



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

April 29, 2022

Mr. David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3; JAMES A. FITZPATRICK NUCLEAR POWER PLANT; LASALLE COUNTY STATION, UNITS 1 AND 2; LIMERICK GENERATING STATION, UNITS 1 AND 2; NINE MILE POINT NUCLEAR STATION, UNIT 2; PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3; QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2; AND R. E. GINNA NUCLEAR POWER PLANT — ISSUANCE OF AMENDMENTS TO ADOPT TSTF-541, REVISION 2, “ADD EXCEPTIONS TO SURVEILLANCE REQUIREMENTS FOR VALVES AND DAMPERS LOCKED IN THE ACTUATED POSITION” (EPID L-2021-LLA-0169)

Dear Mr. Rhoades:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed amendments (listed below) in response to the Exelon Generation Company, LLC application dated September 27, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21270A069), as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022 (ADAMS Accession Nos. ML22054A107 and ML22094A040, respectively). On February 1, 2022 (ADAMS Accession No. ML22032A333), Exelon Generation Company, LLC was renamed Constellation Energy Generation, LLC (CEG, or the licensee).

Enclosed amendments:

1. Amendment No. 226 to Renewed Facility Operating License No. NPF-72 and Amendment No. 226 to Renewed Facility Operating License No. NPF-77 for Braidwood Station, Units 1 and 2, respectively;
2. Amendment No. 228 to Renewed Facility Operating License No. NPF-37 and Amendment No. 228 to Renewed Facility Operating License No. NPF-66 for Byron Station, Unit Nos. 1 and 2, respectively;
3. Amendment No. 344 to Renewed Facility Operating License No. DPR-53 and Amendment No. 322 to Renewed Facility Operating License No. DPR-69 for Calvert Cliffs Nuclear Power Plant, Units 1 and 2, respectively;

4. Amendment No. 244 to Facility Operating License No. NPF-62 for Clinton Power Station, Unit No. 1;
5. Amendment No. 278 to Renewed Facility Operating License No. DPR-19 and Amendment No. 271 to Renewed Facility Operating License No. DPR-25 for Dresden Nuclear Power Station, Units 2 and 3, respectively;
6. Amendment No. 349 to Renewed Facility Operating License No. DPR-59 for James A. FitzPatrick Nuclear Power Plant;
7. Amendment No. 256 to Renewed Facility Operating License No. NPF-11 and Amendment No. 242 to Renewed Facility Operating License No. NPF-18 for LaSalle County Station, Units 1 and 2, respectively;
8. Amendment No. 257 to Renewed Facility Operating License No. NPF-39 and Amendment No. 219 to Renewed Facility Operating License No. NPF-85 for Limerick Generating Station, Units 1 and 2, respectively;
9. Amendment No. 191 to Renewed Facility Operating License No. NPF-69 for Nine Mile Point Nuclear Station, Unit 2;
10. Amendment No. 342 to Subsequent Renewed Facility Operating License No. DPR-44 and Amendment No. 345 to Subsequent Renewed Facility Operating License No. DPR-56 for Peach Bottom Atomic Power Station, Units 2 and 3, respectively;
11. Amendment No. 290 to Renewed Facility Operating License No. DPR-29 and Amendment No. 286 to Renewed Facility Operating License No. DPR-30 for Quad Cities Nuclear Power Station, Units 1 and 2, respectively; and
12. Amendment No. 149 to Renewed Facility Operating License No. DPR-18 for R. E. Ginna Nuclear Power Plant.

The amendments revise the technical specifications for each facility based on Technical Specification Task Force (TSTF) traveler TSTF-541, Revision 2, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position" (ADAMS Accession No. ML19240A315). The amendments also make similar changes to surveillance requirements not included in TSTF-541, Revision 2, and editorial changes to the technical specifications.

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

Sincerely,

/RA/

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

Docket Nos. STN 50-456, STN 50-457,
STN 50-454, STN 50-455, 50-317, 50-318,
50-461, 50-237, 50-249, 50-333, 50-373,
50-374, 50-352, 50-353, 50-410, 50-277,
50-278, 50-254, 50-265, and 50-244

Enclosures:

- | | |
|---------------------------------|---------------------------------|
| 1. Amendment No. 226 to NPF-72 | 12. Amendment No. 242 to NPF-18 |
| 2. Amendment No. 226 to NPF-77 | 13. Amendment No. 257 to NPF-39 |
| 3. Amendment No. 228 to NPF-37 | 14. Amendment No. 219 to NPF-85 |
| 4. Amendment No. 228 to NPF-66 | 15. Amendment No. 191 to NPF-69 |
| 5. Amendment No. 344 to DPR-53 | 16. Amendment No. 342 to DPR-44 |
| 6. Amendment No. 322 to DPR-69 | 17. Amendment No. 345 to DPR-56 |
| 7. Amendment No. 244 to NPF-62 | 18. Amendment No. 290 to DPR-29 |
| 8. Amendment No. 278 to DPR-19 | 19. Amendment No. 286 to DPR-30 |
| 9. Amendment No. 271 to DPR-25 | 20. Amendment No. 149 to DPR-18 |
| 10. Amendment No. 349 to DPR-59 | 21. Safety Evaluation |
| 11. Amendment No. 256 to NPF-11 | |

cc: Listserv



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 226
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-72 is hereby amended to read as follows:

- (2) Technical Specifications

- The Technical Specifications contained in Appendix A as revised through Amendment No. 226 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 226
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 226 and the Environmental Protection Plan contained in Appendix B, both of which are attached to Renewed License No. NPF-72, dated January 27, 2016, are hereby incorporated into the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NOS. 226 AND 226

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

BRAIDWOOD STATION, UNITS 1 AND 2

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

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

Remove

License NPF-72

Page 3

License NPF-77

Page 3

TSs

3.7.10-4

3.7.12-2

3.7.13-4

Insert

License NPF-72

Page 3

License NPF-77

Page 3

TSs

3.7.10-4

3.7.12-2

3.7.13-4

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

The licensee is authorized to operate the facility at reactor core power levels not in excess of 3645 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.
 - (2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 226 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

The licensee is authorized to operate the facility at reactor core power levels not in excess of 3645 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.
 - (2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 226 and the Environmental Protection Plan contained in Appendix B, both of which are attached to Renewed License No. NPF-72, dated January 27, 2016, are hereby incorporated into the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.10.2	Perform required VC Filtration System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.3	Verify each VC Filtration System train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

Nonaccessible Area Exhaust Filter Plenum Ventilation System
3.7.12

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.12.1 Operate each Nonaccessible Area Exhaust Filter Plenum Ventilation System train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2 Perform required Nonaccessible Area Exhaust Filter Plenum Ventilation System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3 Verify each Nonaccessible Area Exhaust Filter Plenum Ventilation System train actuates on a manual, an actual, or a simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.4 Verify two Nonaccessible Area Exhaust Filter Plenum Ventilation System trains can maintain a pressure ≤ -0.25 inches water gauge relative to atmospheric pressure during the emergency mode of operation at a flow rate of $\leq 73,590$ cfm per train.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.7.13.2 Perform required FHB Ventilation System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.13.3 -----NOTE----- Only required during movement of RECENTLY IRRADIATED FUEL assemblies with the equipment hatch not intact. ----- Verify one FHB Ventilation System train can maintain a pressure \leq -0.25 inches water gauge relative to atmospheric pressure during the emergency mode of operation.	In accordance with the Surveillance Frequency Control Program
SR 3.7.13.4 Verify each FHB Ventilation System train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.13.5 -----NOTE----- Only required during movement of RECENTLY IRRADIATED FUEL assemblies in the fuel handling building with the equipment hatch intact. ----- Verify one FHB Ventilation System train can maintain a pressure \leq -0.25 inches water gauge relative to atmospheric pressure during the emergency mode of operation at a flow rate \leq 23,100 cfm.	In accordance with the Surveillance Frequency Control Program



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 228
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-37 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 228 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 228
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-66 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 228, and the Environmental Protection Plan contained in Appendix B, both of which were attached to Renewed License No. NPF-37, dated November 19, 2015, are hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NOS. 228 AND 228

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

BYRON STATION, UNIT NOS. 1 AND 2

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

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

Remove

License NPF-37
Page 3

License NPF-66
Page 3

TSs
3.7.10-4
3.7.12-2
3.7.13-4

Insert

License NPF-37
Page 3

License NPF-66
Page 3

TSs
3.7.10-4
3.7.12-2
3.7.13-4

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. The renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of 3645 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 228 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Deleted.

(4) Deleted.

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. The renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of 3645 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 228, and the Environmental Protection Plan contained in Appendix B, both of which were attached to Renewed License No. NPF-37, dated November 19, 2015, are hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Deleted.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.10.2	Perform required VC Filtration System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.3	Verify each VC Filtration System train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

Nonaccessible Area Exhaust Filter Plenum Ventilation System
3.7.12

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.12.1 Operate each Nonaccessible Area Exhaust Filter Plenum Ventilation System train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2 Perform required Nonaccessible Area Exhaust Filter Plenum Ventilation System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3 Verify each Nonaccessible Area Exhaust Filter Plenum Ventilation System train actuates on a manual, an actual, or a simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.4 Verify two Nonaccessible Area Exhaust Filter Plenum Ventilation System trains can maintain a pressure ≤ -0.25 inches water gauge relative to atmospheric pressure during the emergency mode of operation at a flow rate of $\leq 68,200$ cfm per train.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.7.13.2 Perform required FHB Ventilation System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.13.3 -----NOTE----- Only required during movement of RECENTLY IRRADIATED FUEL assemblies with the equipment hatch not intact. ----- Verify one FHB Ventilation System train can maintain a pressure ≤ -0.25 inches water gauge relative to atmospheric pressure during the emergency mode of operation.	In accordance with the Surveillance Frequency Control Program
SR 3.7.13.4 Verify each FHB Ventilation System train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.13.5 -----NOTE----- Only required during movement of RECENTLY IRRADIATED FUEL assemblies in the fuel handling building with the equipment hatch intact. ----- Verify one FHB Ventilation System train can maintain a pressure ≤ -0.25 inches water gauge relative to atmospheric pressure during the emergency mode of operation at a flow rate $\leq 23,100$ cfm.	In accordance with the Surveillance Frequency Control Program



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

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 344
Renewed License No. DPR-53

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-53 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 344, are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022



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

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 322
Renewed License No. DPR-69

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-69 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 322, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NOS. 344 AND 322

RENEWED FACILITY OPERATING LICENSE NOS. DPR-53 AND DPR-69

CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-317 AND 50-318

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

Remove

License DPR-53
Page 3

License DPR-69
Page 3

TSs
3.6.8-2
3.7.8-5
3.7.12-2

Insert

License DPR-53
Page 3

License DPR-69
Page 3

TSs
3.6.8-2
3.7.8-5
3.7.12-2

- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, in amounts as required, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license is deemed to contain and is subject to the conditions set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act, and the rules, regulations, and orders of the Commission, now or hereafter applicable; and is subject to the additional conditions specified and incorporated below:
- (1) Maximum Power Level

Constellation Energy Generation, LLC is authorized to operate the facility at steady-state reactor core power levels not in excess of 2737 megawatts-thermal in accordance with the conditions specified herein.
 - (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 344, are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

 - (a) For Surveillance Requirements (SRs) that are new, in Amendment 227 to Facility Operating License No. DPR-53, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 227. For SRs that existed prior to Amendment 227, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 227.
 - (3) Additional Conditions

The Additional Conditions contained in Appendix C as revised through Amendment No. 343 are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Additional Conditions.

- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, in amounts as required, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license is deemed to contain and is subject to the conditions set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act, and the rules, regulations, and orders of the Commission, now or hereafter applicable; and is subject to the additional conditions specified and incorporated below:
- (1) Maximum Power Level

Constellation Energy Generation, LLC is authorized to operate the facility at steady-state reactor core power levels not in excess of 2737 megawatts-thermal in accordance with the conditions specified herein.
 - (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 322, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications.

 - (a) For Surveillance Requirements (SRs) that are new, in Amendment 201 to Facility Operating License No. DPR-69, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 201. For SRs that existed prior to Amendment 201, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 201.
 - (3) Less Than Four Pump Operation

The licensee shall not operate the reactor at power levels in excess of five (5) percent of rated thermal power with less than four (4) reactor coolant pumps in operation. This condition shall remain in effect until the licensee has submitted safety analyses for less than four pump operation, and approval for such operation has been granted by the Commission by amendment of this license.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.8.1 Operate each IRS train for \geq 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.6.8.2 Perform required IRS filter testing in accordance with the Ventilation Filter Testing Program.	In accordance with the Ventilation Filter Testing Program
SR 3.6.8.3 Verify each IRS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	Operate each required CREVS filter train for \geq 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.8.2	Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.8.3	Verify each CREVS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.8.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.12.1 Operate each PREVS train for \geq 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2 Verify required PREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3 Verify each PREVS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 244
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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-62 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 244, are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical Specifications
and Facility Operating License

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 244

FACILITY OPERATING LICENSE NO. NPF-62

CLINTON POWER STATION, UNIT NO. 1

DOCKET NO. 50-461

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

Remove

Insert

License NPF-62

License NPF-62

Page 3

Page 3

TSs

TSs

3.5-6

3.5-6

3.5-11

3.5-11

3.5-14

3.5-14

3.6-25

3.6-25

3.6-53

3.6-53

3.7-2a

3.7-2a

3.7-3

3.7-3

3.7-7

3.7-7

- (4) Constellation Energy Generation, LLC, pursuant to the Act and to 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
 - (6) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility. Mechanical disassembly of the GE14i isotope test assemblies containing Cobalt-60 is not considered separation; and
 - (7) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, to intentionally produce, possess, receive, transfer, and use Cobalt-60.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
Constellation Energy Generation, LLC is authorized to operate the facility at reactor core power levels not in excess of 3473 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.
 - (2) Technical Specifications and Environmental Protection Plan
The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 244, are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.5 -----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.6 -----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.7 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify each ADS valve actuator strokes when manually actuated.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8 -----NOTE----- ECCS actuation instrumentation is excluded. -----</p> <p>Verify the ECCS RESPONSE TIME for each ECCS injection/spray subsystem is within limits.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.2.5 -----NOTES----- 1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR. ----- Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.6 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.7 -----NOTE----- Vessel injection/spray may be excluded. ----- Verify the required ECCS injection/spray subsystem can be manually operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5 -----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.7.1	<p>-----NOTE----- Not required to be met for system vent flow paths opened under administrative control. -----</p> <p>Verify each RHR containment spray subsystem manual, power operated, and automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in the correct position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.6.1.7.2	Verify each RHR pump develops a flow rate of ≥ 3800 gpm on recirculation flow through the associated heat exchanger to the suppression pool.	In accordance with the INSERVICE TESTING PROGRAM
SR 3.6.1.7.3	Verify each RHR containment spray subsystem automatic valve in the flow path actuates to its correct position on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.1.7.4	Verify each spray nozzle is unobstructed.	Following activities that could result in nozzle blockage
SR 3.6.1.7.5	Verify RHR containment spray subsystem locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Two SGT subsystems inoperable during movement of recently irradiated fuel assemblies in the primary or secondary containment.	E.1 Suspend movement of recently irradiated fuel assemblies in the primary and secondary containment.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.4.3.1 Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2 Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3 Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4 Verify each SGT filter cooling bypass damper can be opened and the fan started, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.1.1 Verify UHS water volume is \geq 593 acre-ft.	In accordance with UHS Erosion, Sediment Monitoring, and Dredging Program
SR 3.7.1.2 Verify each required SX subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.1.3 Verify each SX subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

3.7 PLANT SYSTEMS

3.7.2 Division 3 Shutdown Service Water (SX) Subsystem

LCO 3.7.2 The Division 3 SX subsystem shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Division 3 SX subsystem inoperable.	A.1 Declare High Pressure Core Spray System inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.2.1 Verify each required Division 3 SX subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.2.2 Verify the Division 3 SX subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.3.3	Perform required Control Room Ventilation filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.3.4	Verify each Control Room Ventilation subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.5	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-237

DRESDEN NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 278
Renewed License No. DPR-19

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-19 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 278, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-249

DRESDEN NUCLEAR POWER STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 271
Renewed License No. DPR-25

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Renewed Facility Operating License No. DPR-25 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 271, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NOS. 278 AND 271

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

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

DOCKET NOS. 50-237 AND 50-249

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

Remove

License DPR-19

Page 3

License DPR-25

Page 4

TSs

3.5.1-5

3.5.2-5

3.5.3-2

3.6.4.3-3

3.7.4-3

Insert

License DPR-19

Page 3

License DPR-25

Page 4

TSs

3.5.1-5

3.5.2-5

3.5.3-2

3.6.4.3-3

3.7.4-3

- (2) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear materials as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
- (3) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

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

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 278, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

f. Surveillance Requirement 4.9.A.10 - Diesel Storage Tank Cleaning
(Unit 3 and Unit 2/3 only)

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

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

A. Maximum Power Level

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

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 271, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. Reports

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

D. Records

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

E. Restrictions

Operation in the coastdown mode is permitted to 40% power

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.6 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. ----- Verify, with reactor pressure \leq 1005 and \geq 920 psig, the HPCI pump can develop a flow rate \geq 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the INSERVICE TESTING PROGRAM</p>
<p>SR 3.5.1.7 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. ----- Verify, with reactor pressure \leq 180 psig, the HPCI pump can develop a flow rate \geq 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8 -----NOTE----- Vessel injection/spray may be excluded. ----- Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.2.4 -----NOTES-----</p> <ol style="list-style-type: none"> 1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR. <p>-----</p> <p>Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.5 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.6 -----NOTE-----</p> <p>Vessel injection/spray may be excluded.</p> <p>-----</p> <p>Verify the required ECCS injection/spray subsystem can be manually operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.3.1	Verify the IC System: a. Shellside water level \geq 6 feet; and b. Shellside water temperature \leq 210°F.	In accordance with the Surveillance Frequency Control Program
SR 3.5.3.2	Verify each IC System manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.5.3.3	Verify the IC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.5.3.4	-----NOTE----- Not required to be performed until 12 hours after adequate reactor power is achieved to perform the test. ----- Verify IC System heat removal capability to remove design heat load.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.1	Operate the CREV System for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.4.2	Perform required CREV filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.4.3	Verify the CREV System actuates on a manual initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.4.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program



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

CONSTELLATION FITZPATRICK, LLC

AND

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 349
Renewed License No. DPR-59

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-59 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 349, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 349
RENEWED FACILITY OPERATING LICENSE NO. DPR-59
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333

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

Remove

License DPR-59
Page 3

TSs

3.5.1-6
3.5.2-6
3.5.3-3
3.6.4.3-3
3.7.2-4

Insert

License DPR-59
Page 3

TSs

3.5.1-6
3.5.2-6
3.5.3-3
3.6.4.3-3
3.7.2-4

- (3) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration; or associated with radioactive apparatus, components or tools.
- (5) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

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

(1) Maximum Power Level

Constellation Energy Generation, LLC is authorized to operate the facility at steady state reactor core power levels not in excess of 2536 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 349, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.9 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. ----- Verify, with reactor pressure \leq 165 psig, the HPCI pump can develop a flow rate \geq 3400 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.10 -----NOTE----- 1. For the HPCI System, not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. 2. Vessel injection/spray may be excluded. ----- Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.11 -----NOTE----- Valve actuation may be excluded. ----- Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.12 Verify each LPCI motor operated valve independent power supply inverter capacity is adequate to supply and maintain in OPERABLE status the required emergency loads for the design duty cycle.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.2.6</p> <p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR. <p>-----</p> <p>Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.7</p> <p>Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.8</p> <p>-----NOTE-----</p> <p>Vessel injection/spray may be excluded.</p> <p>-----</p> <p>Verify the required ECCS injection/spray subsystem can be manually operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE-----</p> <ol style="list-style-type: none"> 1. Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. 2. Vessel injection may be excluded. <p>-----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Manually cycle each SGT subsystem filter cooling cross-tie valve.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.2.4	Verify each ESW subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-373

LASALLE COUNTY STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 256
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-11 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 256, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-374

LASALLE COUNTY STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 242
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-18 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 242, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NOS. 256 AND 242

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

LASALLE COUNTY STATION, UNITS 1 AND 2

DOCKET NOS. 50-373 AND 50-374

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

Remove

License NPF-11

Page 3

License NPF-18

Page 3

TSs

3.5.1-5

3.5.2-5

3.5.3-3

3.6.4.3-3

3.7.4-4

Insert

License NPF-11

Page 3

License NPF-18

Page 3

TSs

3.5.1-5

3.5.2-5

3.5.3-3

3.6.4.3-3

3.7.4-4

- (3) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of LaSalle County Station, Units 1 and 2, and such Class B and Class C low-level radioactive waste as may be produced by the operation of Braidwood Station, Units 1 and 2, Byron Station, Units 1 and 2, and Clinton Power Station, Unit 1.

C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission’s regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

Am. 198
09/16/10

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of full power (3546 megawatts thermal).

Am. 256
04/29/22

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 256, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

Am. 194
08/28/09

(3) DELETED

Am. 194
08/28/09

(4) DELETED

Am. 194
08/28/09

(5) DELETED

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of LaSalle County Station, Units 1 and 2, and such Class B and Class C low-level radioactive waste as may be produced by the operation of Braidwood Station, Units 1 and 2, Byron Station, Units 1 and 2, and Clinton Power Station, Unit 1.

C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission’s regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

Am. 185
09/16/10

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of full power (3546 megawatts thermal). Items in Attachment 1 shall be completed as specified. Attachment 1 is hereby incorporated into this license.

Am. 242
04/29/22

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 242, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY															
SR 3.5.1.5	<p>Verify each ECCS pump develops the specified flow rate against the specified test line pressure.</p> <table border="1"> <thead> <tr> <th><u>SYSTEM</u></th> <th><u>FLOW RATE</u></th> <th><u>TEST LINE PRESSURE</u></th> </tr> </thead> <tbody> <tr> <td>LPCS</td> <td>≥ 6350 gpm</td> <td>≥ 290 psig</td> </tr> <tr> <td>LPCI</td> <td>≥ 7200 gpm</td> <td>≥ 130 psig</td> </tr> <tr> <td>HPCS (Unit 1)</td> <td>≥ 6250 gpm</td> <td>≥ 370 psig</td> </tr> <tr> <td>HPCS (Unit 2)</td> <td>≥ 6200 gpm</td> <td>≥ 330 psig</td> </tr> </tbody> </table>	<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>TEST LINE PRESSURE</u>	LPCS	≥ 6350 gpm	≥ 290 psig	LPCI	≥ 7200 gpm	≥ 130 psig	HPCS (Unit 1)	≥ 6250 gpm	≥ 370 psig	HPCS (Unit 2)	≥ 6200 gpm	≥ 330 psig	<p>In accordance with the INSERVICE TESTING PROGRAM</p>
<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>TEST LINE PRESSURE</u>															
LPCS	≥ 6350 gpm	≥ 290 psig															
LPCI	≥ 7200 gpm	≥ 130 psig															
HPCS (Unit 1)	≥ 6250 gpm	≥ 370 psig															
HPCS (Unit 2)	≥ 6200 gpm	≥ 330 psig															
SR 3.5.1.6	<p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>															
SR 3.5.1.7	<p>-----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>															
SR 3.5.1.8	<p>-----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify each required ADS valve actuator strokes when manually actuated.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>															

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.2.5 -----NOTES----- 1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR. ----- Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.6 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.7 -----NOTE----- Vessel injection/spray may be excluded. ----- Verify the required ECCS injection/spray subsystem can be manually operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5 -----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.2	Manually initiate flow through the CRAF recirculation filters for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.4.3	Perform required CRAF filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.4.4	Verify each CRAF subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.4.5	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 257
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-39 is hereby amended to read as follows:

- (2) Technical Specifications

- The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 257, are hereby incorporated into this renewed license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 257

RENEWED FACILITY OPERATING LICENSE NO. NPF-39

LIMERICK GENERATING STATION, UNIT 1

DOCKET NO. 50-352

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

Remove

License NPF-39

Page 4

TSs

3/4 5-4

3/4 5-7

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3/4 6-56

3/4 7-4

3/4 7-10

Insert

License NPF-39

Page 4

TSs

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(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 257, are hereby incorporated into this renewed license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Fire Protection (Section 9.5, SSER-2, -4)*

Constellation Energy Generation, LLC 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 dated August 1983 through Supplement 9, dated August 1989, and Safety Evaluation dated November 20, 1995, 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.

The Information contained on FOL pages 5 and 6
were intentionally omitted.

* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.1 The emergency core cooling systems shall be demonstrated OPERABLE by:

- a. In accordance with the Surveillance Frequency Control Program:
 1. For the CSS, the LPCI system, and the HPCI system:
 - a) Verifying locations susceptible to gas accumulation are sufficiently filled with water.
 - b) Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct* position.**
 2. For the LPCI system, verifying that both LPCI system subsystem cross-tie valves (HV-51-182 A, B) are closed with power removed from the valve operators.
 3. For the HPCI system, verifying that the HPCI pump flow controller is in the correct position.
 4. For the CSS and LPCI system, performance of a CHANNEL FUNCTIONAL TEST of the injection header ΔP instrumentation.
- b. Verifying that, when tested pursuant to Specification 4.0.5:
 1. Each CSS pump in each subsystem develops a flow of at least 3175 gpm against a test line pressure corresponding to a reactor vessel to primary containment differential pressure of ≥ 105 psid plus head and line losses.
 2. Each LPCI pump in each subsystem develops a flow of at least 10,000 gpm against a test line pressure corresponding to a reactor vessel to primary containment differential pressure of ≥ 20 psid plus head and line losses.
 3. The HPCI pump develops a flow of at least 5600 gpm against a test line pressure which corresponds to a reactor vessel pressure of 1040 psig plus head and line losses when steam is being supplied to the turbine at 1040, +13, -120 psig.**
- c. In accordance with the Surveillance Frequency Control Program:
 1. For the CSS, the LPCI system, and the HPCI system, performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence and verifying that each automatic valve in the flow path actuates to its correct position. **** Actual injection of coolant into the reactor vessel may be excluded from this test.

* Except that an automatic valve capable of automatic return to its ECCS position when an ECCS signal is present may be in position for another mode of operation.

** The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test. If OPERABILITY is not successfully demonstrated within the 12-hour period, reduce reactor steam dome pressure to less than 200 psig within the following 72 hours.

*** Not required to be met for system vent flow paths opened under administrative control.

**** Except for valves that are locked, sealed, or otherwise secured in the actuated position.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.2.1 Verify DRAIN TIME is greater than or equal to 36 hours in accordance with the Surveillance Frequency Control Program.*

4.5.2.2 Verify, for a required LPCI subsystem, the suppression chamber water level is greater than or equal to 16 feet 0 inches in accordance with the Surveillance Frequency Control Program.

4.5.2.3 Verify, for a required CSS subsystem, that the suppression chamber water level is greater than or equal to 16 feet 0 inches or the condensate storage tank water level is greater than or equal to 29 feet 0 inches in accordance with the Surveillance Frequency Control Program.

4.5.2.4 Verify, for the required ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water in accordance with the Surveillance Frequency Control Program.

4.5.2.5 DELETED

4.5.2.6 Operate the required ECCS injection/spray subsystem for greater than or equal to 10 minutes in accordance with the Surveillance Frequency Control Program.#^

4.5.2.7 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal in accordance with the Surveillance Frequency Control Program. **

4.5.2.8 Verify the required ECCS injection/spray subsystem can be manually operated in accordance with the Surveillance Frequency Control Program. **

* DELETED.

#Operation may be through the test return line.

^Credit may be taken for normal system operation to satisfy this surveillance requirement.

** Except for valves that are locked, sealed, or otherwise secured in the actuated position.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the fan starts and isolation valves necessary to draw a suction from the refueling area or the reactor enclosure recirculation discharge open on each of the following test signals, except for valves that are locked, sealed, or otherwise secured in the actuated position:
 - a) Manual initiation from the control room, and
 - b) Simulated automatic initiation signal.
3. Verifying that the temperature differential across each heater is $\geq 15^{\circ}\text{F}$ when tested in accordance with ANSI N510-1980.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of $5764 \text{ cfm} \pm 10\%$.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of $5764 \text{ cfm} \pm 10\%$.
- g. After any major system alteration:
 1. Verify that when the SGTS fan is running the subsystem flowrate is 2800 cfm minimum from each reactor enclosure (Zones I and II) and 2200 cfm minimum from the refueling area (Zone III).
 2. Verify that one standby gas treatment subsystem will drawdown reactor enclosure Zone I secondary containment to greater than or equal to 0.25 inch of vacuum water gauge in less than or equal to 916 seconds with the reactor enclosure recirculation system in operation and the adjacent reactor enclosure and refueling area zones are in their isolation modes.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows, the methyl iodide penetration of less than 2.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C (86°F) and a relative humidity of 70%.
- d. In accordance with the Surveillance Frequency Control Program by:
 - 1. Verifying that the pressure drop across the combined prefilter, upstream and downstream HEPA filters, and charcoal adsorber banks is less than 6 inches water gauge while operating the filter train at a flow rate of 60,000 cfm \pm 10%, verifying that the prefilter pressure drop is less than 0.8 inch water gauge and that the pressure drop across each HEPA is less than 2 inches water gauge.
 - 2. Verifying that the filter train starts and the isolation valves which take suction on and return to the reactor enclosure open on each of the following test signals, except for valves that are locked, sealed, or otherwise secured in the actuated position:
 - a. Manual initiation from the control room, and
 - b. Simulated automatic initiation signal.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 60,000 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 60,000 cfm \pm 10%.

PLANT SYSTEMS
LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

4. With three ESW pump/diesel generator pairs** inoperable, restore at least one inoperable ESW pump/diesel generator pair** to OPERABLE status within 72 hours, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
 5. With four ESW pump/diesel generator pairs** inoperable, restore at least one inoperable ESW pump/diesel generator pair** to OPERABLE status within 8 hours, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION 4 or 5:
1. With only one emergency service water pump and its associated flowpath OPERABLE, restore at least two pumps with at least one flow path to OPERABLE status within 72 hours or declare the associated safety related equipment inoperable and take the ACTION required by Specifications 3.5.2 and 3.8.1.2.
- c. In OPERATIONAL CONDITION *
1. With only one emergency service water pump and its associated flow path OPERABLE, restore at least two pumps with at least one flow path to OPERABLE status within 72 hours or verify adequate cooling remains available for the diesel generators required to be OPERABLE or declare the associated diesel generator(s) inoperable and take the ACTION required by Specification 3.8.1.2. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENT

4.7.1.2 At least the above required emergency service water system loop(s) shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by verifying that each valve (manual, power-operated, or automatic) that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. In accordance with the Surveillance Frequency Control Program by verifying that:
 1. Each automatic valve actuates to its correct position on its appropriate ESW pump start signal. ***
 2. Each pump starts automatically when its associated diesel generator starts.

* When handling irradiated fuel in the secondary containment.

** An ESW pump/diesel generator pair consists of an ESW pump and its associated diesel generator. If either an ESW pump or its associated diesel generator becomes inoperable, then the ESW pump/diesel generator pair is inoperable.

*** Except for valves that are locked, sealed, or otherwise secured in the actuated position.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. In accordance with the Surveillance Frequency Control Program by:
1. Performing a system functional test which includes simulated automatic actuation and restart and verifying that each automatic valve in the flow path actuates to its correct position. Actual injection of coolant into the reactor vessel may be excluded. **
 2. Verifying that the system will develop a flow of greater than or equal to 600 gpm in the test flow path when steam is supplied to the turbine at a pressure of 150 + 15, - 0 psig.*
 3. Verifying that the suction for the RCIC system is automatically transferred from the condensate storage tank to the suppression pool on a condensate storage tank water level-low signal.
 4. Performing a CHANNEL CALIBRATION of the RCIC system discharge line "keep filled" level alarm instrumentation.

* The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the tests. If OPERABILITY is not successfully demonstrated within the 12-hour period, reduce reactor steam pressure to less than 150 psig within the following 72 hours.

** Except for valves that are locked, sealed, or otherwise secured in the actuated position.



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

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-353

LIMERICK GENERATING STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 219
Renewed 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-85 is hereby amended to read as follows:

- (2) Technical Specifications

- The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 219, are hereby incorporated into this renewed license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 219

RENEWED FACILITY OPERATING LICENSE NO. NPF-85

LIMERICK GENERATING STATION, UNIT 2

DOCKET NO. 50-353

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

Remove

Insert

License NPF-85

License NPF-85

Page 3

Page 3

TSs

TSs

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3/4 5-4

3/4 5-7

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- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and to use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility, and to receive and possess, but not separate, such source, byproduct, and special nuclear materials as contained in the fuel assemblies and fuel channels from the Shoreham Nuclear Power Station.

C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below) and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Constellation Energy Generation, LLC is authorized to operate the facility at reactor core power levels of 3515 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 219, are hereby incorporated into this renewed license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.1 The emergency core cooling systems shall be demonstrated OPERABLE by:

- a. In accordance with the Surveillance Frequency Control Program:
 1. For the CSS, the LPCI system, and the HPCI system:
 - a) Verifying locations susceptible to gas accumulation are sufficiently filled with water.
 - b) Verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct* position.***
 2. For the LPCI system, verifying that both LPCI system subsystem cross-tie valves (HV-51-282 A, B) are closed with power removed from the valve operators.
 3. For the HPCI system, verifying that the HPCI pump flow controller is in the correct position.
 4. For the CSS and LPCI system, performance of a CHANNEL FUNCTIONAL TEST of the injection header ΔP instrumentation.
- b. Verifying that, when tested pursuant to Specification 4.0.5:
 1. Each CSS pump in each subsystem develops a flow of at least 3175 gpm against a test line pressure corresponding to a reactor vessel to primary containment differential pressure of = 105 psid plus head and line losses.
 2. Each LPCI pump in each subsystem develops a flow of at least 10,000 gpm against a test line pressure corresponding to a reactor vessel to primary containment differential pressure of ≥ 20 psid plus head and line losses.
 3. The HPCI pump develops a flow of at least 5600 gpm against a test line pressure which corresponds to a reactor vessel pressure of 1040 psig plus head and line losses when steam is being supplied to the turbine at 1040, +13, -120 psig.**
- c. In accordance with the Surveillance Frequency Control Program:
 1. For the CSS, the LPCI system, and the HPCI system, performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence and verifying that each automatic valve in the flow path actuates to its correct position. **** Actual injection of coolant into the reactor vessel may be excluded from this test.

* Except that an automatic valve capable of automatic return to its ECCS position when an ECCS signal is present may be in position for another mode of operation.

** The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test. If OPERABILITY is not successfully demonstrated within the 12-hour period, reduce reactor steam dome pressure to less than 200 psig within the following 72-hours.

*** Not required to be met for system vent flow paths opened under administrative control.

**** Except for valves that are locked, sealed, or otherwise secured in the actuated position.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.2.1 Verify DRAIN TIME is greater than or equal to 36 hours in accordance with the Surveillance Frequency Control Program.*

4.5.2.2 Verify, for a required LPCI subsystem, the suppression chamber water level is greater than or equal to 16 feet 0 inches in accordance with the Surveillance Frequency Control Program.

4.5.2.3 Verify, for a required CSS subsystem, that the suppression chamber water level is greater than or equal to 16 feet 0 inches or the condensate storage tank water level is greater than or equal to 29 feet 0 inches in accordance with the Surveillance Frequency Control Program.

4.5.2.4 Verify, for the required ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water in accordance with the Surveillance Frequency Control Program.

4.5.2.5 DELETED

4.5.2.6 Operate the required ECCS injection/spray subsystem for greater than or equal to 10 minutes in accordance with the Surveillance Frequency Control Program.#^

4.5.2.7 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal in accordance with the Surveillance Frequency Control Program. **

4.5.2.8 Verify the required ECCS injection/spray subsystem can be manually operated in accordance with the Surveillance Frequency Control Program. **

* DELETED.

#Operation may be through the test return line.

^Credit may be taken for normal system operation to satisfy this surveillance requirement.

** Except for valves that are locked, sealed, or otherwise secured in the actuated position.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the fan starts and isolation valves necessary to draw a suction from the refueling area or the reactor enclosure recirculation discharge open on each of the following test signals, except for valves that are locked, sealed, or otherwise secured in the actuated position:
 - a) Manual initiation from the control room, and
 - b) Simulated automatic initiation signal.
3. Verifying that the temperature differential across each heater is $\geq 15^{\circ}\text{F}$ when tested in accordance with ANSI N510-1980.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 5764 cfm $\pm 10\%$.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 5764 cfm $\pm 10\%$.
- g. After any major system alteration:
 1. Verify that when the SGTS fan is running the subsystem flowrate is 2800 cfm minimum from each reactor enclosure (Zones I and II) and 2200 cfm minimum from the refueling area (Zone III).
 2. Verify that one standby gas treatment subsystem will drawdown reactor enclosure Zone II secondary containment to greater than or equal to 0.25 inch of vacuum water gauge in less than or equal to 916 seconds with the reactor enclosure recirculation system in operation and the adjacent reactor enclosure and refueling area zones are in their isolation modes.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration of less than 2.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C (86°F) and a relative humidity of 70%.
- d. In accordance with the Surveillance Frequency Control Program by:
 - 1. Verifying that the pressure drop across the combined prefilter, upstream and downstream HEPA filters, and charcoal adsorber banks is less than 6 inches water gauge while operating the filter train at a flow rate of 60,000 cfm \pm 10%, verifying that the prefilter pressure drop is less than 0.8 inch water gauge and that the pressure drop across each HEPA is less than 2 inches water gauge.
 - 2. Verifying that the filter train starts and the isolation valves which take suction on and return to the reactor enclosure open on each of the following test signals, except for valves that are locked, sealed, or otherwise secured in the actuated position:
 - a. Manual initiation from the control room, and
 - b. Simulated automatic initiation signal.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 60,000 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the in-place penetration and leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 60,000 cfm \pm 10%.

PLANT SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

4. With three ESW pump/diesel generator pairs** inoperable, restore at least one inoperable ESW pump/diesel generator pair** to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
 5. With four ESW pump/diesel generator pairs** inoperable, restore at least one inoperable ESW pump/diesel generator pair** to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION 4 or 5:
1. With only one emergency service water pump and its associated flow path OPERABLE, restore at least two pumps with at least one flow path to OPERABLE status within 72 hours or declare the associated safety related equipment inoperable and take the ACTION required by Specifications 3.5.2 and 3.8.1.2.
- c. In OPERATIONAL CONDITION *
1. With only one emergency service water pump and its associated flow path OPERABLE, restore at least two pumps with at least one flow path to OPERABLE status within 72 hours or verify adequate cooling remains available for the diesel generators required to be OPERABLE or declare the associated diesel generator(s) inoperable and take the ACTION required by Specification 3.8.1.2. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENT

4.7.1.2 At least the above required emergency service water system loop(s) shall be demonstrated OPERABLE:

- a. In accordance with the Surveillance Frequency Control Program by verifying that each valve (manual, power-operated, or automatic) that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. In accordance with the Surveillance Frequency Control Program by verifying that:
 1. Each automatic valve actuates to its correct position on its appropriate ESW pump start signal. ***
 2. Each pump starts automatically when its associated diesel generator starts.

* When handling irradiated fuel in the secondary containment.

** An ESW pump/diesel generator pair consists of an ESW pump and its associated diesel generator. If either an ESW pump or its associated diesel generator becomes inoperable, then the ESW pump/diesel generator pair is inoperable.

*** Except for valves that are locked, sealed, or otherwise secured in the actuated position.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. In accordance with the Surveillance Frequency Control Program by:
1. Performing a system functional test which includes simulated automatic actuation and restart and verifying that each automatic valve in the flow path actuates to its correct position. ** Actual injection of coolant into the reactor vessel may be excluded.
 2. Verifying that the system will develop a flow of greater than or equal to 600 gpm in the test flow path when steam is supplied to the turbine at a pressure of 150 + 15, - 0 psig.*
 3. Verifying that the suction for the RCIC system is automatically transferred from the condensate storage tank to the suppression pool on a condensate storage tank water level-low signal.
 4. Performing a CHANNEL CALIBRATION of the RCIC system discharge line "keep filled" level alarm instrumentation.

* The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the tests. If OPERABILITY is not successfully demonstrated within the 12-hour period, reduce reactor steam dome pressure to less than 150 psig within the following 72 hours.

** Except for valves that are locked, sealed, or otherwise secured in the actuated position.



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

NINE MILE POINT NUCLEAR STATION, LLC

LONG ISLAND LIGHTING COMPANY

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 191
Renewed License No. NPF-69

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-69 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

- The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 191, are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 191
RENEWED FACILITY OPERATING LICENSE NO. NPF-69
NINE MILE POINT NUCLEAR STATION, UNIT 2
DOCKET NO. 50-410

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

Remove

License NPF-69
Page 4

TSs
3.5.1-5
3.5.2-5
3.5.3-3
3.6.4.3-3
3.7.1-5
3.7.2-3

Insert

License NPF-69
Page 4

TSs
3.5.1-5
3.5.2-5
3.5.3-3
3.6.4.3-3
3.7.1-5
3.7.2-3

(1) Maximum Power Level

Constellation Energy Generation, LLC is authorized to operate the facility at reactor core power levels not in excess of 3988 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 191, are hereby incorporated into this license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Fuel Storage and Handling (Section 9.1, SSER 4)*

- a. Fuel assemblies, when stored in their shipping containers, shall be stacked no more than three containers high.
- b. When not in the reactor vessel, no more than three fuel assemblies shall be allowed outside of their shipping containers or storage racks in the New Fuel Vault or Spent Fuel Storage Facility.
- c. The above three fuel assemblies shall maintain a minimum edge-to-edge spacing of twelve (12) inches from the shipping container array and approved storage rack locations.
- d. The New Fuel Storage Vault shall have no more than ten fresh fuel assemblies uncovered at any one time.

(4) Turbine System Maintenance Program (Section 3.5.1.3.10 SER)

The operating licensee shall submit for NRC approval by October 31, 1989, a turbine system maintenance program based on the manufacturer's calculations of missile generation probabilities. (Submitted by NMPC letter dated October 30, 1989 from C.D. Terry and approved by NRC letter dated March 15, 1990 from Robert Martin to Mr. Lawrence Burkhardt, III).

* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report (SER) and/or its supplements wherein the license condition is discussed.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY															
SR 3.5.1.4	<p>Verify each ECCS pump develops the specified flow rate with the specified developed head.</p> <table border="1"> <thead> <tr> <th><u>SYSTEM</u></th> <th><u>FLOW RATE</u></th> <th><u>TOTAL DEVELOPED HEAD</u></th> </tr> </thead> <tbody> <tr> <td>LPCS</td> <td>≥ 6350 gpm</td> <td>≥ 284 psid</td> </tr> <tr> <td>LPCS A, B</td> <td>≥ 7450 gpm</td> <td>≥ 127 psid</td> </tr> <tr> <td>LPCI C</td> <td>≥ 7450 gpm</td> <td>≥ 140 psid</td> </tr> <tr> <td>HPCS</td> <td>≥ 6350 gpm</td> <td>≥ 327 psid</td> </tr> </tbody> </table>	<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>TOTAL DEVELOPED HEAD</u>	LPCS	≥ 6350 gpm	≥ 284 psid	LPCS A, B	≥ 7450 gpm	≥ 127 psid	LPCI C	≥ 7450 gpm	≥ 140 psid	HPCS	≥ 6350 gpm	≥ 327 psid	In accordance with the INSERVICE TESTING PROGRAM
<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>TOTAL DEVELOPED HEAD</u>															
LPCS	≥ 6350 gpm	≥ 284 psid															
LPCS A, B	≥ 7450 gpm	≥ 127 psid															
LPCI C	≥ 7450 gpm	≥ 140 psid															
HPCS	≥ 6350 gpm	≥ 327 psid															
SR 3.5.1.5	<p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program															
SR 3.5.1.6	<p>-----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	In accordance with the Surveillance Frequency Control Program															
SR 3.5.1.7	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify each required ADS valve actuator strokes when manually actuated.</p>	In accordance with the Surveillance Frequency Control Program															

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.2.6	Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.7	<p>-----NOTE----- Vessel injection/spray may be excluded. ----- Verify the required ECCS injection/spray subsystem can be manually operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. ----- Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify each SGT decay heat removal air inlet valve can be opened.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.7.1.5</p> <p>----- NOTE ----- Not required to be met if SR 3.7.1.1 satisfied. -----</p> <p>Verify, for each intake deicer heater division, the current of each required heater feeder cable is within the limit.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.7.1.6</p> <p>----- NOTE ----- Isolation of flow to individual components does not render SW System inoperable. -----</p> <p>Verify each SW subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.7.1.7</p> <p>Verify each SW subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.7.1.8</p> <p>----- NOTE ----- Not required to be met if SR 3.7.1.1 satisfied. -----</p> <p>Verify, for each intake deicer heater division, the resistance of each required heater feeder cable and associated heater elements is within the limit.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Two CREF subsystems inoperable with safety function not maintained during movement of recently irradiated fuel assemblies in the secondary containment.</p> <p><u>OR</u></p> <p>One or more CREF subsystems inoperable due to inoperable CRE boundary during movement of recently irradiated fuel assemblies in the secondary containment.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>F.1 Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.2.1 Operate each CREF subsystem for ≥ 15 continuous minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.7.2.2 Perform required CREF System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p>	<p>In accordance with the VFTP</p>
<p>SR 3.7.2.3 Verify each CREF subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)



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

CONSTELLATION ENERGY GENERATION, LLC

PSEG NUCLEAR, LLC

DOCKET NO. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT 2

AMENDMENT TO SUBSEQUENT RENEWED FACILITY OPERATING LICENSE

Amendment No. 342
Subsequent 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Subsequent Renewed Facility Operating License No. DPR-44 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 342, are hereby incorporated in the license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 342

SUBSEQUENT RENEWED FACILITY OPERATING LICENSE NO. DPR-44

PEACH BOTTOM ATOMIC POWER STATION, UNIT 2

DOCKET NO. 50-277

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

Remove

License DPR-44
Page 3

TSs

3.5-6
3.5-14
3.5-18
3.6-42
3.7-4
3.7-9

Insert

License DPR-44
Page 3

TSs

3.5-6
3.5-14
3.5-18
3.6-42
3.7-4
3.7-9

- (1) Constellation Energy Generation, LLC, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility and PSEG Nuclear to possess the facility at the designated location in Peach Bottom, York County, Pennsylvania in accordance with the procedures and limitations set forth in this license;
- (2) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or when associated with radioactive apparatus or components;
- (5) Constellation Energy Generation, LLC, 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 subsequent 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

Constellation Energy Generation, LLC is authorized to operate the Peach Bottom Atomic Power Station, Unit 2, at steady state reactor core power levels not in excess of 4016 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 342, are hereby incorporated in the license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.8 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 1053 and ≥ 910 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.5.1.9 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 175 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.5.1.10 -----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5 -----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.4.4	Verify, for the required ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.5	<p style="text-align: center;">-----NOTE-----</p> <p>Not required to be met for system vent flow paths open under administrative control.</p> <p style="text-align: center;">-----</p> <p>Verify for the required ECCS injection/spray subsystem manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.6	Operate the required ECCS injection/spray subsystem through the recirculation line for ≥ 10 minutes.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.7	Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.8	<p style="text-align: center;">-----NOTE-----</p> <p>Vessel injection/spray may be excluded.</p> <p style="text-align: center;">-----</p> <p>Verify the required ECCS injection/spray subsystem can be manually actuated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program.
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.2.1 Verify the water level in the pump bays of the pump structure is ≥ 98.5 ft Conowingo Datum (CD) and ≤ 113 ft CD.	In accordance with the Surveillance Frequency Control Program.
SR 3.7.2.2 Verify the water temperature of normal heat sink is $\leq 92^\circ\text{F}$.	In accordance with the Surveillance Frequency Control Program. <u>AND</u> Hourly when water temperature of normal heat sink is $> 90^\circ\text{F}$.
SR 3.7.2.3 -----NOTE----- Isolation of flow to individual components does not render ESW System inoperable. ----- Verify each ESW subsystem manual and power operated valve in the flow paths servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program.
SR 3.7.2.4 Verify each ESW subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Two MCREV subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, or during CORE ALTERATIONS.</p> <p>OR</p> <p>One or more MCREV subsystems inoperable due to an inoperable CRE Boundary during movement of irradiated fuel assemblies in the secondary containment, or during CORE ALTERATIONS.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>F.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>F.2 Suspend CORE ALTERATIONS.</p>	<p>Immediately</p> <p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.4.1 Operate each MCREV subsystem for ≥ 15 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.7.4.2 Perform required MCREV filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p>	<p>In accordance with the VFTP</p>
<p>SR 3.7.4.3 Verify each MCREV subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.7.4.4 Perform required CRE unfiltered air leakage testing in accordance with the Control Room Envelope Habitability Program.</p>	<p>In accordance with the Control Room Envelope Habitability Program.</p>



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

CONSTELLATION ENERGY GENERATION, LLC

PSEG NUCLEAR, LLC

DOCKET NO. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT 3

AMENDMENT TO SUBSEQUENT RENEWED FACILITY OPERATING LICENSE

Amendment No. 345

Subsequent 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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Subsequent Renewed Facility Operating License No. DPR-56 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 345, are hereby incorporated in the license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 345

SUBSEQUENT RENEWED FACILITY OPERATING LICENSE NO. DPR-56

PEACH BOTTOM ATOMIC POWER STATION, UNIT 3

DOCKET NO. 50-278

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

Remove

License DPR-56
Page 3

TSs

3.5-6
3.5-14
3.5-18
3.6-42
3.7-4
3.7-9

Insert

License DPR-56
Page 3

TSs

3.5-6
3.5-14
3.5-18
3.6-42
3.7-4
3.7-9

Pennsylvania in accordance with the procedures and limitations set forth in this license;

- (2) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Constellation Energy Generation, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or when associated with radioactive apparatus or components;
- (5) Constellation Energy Generation, LLC, 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 subsequent 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

Constellation Energy Generation, LLC is authorized to operate the Peach Bottom Atomic Power Station, Unit No. 3, at steady state reactor core power levels not in excess of 4016 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 345, are hereby incorporated in the license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.8 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. ----- Verify, with reactor pressure ≤ 1053 and ≥ 910 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.5.1.9 -----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. ----- Verify, with reactor pressure ≤ 175 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.5.1.10 -----NOTE----- Vessel injection/spray may be excluded. ----- Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5 -----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.5.4.4 Verify, for the required ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.5 -----NOTE----- Not required to be met for system vent flow paths open under administrative control. ----- Verify for the required ECCS injection/spray subsystem manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.6 Operate the required ECCS injection/spray subsystem through the recirculation line for \geq 10 minutes.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.7 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.
SR 3.5.4.8 -----NOTE----- Vessel injection/spray may be excluded. ----- Verify the required ECCS injection/spray subsystem can be manually actuated, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program.
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.2.1 Verify the water level in the pump bays of the pump structure is ≥ 98.5 ft Conowingo Datum (CD) and ≤ 113 ft CD.	In accordance with the Surveillance Frequency Control Program.
SR 3.7.2.2 Verify the water temperature of normal heat sink is $\leq 92^\circ\text{F}$.	In accordance with the Surveillance Frequency Control Program. <u>AND</u> Hourly when water temperature of normal heat sink is $> 90^\circ\text{F}$.
SR 3.7.2.3 -----NOTE----- Isolation of flow to individual components does not render ESW System inoperable. ----- Verify each ESW subsystem manual and power operated valve in the flow paths servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	In accordance with the Surveillance Frequency Control Program.
SR 3.7.2.4 Verify each ESW subsystem actuates on an actual or simulated initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Two MCREV subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, or during CORE ALTERATIONS.</p> <p>OR</p> <p>One or more MCREV subsystems inoperable due to an inoperable CRE boundary during movement of irradiated fuel assemblies in the secondary containment, or during CORE ALTERATIONS.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p>	<p>Immediately</p>
	<p>F.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p>	
	<p><u>AND</u></p> <p>F.2 Suspend CORE ALTERATIONS.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.4.1 Operate each MCREV subsystem for \geq 15 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.7.4.2 Perform required MCREV filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p>	<p>In accordance with the VFTP</p>
<p>SR 3.7.4.3 Verify each MCREV subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program.</p>
<p>SR 3.7.4.4 Perform required CRE unfiltered air leakage testing in accordance with the Control Room Envelope Habitability Program.</p>	<p>In accordance with the Control Room Envelope Habitability Program.</p>



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

CONSTELLATION ENERGY GENERATION, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 290
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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Renewed Facility Operating License No. DPR-29 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 290, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022



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

CONSTELLATION ENERGY GENERATION, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 286
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 dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Renewed Facility Operating License No. DPR-30 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 286, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NOS. 290 AND 286

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

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

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

Remove

License DPR-29

Page 4

License DPR-30

Page 4

TSs

3.5.1-6

3.5.2-6

3.5.3-3

3.6.4.3-3

3.7.4-3

Insert

License DPR-29

Page 4

License DPR-30

Page 4

TSs

3.5.1-6

3.5.2-6

3.5.3-3

3.6.4.3-3

3.7.4-3

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 290, 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 plans¹, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Quad Cities Nuclear Power Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 2," submitted by letter dated May 17, 2006.

Constellation Energy Generation, LLC 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 CSP was approved by License Amendment No. 249 as modified by License Amendment No. 259.

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

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 286, 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 set of plans¹, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Quad Cities Nuclear Power Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 2," submitted by letter dated May 17, 2006.

Constellation Energy Generation, LLC 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 CSP was approved by License Amendment No. 244 and modified by License Amendment No. 254.

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

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.1.8	<p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.9	<p>-----NOTE----- Valve actuation may be excluded. -----</p> <p>Verify the ADS actuates on an actual or simulated automatic initiation signal.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.10	Verify each ADS valve actuator strokes when manually actuated.	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.11	Verify automatic transfer capability of the LPCI swing bus power supply from the normal source to the backup source.	In accordance with the Surveillance Frequency Control Program
SR 3.5.1.12	Verify ADS pneumatic supply header pressure is ≥ 80 psig.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.2.4 -----NOTE----- 1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR. ----- Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.5 Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.2.6 -----NOTE----- Vessel injection/spray may be excluded. ----- Verify the required ECCS injection/spray subsystem can be manually operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5 -----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.1	Operate the CREV System for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.4.2	Perform required CREV filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.4.3	Verify the CREV System isolation dampers close on an actual or simulated initiation signal, except for dampers that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.4.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program



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

R. E. GINNA NUCLEAR POWER PLANT, LLC

CONSTELLATION ENERGY GENERATION, LLC

DOCKET NO. 50-244

R. E. GINNA NUCLEAR POWER PLANT

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 149
Renewed License No. DPR-18

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC dated September 27, 2021, as supplemented by the Constellation Energy Generation, LLC letters dated February 23 and April 4, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-18 is hereby amended to read as follows:

- (2) Technical Specifications

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 149, are hereby incorporated in the renewed license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Date of Issuance: April 29, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 149
RENEWED FACILITY OPERATING LICENSE NO. DPR-18
R. E. GINNA NUCLEAR POWER PLANT
DOCKET NO. 50-244

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

Remove

License DPR-18
Page 4

TSs
3.7.9-2

Insert

License DPR-18
Page 4

TSs
3.7.9-2

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 149, are hereby incorporated in the renewed license. Constellation Energy Generation, LLC shall operate the facility in accordance with the Technical Specifications.

(3) Fire Protection

Constellation Energy Generation, LLC shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee's amendment request dated March 28, 2013, supplemented by letters dated December 17, 2013; January 29, 2014; February 28, 2014; September 5, 2014; September 24, 2014; December 4, 2014; March 18, 2015; June 11, 2015; August 7, 2015; and as approved in the safety evaluation report dated November 23, 2015. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

(a) Risk-Informed Changes that May Be Made Without Prior NRC Approval

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

1. Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

CONDITION		REQUIRED ACTION		COMPLETION TIME
D.	Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies.	D.1	Place OPERABLE CREATS train in emergency mode.	Immediately
		<u>OR</u>		
		D.2	Suspend movement of irradiated fuel assemblies.	Immediately
E.	Two CREATS trains inoperable during movement of irradiated fuel assemblies.	E.1	Suspend movement of irradiated fuel assemblies.	Immediately
	<u>OR</u>			
	One or more CREATS trains inoperable due to an inoperable CRE boundary during movement of irradiated fuel assemblies.			
F.	Two CREATS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1	Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Operate each CREATS filtration train \geq 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.9.2	Perform required CREATS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.9.3	Verify each CREATS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 226 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-72

AMENDMENT NO. 226 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-77

AMENDMENT NO. 228 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-37

AMENDMENT NO. 228 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-66

AMENDMENT NO. 344 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 322 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69

AMENDMENT NO. 244 TO FACILITY OPERATING LICENSE NO. NPF-62

AMENDMENT NO. 278 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-19

AMENDMENT NO. 271 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-25

AMENDMENT NO. 349 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-59

AMENDMENT NO. 256 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-11

AMENDMENT NO. 242 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-18

AMENDMENT NO. 257 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-39

AMENDMENT NO. 219 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-85

AMENDMENT NO. 191 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-69

AMENDMENT NO. 342 TO SUBSEQUENT RENEWED FACILITY
OPERATING LICENSE NO. DPR-44

AMENDMENT NO. 345 TO SUBSEQUENT RENEWED FACILITY
OPERATING LICENSE NO. DPR-56

AMENDMENT NO. 290 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-29

AMENDMENT NO. 286 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-30

AND AMENDMENT NO. 149 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-18

CONSTELLATION ENERGY GENERATION, LLC

BRAIDWOOD STATION, UNITS 1 AND 2

BYRON STATION, UNIT NOS. 1 AND 2

CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2

CLINTON POWER STATION, UNIT NO. 1

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

LASALLE COUNTY STATION, UNITS 1 AND 2

LIMERICK GENERATING STATION, UNITS 1 AND 2

NINE MILE POINT NUCLEAR STATION, UNIT 2

PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

R. E. GINNA NUCLEAR POWER PLANT

DOCKET NOS. STN 50-456, STN 50-457, STN 50-454, STN 50-455,

50-317, 50-318, 50-461, 50-237, 50-249, 50-333, 50-373, 50-374, 50-352,

50-353, 50-410, 50-277, 50-278, 50-254, 50-265, AND 50-244

1.0 INTRODUCTION

By application dated September 27, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21270A069), Exelon Generation Company, LLC (EGC) submitted a license amendment request (LAR) for Braidwood Station (Braidwood), Units 1 and 2; Byron Station (Byron), Unit Nos. 1 and 2; Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2; Clinton Power Station (Clinton), Unit No. 1; Dresden Nuclear Power Station (Dresden), Units 2 and 3; James A. FitzPatrick Nuclear Power Plant (FitzPatrick); LaSalle County Station (LaSalle), Units 1 and 2; Limerick Generating Station (Limerick), Units 1 and 2; Nine Mile Point Nuclear Station, Unit 2 (NMP-2); Peach Bottom Atomic Power Station (Peach Bottom), Units 2 and 3; Quad Cities Nuclear Power Station (Quad Cities), Units 1 and 2; and R. E. Ginna Nuclear Power Plant (Ginna) (collectively, the facilities). Subsequently, on February 1, 2022 (ADAMS Accession No. ML22032A333), EGC was renamed Constellation Energy Generation, LLC (CEG, or the licensee). CEG supplemented the LAR by letters dated February 23 and April 4, 2022 (ADAMS Accession Nos. ML22054A107 and ML22094A040, respectively). The February 23, 2022, supplement was in response to a U.S. Nuclear Regulatory Commission (NRC, or Commission) request for additional information dated February 10, 2022 (ADAMS Accession No. ML22041B536).

The proposed amendments would revise the technical specifications (TSs) for each facility based on Technical Specification Task Force (TSTF) traveler TSTF-541, Revision 2, “Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position,” dated August 28, 2019 (ADAMS Accession No. ML19240A315). The NRC approved TSTF-541, Revision 2, by letter dated December 10, 2019 (ADAMS Package Accession No. ML19323E957). The amendments would also make similar changes to surveillance requirements (SRs) not included in TSTF-541, Revision 2, and editorial changes to the TSs.

The February 23 and April 4, 2022, supplemental letters 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 November 30, 2021 (86 FR 67988).

1.1 System Descriptions

The licensee has proposed revising SRs for various systems based on TSTF-541, Revision 2. The systems affected by the proposed amendments are different depending upon the specific design of the facility. The units at Braidwood, Byron, and Ginna are pressurized-water reactors (PWRs) designed by Westinghouse. Calvert Cliffs, Units 1 and 2, are PWRs designed by Combustion Engineering. The units at Clinton, Dresden, Fitzpatrick, LaSalle, Limerick, NMP-2, Peach Bottom, and Quad Cities are boiling-water reactors (BWRs) designed by General Electric. The relevant system descriptions for this application are described below.

Control Room Ventilation System (All Facilities, Except FitzPatrick and Limerick)

The control room ventilation system provides a protected environment from which occupants can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. The TSs for Braidwood, Byron, Calvert Cliffs, Clinton, LaSalle, NMP-2, Peach Bottom, and Ginna include an SR to verify that each control room ventilation system train or subsystem, as applicable, actuates on an actual or simulated actuation signal, this includes actuation of required dampers and valves. The TSs for Dresden include an SR to verify that the control room ventilation system actuates on a manual initiation signal, this includes actuation of required dampers and valves. The TSs for Quad Cities include an SR to verify that the control room ventilation system isolation dampers close on an actual or simulated initiation signal. The specific SR number and system name for each facility are listed in Table 1 below.

Table 1: Control room ventilation system name and SR to verify system actuation.

Facility	System Name	SR for System Actuation
Braidwood	Control Room Ventilation Filtration System	SR 3.7.10.3
Byron	Control Room Ventilation Filtration System	SR 3.7.10.3
Calvert Cliffs	Control Room Emergency Ventilation System	SR 3.7.8.3
Clinton	Control Room Ventilation System	SR 3.7.3.4
Dresden	Control Room Emergency Ventilation System	SR 3.7.4.3
LaSalle	Control Room Area Filtration System	SR 3.7.4.4
NMP-2	Control Room Envelope Filtration System	SR 3.7.2.3
Peach Bottom	Main Control Room Emergency Ventilation System	SR 3.7.4.3
Quad Cities	Control Room Emergency Ventilation System	SR 3.7.4.3
Ginna	Control Room Emergency Air Treatment System	SR 3.7.9.3

Nonaccessible Area Exhaust Filter Plenum Ventilation System (Braidwood and Byron)

At Braidwood and Byron, the nonaccessible area exhaust filter plenum ventilation system, in conjunction with other normally operating systems, provides environmental control of temperature and humidity in the emergency core cooling system (ECCS) pump room area and the lower reaches of the auxiliary building. Ductwork, valves or dampers, and instrumentation also form part of the system, as well as demisters functioning to reduce the relative humidity of the air stream. During emergency operations, the nonaccessible area exhaust filter plenum ventilation system dampers are realigned, and fans are started to begin air filtration. Upon receipt of the actuating signal, normal air discharges from the ECCS pump room isolate, and the stream of ventilation air discharges through the system filter trains. The prefilters or demisters remove any large particles in the air, and any entrained water droplets present, to prevent excessive loading of the high-efficiency particulate air (HEPA) filters and charcoal adsorbers. For Braidwood and Byron, SR 3.7.12.3 requires the licensee to verify each nonaccessible area exhaust filter plenum ventilation system train actuates on a manual, actual, or simulated actuation signal, which would include actuation of required dampers and valves.

Fuel Handling Building Exhaust Filter Plenum Ventilation System (Braidwood and Byron)

At Braidwood and Byron, the fuel handling building exhaust filter plenum (FHB) ventilation system filters airborne radioactive particulates from the area of the fuel pool following a fuel handling accident or loss-of-coolant accident (LOCA). The FHB ventilation system, in conjunction with other normally operating systems, also provides environmental control of temperature and humidity in the fuel pool area. The FHB ventilation system consists of two independent and redundant trains. Each train consists of a heater, prefilter or demister, HEPA filter, activated charcoal adsorber section for removal of gaseous activity (principally iodine), and a fan. Ductwork, valves or dampers, and instrumentation also form part of the system, as well as demisters, functioning to reduce the relative humidity of the airstream. The system initiates filtered ventilation of the fuel handling building following receipt of a high-radiation signal. The FHB ventilation system is a standby system, parts of which may also be operated during normal plant operations. Upon receipt of the actuating signal, normal air discharges from the building, the fuel handling building is isolated, and the stream of ventilation air discharges through the system filter trains. For Braidwood and Byron, SR 3.7.13.4 requires the licensee to verify each FHB ventilation system train actuates on an actual or simulated actuation signal, which would include actuation of required dampers and valves.

Iodine Removal System (Calvert Cliffs)

At Calvert Cliffs, the iodine removal system (IRS), in conjunction with the containment spray and cooling systems, reduces the potential release of radioactive material, principally iodine, from the containment to the environment following a design-basis accident (DBA). The IRS consists of two 100 percent capacity, separate, independent, and redundant trains. Each train includes a heater, cooling coils, prefilter, demister, HEPA filter, activated charcoal adsorber section for removal of radioiodine, and a fan. Ductwork, valves and dampers, and instrumentation also form part of the system. The system initiates filtered recirculation of the containment atmosphere following receipt of a containment isolation actuation signal. For Calvert Cliffs, SR 3.6.8.3 requires the licensee to verify each IRS train actuates on an actual or simulated actuation signal, which would include actuation of required dampers and valves.

Penetration Room Exhaust Ventilation System (Calvert Cliffs)

At Calvert Cliffs, the penetration room exhaust ventilation system (PREVS) filters air from the penetration area between the containment and the auxiliary building. The PREVS consists of two independent and redundant trains. Each train consists of a heater, prefilter or demister, HEPA filter, activated charcoal adsorber section for removal of gaseous activity (principally iodine), and a fan. Ductwork, valves and dampers, instrumentation, and demisters also form part of the system. The PREVS is a standby system, parts of which may also operate during normal plant operations. Upon receipt of an actuating signal, the PREVS dampers are realigned, and fans are started to initiate filtration. For Calvert Cliffs, SR 3.7.12.3 requires the licensee to verify each PREVS train actuates on an actual or simulated actuation signal, which would include actuation of required dampers and valves.

Emergency Core Cooling System (All BWR Facilities)

At the BWR facilities, the ECCS is designed to limit the release of radioactive materials to the environment following a LOCA and consists of coolant injection, core spray, and automatic depressurization systems. The TSs for the BWR facilities except Limerick include an SR that requires the licensee to verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, which would include actuation of required valves. For the ECCS injection and spray systems at Limerick, SR 4.5.1.c.1 requires the licensee to perform a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence and verifying that each automatic valve in the flow path actuates to its correct position. These SRs are listed under the ECCS-Operating column in Table 2 below.

Table 2: ECCS SRs for injection/spray subsystem actuation and automatic valve actuation.

Facility	ECCS - Operating	RPV Water Inventory Control	
		SR for automatic valve actuation	SR for injection/spray subsystem actuation
Clinton	SR 3.5.1.5	SR 3.5.2.6	SR 3.5.2.7
Dresden	SR 3.5.1.8	SR 3.5.2.5	SR 3.5.2.6
FitzPatrick	SR 3.5.1.10	SR 3.5.2.7	SR 3.5.2.8
LaSalle	SR 3.5.1.6	SR 3.5.2.6	SR 3.5.2.7
Limerick	SR 4.5.1.c.1	SR 4.5.2.7	SR 4.5.2.8
NMP-2	SR 3.5.1.5	SR 3.5.2.6	SR 3.5.2.7
Peach Bottom	SR 3.5.1.10	SR 3.5.4.7	SR 3.5.4.8
Quad Cities	SR 3.5.1.8	SR 3.5.2.5	SR 3.5.2.6

At the BWR facilities, the ECCS also functions to assist with reactor pressure vessel (RPV) water inventory control during modes 4 and 5. For the BWR facilities, TS 3.5.2 (Peach Bottom TS 3.5.4), "RPV Water Inventory Control," establishes requirements for minimum RPV drain times and availability of ECCS subsystems. These limits and availability requirements provide assurance that the RPV water inventory will adequately cover and cool fuel in the vessel. The TSs for the BWR facilities include an SR that requires the licensee to verify that each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal. In addition, these TSs include an SR that requires the licensee to verify that the required ECCS injection/spray subsystem can be manually operated,

including repositioning of required valves. These SRs are listed under the RPV Water Inventory Control columns in Table 2 above.

Reactor Core Isolation Cooling System (Clinton, Fitzpatrick, LaSalle, Limerick, NMP-2, Peach Bottom, and Quad Cities)

At Clinton, Fitzpatrick, LaSalle, Limerick, NMP-2, Peach Bottom, and Quad Cities, the function of the reactor core isolation cooling (RCIC) system is to respond to transient events by providing makeup coolant to the reactor. SR 3.5.3.5 for Clinton, FitzPatrick, LaSalle, NMP-2, Peach Bottom, and Quad Cities requires the licensee to verify the RCIC system actuates on an actual or simulated automatic initiation signal, which would include actuation of required dampers and valves, as applicable. SR 4.7.3.c.1 for Limerick requires the licensee to perform a system functional test which includes simulated automatic actuation and restart and verifying that each automatic valve in the flow path actuates to its correct position.

Isolation Condenser System (Dresden)

At Dresden, the isolation condenser (IC) system functions to provide adequate core cooling following RPV isolation. The system passively removes heat and controls reactor pressure. At Dresden, SR 3.5.3.3 requires the licensee to verify that the IC system actuates on an actual or simulated automatic initiation signal, which would include actuation of required valves.

Residual Heat Removal Containment Spray System (Clinton)

At Clinton, the residual heat removal (RHR) containment spray system is designed to mitigate the effects of primary containment bypass leakage and low-energy line breaks. SR 3.6.1.7.3 for Clinton requires the licensee to verify that each RHR containment spray subsystem automatic valve in the flow path actuates to its correct position on an actual or simulated automatic actuation signal.

Standby Gas Treatment System (All BWR Facilities)

At the BWR facilities, the function of the standby gas treatment (SGT) system is to ensure that radioactive materials that leak from the primary containment into the secondary containment following a DBA are filtered and adsorbed prior to exhausting to the environment. At all the BWR facilities except Limerick, SR 3.6.4.3.3 requires the licensee to verify that each SGT subsystem actuates on an actual or simulated initiation signal, which would include actuation of required dampers. At Limerick, SR 4.6.5.3.d.2 requires the licensee to verify, for each SGT subsystem, that the fan starts and isolation valves necessary to draw a suction from the refueling area or the reactor enclosure recirculation discharge open on each of the following test signals: (a) manual initiation signal from the control room, and (b) simulated automatic initiation signal. SR 3.6.4.3.4 for Clinton requires the licensee to verify that each SGT filter cooling bypass damper can be opened, and the fan started.

Reactor Enclosure Recirculation System (Limerick)

At Limerick, the function of the reactor enclosure recirculation system (RERS), along with the SGT system, is to ensure sufficient iodine removal capability following a LOCA. This reduces the amount of radioiodine that can be released through containment leakage to the atmosphere to limit radiation doses to control room personnel and offsite individuals. At Limerick, SR 4.6.5.4.d.2 requires the licensee to verify, for each reactor enclosure recirculation

subsystem, that the filter train starts and the isolation valves which take suction on and return to the reactor enclosure open on each of the following test signals: (a) manual initiation from the control room, and (b) simulated automatic initiation signal.

Emergency Service Water System (Clinton, FitzPatrick, Limerick, NMP-2, and Peach Bottom)

At Clinton, FitzPatrick, Limerick, NMP-2, and Peach Bottom, the emergency service water (ESW) system is designed to provide cooling water for the removal of heat from equipment required for a safe reactor shutdown following a DBA or transient. The ESW system also provides cooling to unit components, as required, during normal shutdown and reactor isolation modes. During a DBA, the equipment required only for normal operation is isolated and cooling is directed to only safety-related equipment. The ESW systems at Clinton and NMP-2 are called the shutdown service water system and service water system, respectively.

At Clinton, SR 3.7.1.3 (Division 1 and 2) and SR 3.7.2.2 (Division 3) requires the licensee to verify that each shutdown service water subsystem actuates on an actual or simulated initiation signal, which would include actuation of required valves. SR 3.7.1.7 for NMP-2, SR 3.7.2.4 for FitzPatrick, and SR 3.7.2.4 for Peach Bottom require the licensee to verify that each ESW subsystem actuates on an actual or simulated initiation signal, which would include actuation of required valves. SR 4.7.1.2.b.1 for Limerick requires the licensee to verify that each automatic valve actuates to its correct position on its appropriate ESW pump signal for the required ESW system loop(s).

1.2 Description of Proposed Changes

The licensee proposed to revise certain SRs by adding exceptions to the verification requirements in these SRs for automatic dampers or valves that are locked, sealed, or otherwise secured in the actuated position. The SRs are described in Section 1.1 of this safety evaluation (SE), and a summary of the proposed SR changes is provided below.

- Braidwood and Byron SRs 3.7.10.3, 3.7.12.3, and 3.7.13.4 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”
- Calvert Cliffs SRs 3.6.8.3, 3.7.8.3, and 3.7.12.3 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”
- Clinton SRs 3.5.1.5, 3.5.2.6, 3.5.2.7, 3.5.3.5, 3.6.1.7.3, 3.7.1.3, and 3.7.2.2 would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” Clinton SRs 3.6.4.3.3 and 3.6.4.3.4 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.” Clinton SR 3.7.3.4 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”
- Dresden SRs 3.5.1.8, 3.5.2.5, 3.5.2.6, and 3.5.3.3 would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” Dresden SR 3.6.4.3.3 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.” Dresden

SR 3.7.4.3 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”

- FitzPatrick SRs 3.5.1.10, 3.5.2.7, 3.5.2.8, 3.5.3.5, and 3.7.2.4 would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” FitzPatrick SR 3.6.4.3.3 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.”
- LaSalle SRs 3.5.1.6, 3.5.2.6, 3.5.2.7, and 3.5.3.5¹ would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” LaSalle SR 3.6.4.3.3 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.” LaSalle SR 3.7.4.4 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”
- Limerick SRs 4.5.1.c.1, 4.5.2.7, 4.5.2.8, 4.6.5.3.d.2, 4.6.5.4.d.2, 4.7.1.2.b.1, and 4.7.3.c.1 would be revised by a footnote allowing an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.”
- NMP-2 SRs 3.5.1.5, 3.5.2.6, 3.5.2.7, 3.5.3.5, and 3.7.1.7² would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” NMP-2 SR 3.6.4.3.3 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.” NMP-2 SR 3.7.2.3 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”
- Peach Bottom SRs 3.5.1.10, 3.5.3.5, 3.5.4.7, 3.5.4.8, and 3.7.2.4 would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” Peach Bottom SR 3.6.4.3.3 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.” Peach Bottom SR 3.7.4.3 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”
- Quad Cities SRs 3.5.1.8, 3.5.2.5, 3.5.2.6, and 3.5.3.5³ would be revised to include an exception “for valves that are locked, sealed, or otherwise secured in the actuated position.” Quad Cities SRs 3.6.4.3.3 and 3.7.4.3 would be revised to include an exception “for dampers that are locked, sealed, or otherwise secured in the actuated position.”

¹ The TS markup provided with the application shows that LaSalle SR 3.5.2.7 and SR 3.5.2.8 were to be revised. These SRs were renumbered as SR 3.5.2.6 and SR 3.5.2.7, respectively, by amendments issued on December 7, 2021 (ADAMS Accession No. ML21307A342).

² The TS markup provided with the application shows that NMP-2 SR 3.5.2.7 and SR 3.5.2.8 were to be revised. These SRs were renumbered as SR 3.5.2.6 and SR 3.5.2.7, respectively, by amendment issued on March 4, 2022 (ADAMS Accession No. ML22033A310). In addition, the original text for SR 3.5.2.8 was also revised by this amendment. The current text for SR 3.5.2.7 is described in Section 1.1 of this SE.

³ The TS markup provided with the application shows that Quad Cities SR 3.5.2.6 and SR 3.5.2.7 were to be revised. These SRs were renumbered as SR 3.5.2.5 and SR 3.5.2.6, respectively, by amendments issued on December 7, 2021 (ADAMS Accession No. ML21307A342).

- Ginna SR 3.7.9.3 would be revised to include an exception “for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.”

For FitzPatrick, the licensee also proposed to delete an obsolete footnote to SR 3.7.2.4.

1.3 Variations from TSTF-541, Revision 2

The following variations from TSTF-541, Revision 2, were identified in the application:

- Some of the facility TSs use different numbering, titles, and nomenclature than the Standard Technical Specifications (STSs) on which TSTF-541, Revision 2, was based.
- The Limerick TSs are based on an older version of the STS, which has different formatting and wording than the current STS.
- Plant-specific variations from the revised SR wording in TSTF-541, Revision 2, were proposed to reflect plant-specific configuration and nomenclature. These changes were made so that the SRs reflect whether the facilities have valves, dampers, or both installed in the equipment to which the SRs apply.
- The proposed changes to the SRs for the RPV water inventory control (see Table 2 above) are not included in TSTF-541, Revision 2, as these SRs were not in the STS when TSTF-541 was developed.
- The proposed change to SR 3.5.3.3 for the Dresden IC system was not included in TSTF-541, Revision 2, as this system is not in the STS.
- The proposed change to SR 4.6.5.4.d.2 for the Limerick RERS was not included in TSTF-541, Revision 2, as this system is not in the STS.
- The proposed deletion of the obsolete footnote to SR 3.7.2.4 for FitzPatrick is unrelated to TSTF-541, Revision 2.

2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.90, “Application for amendment of license, construction permit, or early site permit,” requires that whenever a licensee desires to amend the license, application for an amendment must be filed with the Commission fully describing the changes desired, and following as far as applicable, the form prescribed for original applications.

Under 10 CFR 50.92(a), determinations on whether to grant an applied-for license amendment are guided by the considerations that govern the issuance of initial licenses or construction permits to the extent applicable and appropriate. Both the common standards for licenses and construction permits in 10 CFR 50.40(a), and those specifically for issuance of operating licenses in 10 CFR 50.57(a)(3), provide that there must be “reasonable assurance” that the activities at issue will not endanger the health and safety of the public.

The regulation under 10 CFR 50.36, “Technical specifications,” establishes the regulatory requirements related to the content of TSs. Section 50.36(a)(1) requires an application for an

operating license to include proposed TSs. A summary statement of the bases or reasons for such specifications, other than those covering administrative controls, must also be included in the application, but shall not become part of the TSs.

The categories of items required to be in the TS are listed in 10 CFR 50.36(c). In accordance with 10 CFR 50.36(c)(2), limiting conditions for operation (LCOs) are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When LCOs are not met, the licensee must shut down the reactor or follow any remedial action permitted by the TSs until the condition can be met.

SRs are defined in 10 CFR 50.36(c)(3) as “requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.”

The NRC staff’s guidance for the review of TSs is in Chapter 16.0, Revision 3, “Technical Specifications,” dated March 2010 (ADAMS Accession No. ML100351425), of NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition.” As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STSs for each of the LWR nuclear designs. Accordingly, the NRC staff’s review includes consideration of whether the proposed changes are consistent with the applicable STSs (i.e., the current STS), as modified by NRC-approved travelers. In addition, the guidance states that comparing the change to previous STS can help clarify the TS intent. The current STSs that are applicable to the facilities are:

- NUREG-1431, “Standard Technical Specifications, Westinghouse Plants,” Volume 1, “Specifications,” and Volume 2, “Bases,” Revision 5.0, dated September 2021 (ADAMS Accession Nos. ML21259A155 and ML21259A159, respectively).
- NUREG-1432, “Standard Technical Specifications, Combustion Engineering Plants,” Volume 1, “Specifications,” and Volume 2, “Bases,” Revision 5.0, dated September 2021 (ADAMS Accession Nos. ML21258A421 and ML21258A424, respectively).
- NUREG-1433, “Standard Technical Specifications, General Electric BWR/4 Plants,” Volume 1, “Specifications,” and Volume 2, “Bases,” Revision 5.0, dated September 2021 (ADAMS Accession Nos. ML21272A357 and ML21272A358, respectively).
- NUREG-1434, “Standard Technical Specifications, General Electric BWR/6 Plants” Volume 1, “Specifications,” and Volume 2, “Bases,” Revision 5.0, dated September 2021 (ADAMS Accession Nos. ML21271A582 and ML21271A596, respectively).

3.0 TECHNICAL EVALUATION

3.1 Proposed TS Changes to Adopt TSTF-541

The proposed amendments are based on the NRC-approved TSTF-541, Revision 2. The NRC staff’s evaluation of the proposed amendments relies upon the NRC staff’s previous approval of TSTF-541, Revision 2. The regulatory framework the NRC staff used to determine the acceptability of the proposed changes consists of the requirements and guidance listed in Section 2.0 of this SE. The NRC staff reviewed the proposed TS changes to determine whether

they meet the standards in 10 CFR 50.36(c)(3). The licensee's proposed changes to the SRs are consistent with TSTF-541, Revision 2, except for the variations described in Section 1.3 of this SE.

As discussed in Section 1.1 of this SE, the SRs to be revised by these amendments are used to verify that certain systems, subsystems, trains, components, are OPERABLE. The definition section of the TSs for each facility states, in part, that:

A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).

The proposed changes to the SRs would exclude the need to verify actuation of dampers and valves that do not, in fact, actuate (i.e., change position) in response to an actuation signal.

The licensee's LAR contains the following statements:

1. While the proposed exceptions permit automatic valves and dampers that are locked, sealed, or otherwise secured in the actuated position to be excluded from the SR in order to consider the SR met, the proposed changes will not permit a system that is made inoperable by locking, sealing, or otherwise securing an automatic valve or damper in the actuated position to be considered operable. As stated in the SR 3.0.1 Bases, "Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when: a. The systems or components are known to be inoperable, although still meeting the SRs."
2. EGC acknowledges that under the proposed change, the affected valves and dampers may be excluded from the SR when locked, sealed or otherwise secured in the actuated position. However, if the safety analysis assumes movement from the actuated position following an event, or the system is rendered inoperable by locking, sealing, or otherwise securing the valve or damper in the actuated position, then the system cannot perform its specified safety function and is inoperable regardless of whether the SR is met.
3. EGC acknowledges for components for which the SR allowance can be utilized, the SR must be verified to have been met within its required Frequency after removing the valve or damper from the locked, sealed or otherwise secured status. If the SR exception is utilized to not test the actuation of a valve or damper and the specified Frequency of the SR is exceeded without testing the component, the SR must be performed on the component when it is returned to service in order to meet the SR.

Based on the above, the NRC staff determined that there is reasonable assurance that the licensee will continue to properly control affected equipment in accordance with existing regulations and requirements when using the exceptions added to the respective SRs.

The amended SRs would continue to require the licensee to verify that valves and dampers that must actuate to perform their safety functions and support functions are able to change position. The NRC staff finds that it is not necessary to verify actuation of valves and dampers that are locked, sealed, or otherwise secured in their actuated positions. Accordingly, the NRC staff finds that the TSs, with the proposed changes, would continue to meet 10 CFR 50.36(c)(3), because the revised SRs will continue to provide assurance that the necessary quality of systems and components is maintained and that the LCOs will be met. Therefore, the proposed changes are acceptable to the NRC staff.

3.2 Variations

3.2.1 Editorial Variations

As discussed in Section 1.3, the licensee proposed and the NRC staff reviewed the following variations from TSTF-541, Revision 2, and determined that they were editorial in nature and do not affect the applicability of the traveler to the facilities:

- Some of the facility TSs use different numbering, titles, and nomenclature than the STSs on which TSTF-541, Revision 2, was based.
- The Limerick TSs are based on an older version of the STS, which has different formatting and wording than the current STS.
- Plant-specific variations from the revised SR wording in TSTF-541, Revision 2, were proposed to reflect plant-specific configuration and nomenclature. These changes were made so that the SRs reflect whether the facilities have valves, dampers, or both installed in the equipment to which the SRs apply.

3.2.2 Similar Changes to SRs Not Included in TSTF-541, Revision 2

The licensee proposed to revise the following SRs that were not included in TSTF-541, Revision 2, by adding exceptions to the verification requirements in these SRs for automatic valves that are locked, sealed, or otherwise secured in the actuated position:

- BWR SRs for RPV water inventory control listed in Table 2 of this SE;
- Dresden SR 3.5.3.3 for the IC system; and
- Limerick SR 4.6.5.4.d.2 for the RERS.

The licensee stated that the TSs for the BWR facilities have incorporated TSTF-542, Revision 2, "Reactor Pressure Vessel Water Inventory Control" (ADAMS Accession No. ML16074A448), which had not been incorporated into the versions of the STSs on which TSTF-541, Revision 2, was based. The licensee further stated that the changes in TSTF-541, Revision 2, are equally applicable to the ECCS SRs, listed in Table 2 of this SE, that were added with the adoption of TSTF-542, Revision 2. The licensee also stated that the Dresden facility design includes an IC system instead of an RCIC system, but the justification for TSTF-541, Revision 2, is also applicable to SR 3.5.3.3 for the Dresden IC system. In addition, the licensee stated that the justification for TSTF-541, Revision 2, is also applicable to SR 4.6.5.4.d.2 for the Limerick RERS.

The NRC staff determined that these SRs are similar to the type of SRs included in TSTF-541, Revision 2, and the proposed changes are equivalent. Specifically, the proposed changes to these SRs would exclude the need to verify actuation of valves that do not, in fact, actuate (i.e., change position) in response to an actuation signal. The amended SRs would continue to require the licensee to verify that valves and dampers that must actuate to perform their safety functions and support functions are able to change position.

The NRC staff reviewed the justification provided in TSTF-541, Revision 2, and the associated NRC staff SE and found that it was equally applicable to the proposed changes to these SRs. Therefore, the proposed changes are acceptable to the NRC staff for the same reasons discussed in Section 3.1 of this SE. Specifically, the NRC staff finds that it is not necessary to verify actuation of valves that are locked, sealed, or otherwise secured in their actuated positions for the following systems:

- The licensee's BWR ECCS systems that support the PRV water inventory control;
- The Dresden IC system; and
- The Limerick RERS.

Accordingly, the NRC staff finds that the TSs, with these proposed changes, would continue to meet 10 CFR 50.36(c)(3), because the revised SRs will continue to provide assurance that the necessary quality of systems and components is maintained and that the LCOs will be met.

3.2.3 Additional Changes

The licensee proposed to delete an obsolete footnote to SR 3.7.2.4 for FitzPatrick. The NRC staff determined that the proposed change is acceptable because deletion of the footnote does not change the TS requirements for FitzPatrick.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois, Maryland, Pennsylvania, and New York State officials were notified of the proposed issuance of the amendments on March 28, 2022. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and change SRs. 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 in the *Federal Register* (86 FR 67988; November 30, 2021), and there has been no public comment on such finding. In addition, the amendments make editorial, corrective, or other minor revisions to the TSs. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that 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: B. Purnell, NRR

Date: April 29, 2022

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3; JAMES A. FITZPATRICK NUCLEAR POWER PLANT; LASALLE COUNTY STATION, UNITS 1 AND 2; LIMERICK GENERATING STATION, UNITS 1 AND 2; NINE MILE POINT NUCLEAR STATION, UNIT 2; PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3; QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2; AND R. E. GINNA NUCLEAR POWER PLANT — ISSUANCE OF AMENDMENTS TO ADOPT TSTF-541, REVISION 2, “ADD EXCEPTIONS TO SURVEILLANCE REQUIREMENTS FOR VALVES AND DAMPERS LOCKED IN THE ACTUATED POSITION” (EPID L-2021-LLA-0169) DATED APRIL 29, 2022

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