



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

December 2, 2019

Mr. David B. Hamilton
Senior Vice President and Chief
Nuclear Officer
FirstEnergy Nuclear Operating Company
341 White Pine Drive
Akron, OH 44320

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2; DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1; AND PERRY NUCLEAR POWER PLANT, UNIT NO. 1 – ORDER APPROVING TRANSFER OF LICENSES AND DRAFT CONFORMING LICENSE AMENDMENTS (EPID L-2019-LLM-0000)

Dear Mr. Hamilton:

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the application dated April 26, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19116A087), as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019 (ADAMS Accession Nos. ML19151A531, ML19214A100, ML19241A462, ML19268A053, ML19268B133, and ML19290D432, respectively).

The application seeks an NRC order consenting to the transfer of Renewed Facility Operating License (FOL) Nos. DPR-66 and NPF-73 for Beaver Valley Power Station (BVPS), Unit Nos. 1 and 2, and its generally licensed independent spent fuel storage installation (ISFSI); Renewed FOL No. NPF-3 for Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS), and its generally licensed ISFSI; and FOL No. NPF-58 for Perry Nuclear Power Plant, Unit No. 1 (PNPP), and its generally licensed ISFSI. Specifically, the application seeks a direct transfer of operating authority for the facilities from FirstEnergy Nuclear Operating Company (FENOC) to an as-yet unnamed company, herein identified as OpCo; a direct transfer of ownership of the facilities from FirstEnergy Nuclear Generation, LLC (FENGen) to an as-yet unnamed company, herein identified as OwnerCo; and an indirect transfer of ownership of the facilities to an as-yet unnamed parent company, herein identified as New HoldCo (FirstEnergy Corp. is currently the ultimate parent company).

The Order in Enclosure 1 approves the proposed transfers pursuant to Sections 50.80 and 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), and subject to the conditions described therein. The Order also approves the enclosed draft conforming license amendments for BVPS Unit 1, BVPS Unit 2, DBNPS, and PNPP (Enclosures 2 through 5, respectively), which will be issued and made effective at the time the transfer actions are completed. The Order is effective upon issuance and valid for 1 year from the date of issuance.

NOTICE: Enclosure 7 to this letter contains proprietary information. Upon separation from Enclosure 7, this letter is decontrolled.

D. Hamilton

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Enclosure 6 is the NRC staff's non-proprietary safety evaluation (SE) related to the application. A proprietary version of the SE is provided as Enclosure 7.

The Order has been forwarded to the Office of the Federal Register for publication.

If you have any questions, please contact me at (301) 415-3308.

Sincerely,

Handwritten signature of Scott P. Wall in black ink, with the letters "(FER)" written in parentheses to the right of the signature.

Bhalchandra K. Vaidya, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-334, 50-412, 72-1043,
50-346, 72-14, 50-440,
and 72-69

Enclosures:

1. Order
2. Draft Conforming License Amendment
to Renewed FOL No. DPR-66
3. Draft Conforming License Amendment
to Renewed FOL No. NPF-73
4. Draft Conforming License Amendment
to Renewed FOL No. NPF-3
5. Draft Conforming License Amendment
to FOL No. NPF-58
6. Non-proprietary SE
7. Proprietary SE

cc without Enclosure 7:

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Listserv

ENCLOSURE 1

**ORDER APPROVING TRANSFERS OF CONTROL OF LICENSES
AND DRAFT CONFORMING LICENSE AMENDMENTS FOR
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2;
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1; AND
PERRY NUCLEAR POWER PLANT, UNIT NO. 1
(ADAMS Accession No. ML19303C953)**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
FIRSTENERGY NUCLEAR OPERATING)	
COMPANY)	
FIRSTENERGY NUCLEAR GENERATION,)	
LLC)	
)	
Beaver Valley Power Station, Unit Nos. 1)	Docket Nos. 50-334, 50-412, and 72-1043
and 2 and its generally licensed ISFSI)	License Nos. DPR-66 and NPF-73
)	
Davis-Besse Nuclear Power Station,)	Docket Nos. 50-346 and 72-14
Unit No. 1 and its generally licensed ISFSI)	License No. NPF-3
)	
Perry Nuclear Power Plant, Unit No. 1)	Docket Nos. 50-440 and 72-69
and its generally licensed ISFSI)	License No. NPF-58

ORDER APPROVING DIRECT AND INDIRECT TRANSFERS OF CONTROL
OF LICENSES AND DRAFT CONFORMING LICENSE AMENDMENTS

I.

FirstEnergy Nuclear Operating Company (FENOC) and FirstEnergy Nuclear Generation, LLC (FENGen) (together, the Applicants) operate and own, respectively, Beaver Valley Power Station (BVPS), Unit Nos. 1 and 2, and its generally licensed independent spent fuel storage installation (ISFSI); Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS) and its generally licensed ISFSI; and Perry Nuclear Power Plant, Unit No. 1 (PNPP) and its generally licensed ISFSI (together, the Facilities). Specifically, they are co-holders of:

- (1) Renewed Facility Operating License Nos. DPR-66 and NPF-73 for BVPS, Units 1 and 2, respectively, located in Beaver County, Pennsylvania;
- (2) Renewed Facility Operating License No. NPF-3 for DBNPS, located in Ottawa County, Ohio; and

(3) Facility Operating License No. NPF-58 for PNPP, located in Lake County, Ohio.

II.

By application dated April 26, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19116A087), as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019 (ADAMS Accession Nos. ML19151A531, ML19214A100, ML19241A462, ML19268A053, ML19268B133, and ML19290D432, respectively), the Applicants requested, pursuant to Section 184 of the Atomic Energy Act of 1954, as amended, and Section 50.80, "Transfer of licenses," of Title 10 of the *Code of Federal Regulations* (10 CFR), that the U.S. Nuclear Regulatory Commission (NRC, the Commission) consent to the transfer of licenses. Specifically, the Applicants requested a direct transfer of operating authority for the Facilities from FENOC to an as-yet unnamed company, herein identified as OpCo; a direct transfer of ownership of the Facilities from FENGen to an as-yet unnamed company, herein identified as OwnerCo; and an indirect transfer of ownership of the Facilities to an as-yet unnamed parent company, herein identified as New HoldCo (FirstEnergy Corp. is currently the ultimate parent company). The Applicants also requested the NRC's prior written consent and issuance of conforming amendments to the licenses pursuant to 10 CFR 50.80 and 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit."

On March 31, 2018, FirstEnergy Solutions Corp. (FES), together with FENOC, FENGen, and FES's other subsidiaries, filed voluntary petitions for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Northern District of Ohio, Eastern Division (Bankruptcy Court). By letter dated April 2, 2018 (ADAMS Accession No. ML18094A661), in accordance with 10 CFR 50.54(cc)(1), FENOC notified the NRC of the bankruptcy filing. The proposed direct and indirect license transfers would support the emergence from bankruptcy of the Applicants, along with FES and other

affiliated companies that are currently debtors in the bankruptcy process, pursuant to the Eighth Amended Joint Plan of Reorganization (the Bankruptcy Reorganization Plan) filed with the Bankruptcy Court on October 11, 2019, and the Revised Eighth Amended Plan filed with the Bankruptcy Court on October 14, 2019, and confirmed by the Bankruptcy Court on October 16, 2019, as noted in the Applicants' supplemental letter dated October 17, 2019.

Under the Bankruptcy Reorganization Plan, at emergence from bankruptcy, a new privately-held holding company, New HoldCo, will be formed with shares initially held by certain current creditors of one or more of FES, FENOC, FENGen, or FirstEnergy Generation, LLC (FG) (a sister company of FENGen holding fossil fuel generation assets) and management of the new holding company. Both OpCo and OwnerCo will become wholly-owned subsidiaries of New HoldCo. New HoldCo will also have ultimate ownership of FES's existing non-nuclear generating assets as well as the retail and wholesale load-serving business.

A notice of the application and opportunity to request a hearing and to comment on the application was published in the *Federal Register* (FR) on June 27, 2019 (84 FR 30775). In response, on July 17, 2019, the Environmental Law & Policy Center filed a hearing request. The hearing request is currently pending before the Commission. The NRC did not receive any comments on the application.

Pursuant to 10 CFR 50.80, no license for a production or utilization facility, or any right thereunder, shall be transferred, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission gives its consent in writing. Upon review of the information in the application for license transfer, as supplemented, and other information before the Commission, the NRC staff has determined that OpCo and OwnerCo are qualified to hold the licenses to the extent proposed to permit the transfer of the licenses from FENOC and FENGen to OpCo and OwnerCo, respectively, and that the transfers of the licenses, as described in the application, are otherwise consistent with applicable

provisions of law, regulations, and orders issued by the NRC pursuant thereto, subject to the conditions set forth below.

Upon review of the information in the application for conforming amendments, as supplemented, the NRC staff has determined that:

(1) The application for conforming license amendments 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.

(2) The Facilities will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission.

(3) There is reasonable assurance that the activities authorized by the amendments can be conducted without endangering the health and safety of the public and that such activities will be conducted in compliance with the Commission's regulations.

(4) The issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

(5) The issuance of the amendments is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

The findings set forth above are supported by an NRC staff safety evaluation dated the same date as this Order, which is available at ADAMS Accession No. ML19305B131 (non-proprietary).

III.

Accordingly, pursuant to Sections 161b, 161i, and 184 of the Atomic Energy Act of 1954, as amended, 42 USC §§ 2201(b), 2201(i), and 2234; and 10 CFR 50.80, 10 CFR 72.50, and 10 CFR 50.90, IT IS HEREBY ORDERED that the application for license transfers, as described herein, is approved for BVPS, Unit 1, BVPS, Unit 2, DBNPS, and PNPP, and the respective ISFSIs, subject to the following conditions.

1. OwnerCo and OpCo shall provide satisfactory documentary evidence to the Director of the NRC Office of Nuclear Reactor Regulation that, as of the date of the license transfer, the licensees reflected in the amended licenses have obtained the appropriate amount of insurance required of a licensee under 10 CFR Part 140 and 10 CFR 50.54(w).
2. On or by the closing date of the license transfer transaction, the Applicants shall take all necessary steps to ensure that the provisional trust agreement submitted on September 25, 2019, to address the shortfall identified for BVPS, Unit 1 is implemented and maintained consistent with the safety evaluation supporting this Order.
3. The NRC staff's approval of these license transfers is subject to the Commission's authority to rescind, modify, or condition the approved transfers based on the outcome of any post-effectiveness hearing on the license transfer application.

IT IS FURTHER ORDERED that after receipt of all required regulatory approvals of the proposed transfer actions, the Applicants shall inform the Director of the Office of Nuclear Reactor Regulation in writing of such receipt no later than 5 business days prior to the date of the closing of the transfer. Should the proposed transfer not be completed within 1 year from the date of this Order, this Order shall become null and void, provided, however, upon written application and for good cause shown, such date may be extended by order. The conditions of this Order may be amended upon application by the Applicants and approval by the Director of the Office of Nuclear Reactor Regulation.

IT IS FURTHER ORDERED that consistent with 10 CFR 2.1315(b), the license amendments that make changes, as indicated in Enclosures 2 through 5 to the letter transmitting this Order, to reflect the subject transfers, are approved. The amendments shall be issued and made effective within 30 days of the date when the proposed transfer actions are completed.

This Order is effective upon issuance.

For further details with respect to this Order, see the application dated April 26, 2019, as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019, and the NRC safety evaluation dated the same

date as this Order, which are available for public inspection at the NRC's Public Document Room (PDR) located at One White Flint North, Public File Area 01 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available documents created or received at the NRC are accessible electronically through ADAMS in the NRC Library at <https://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems accessing the documents located in ADAMS, should contact the NRC PDR reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to pdr.resource@nrc.gov.

Dated at Rockville, Maryland this 2nd day of December, 2019.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Eric J. Benner, Deputy Director,
Office of Nuclear Reactor Regulation.

ENCLOSURE 2

DRAFT CONFORMING LICENSE AMENDMENT

BEAVER VALLEY POWER STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334



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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION, LLC

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No.
Renewed License No. DPR-66

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by FirstEnergy Nuclear Operating Company (the licensee, FENOC), dated April 26, 2019, as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019, 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.

*FENOC is authorized to act as agent for FirstEnergy Nuclear Generation, LLC, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, Renewed Facility Operating License No. DPR-66 and Appendix C, Additional Conditions, are amended as indicated in the attachment to this license amendment.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 7 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Ho K. Nieh, Director
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. DPR-66
and Appendix C, Additional Conditions

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO. _____

BEAVER VALLEY POWER STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following pages of the Renewed Facility Operating License and Appendix C, Additional Conditions, with the attached revised pages. The revised pages are identified by amendment numbers and contain marginal lines indicating the areas of change.

Renewed Facility Operating License

REMOVE

1
2
3
4
6
7
8
9

INSERT

1
2
3
4
6
7
8
9

Appendix C, Additional Conditions

REMOVE

C-1
C-2
C-3
C-4
C-5
--

INSERT

C-1
C-2
C-3
C-4
C-5
C-6

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

OpCo

OwnerCo

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE

License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The application to Renewed Facility Operating License No. DPR-66, filed by OpCo* acting on its own behalf and as agent for OwnerCo (the licensees) 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 1, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Beaver Valley Power Station, Unit No. 1 (facility), has been substantially completed in conformity with Construction Permit No. CPPR-75 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. OpCo is technically qualified and the licensees are financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

*OpCo is authorized to act as agent for OwnerCo and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

Amendment No.
Renewed Operating License DPR-66

- G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Renewed Facility Operating License No. DPR-66 is in accordance with 10 CFR Part 51 (formerly Appendix D of 10 CFR Part 50) of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, by-product, and special nuclear material as authorized by this renewed operating license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70, including 10 CFR Sections 30.33, 40.32, 70.23, and 70.31.
 - J. Actions have been identified and have been or will be taken with respect to: (1) managing the effects of aging on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1) during the period of extended operation, and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3 for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;
2. Renewed Facility Operating License No. DPR-66 is hereby issued to OpCo and OwnerCo to read as follows:
- A. This renewed license applies to the Beaver Valley Power Station, Unit No. 1, a pressurized water nuclear reactor and associated equipment (the facility), owned by OwnerCo, and operated by OpCo. The facility is located in Beaver County, Pennsylvania, on the southern shore of the Ohio River, and is described in the "Updated Final Safety Analysis Report" as supplemented and amended and the Environmental Report as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) OpCo, 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 OwnerCo to possess the facility at the designated location in Beaver County, Pennsylvania in accordance with the procedures and limitations set forth in this renewed license;
 - (2) OpCo, 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) OpCo, 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) OpCo, 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;
 - (5) OpCo, 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 operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter 1: 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
OpCo is authorized to operate the facility at a steady state reactor core power level of 2900 megawatts thermal.
 - (2) Technical Specifications
The Technical Specifications contained in Appendix A, as revised through Amendment No. 303, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.
 - (3) Auxiliary River Water System
(Deleted by Amendment No. 8)

(3) Less Than Three Loop Operation

Deleted per License Amendment No. 239.

(4) Steam Generator Water Rise Rate

Deleted per License Amendment No. 24.

(5) Fire Protection Program

OpCo 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 license amendment request dated December 23, 2013 (as supplemented by letters dated February 14, 2014; April 27, May 27, June 26, November 6, and December 21, 2015; February 24 and May 12, 2016; and January 30, April 21, June 23, August 22, October 25, and November 29, 2017), and as approved in the safety evaluation dated January 22, 2018. 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 a change that results in a net 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.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC SE dated January 22, 2018, to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

(c) Transition License Conditions

1. Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in (2) above.
2. The licensee shall implement the Unit 1 modifications to its facility, as described in Attachment S, Table S-2, "Plant Modifications Committed," in FENOC letter L-17-122, dated April 21, 2017, to complete the transition to full compliance with 10 CFR 50.48(c), by the completion of the second Unit 1 refueling outage after issuance of the safety evaluation. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.
3. The licensee shall implement the items listed in Attachment S, Table S-3, "Implementation Items," of FENOC letter L-17-268, dated August 22, 2017, by 12 months after issuance of the safety evaluation (with the exception of Items BV1-1633, BV1-2974, BV1-3060, BV1-3108, BV1-3109, BV2-1580, BV2-1622, BV2-1623, and BV2-1750, which are to be completed by the end of the second Unit 2 refueling outage after issuance of the safety evaluation).

(6) Systems Integrity

OpCo shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

(7) Iodine Monitoring

OpCo shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

(8) Backup Method for Determining Subcooling Margin

OpCo shall implement a program which will ensure the capability to accurately monitor the Reactor Coolant System subcooling margin. This program shall include the following:

1. Training of personnel, and
2. Procedures for monitoring.

(9) Steam Generator Surveillance Interval Extension

Deleted per License Amendment No. 278.

(10) Additional Conditions

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

(11) Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

(a) Fire fighting response strategy with the following elements:

1. Pre-defined coordinated fire response strategy and guidance
2. Assessment of mutual aid fire fighting assets
3. Designated staging areas for equipment and materials
4. Command and control
5. Training of response personnel

(b) Operations to mitigate fuel damage considering the following:

1. Protection and use of personnel assets
2. Communications
3. Minimizing fire spread
4. Procedures for implementing integrated fire response strategy
5. Identification of readily-available pre-staged equipment
6. Training on integrated fire response strategy
7. Spent fuel pool mitigation measures

(c) Actions to minimize release to include consideration of:

1. Water spray scrubbing
2. Dose to onsite responders

D. Physical Protection

OpCo 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 to the authority 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21 is entitled: "Beaver Valley Power Station (BVPS) Physical Security Plan" submitted by letter September 9, 2004, and supplemented September 30, 2004, October 14, 2004, and May 12, 2006.

OpCo 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 Beaver Valley Power Station CSP was approved by License Amendment No. 287, and amended by License Amendment No. 295.

E. All work and activities in connection with this project shall be performed pursuant to the provisions of the Commonwealth of Pennsylvania Clean Streams Acts of June 24, 1913, as amended and of June 22, 1937, as amended, and in accordance with all permits issued by the Department of Environmental Resources of the Commonwealth of Pennsylvania.

F. License Renewal Commitments – The UFSAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to and/or during the period of extended operation. OpCo shall complete these activities in accordance with Appendix A of NUREG-1929, Safety Evaluation Report Related to the Beaver Valley Power Station, Units 1 and 2, dated October 2009, and Supplement 1 of NUREG-1929, dated October 2009, and shall notify the NRC in writing when activities to be completed prior to the period of extended operation are complete and can be verified by NRC inspection.

- G. UFSAR Supplement Changes – The information in the UFSAR supplement, as revised, submitted pursuant to 10 CFR54.21(d), shall be incorporated into the UFSAR as required by 10 CFR 50.71(e) following the issuance of this renewed operating license. Until that update is complete, OpCo may not make changes to the information in the supplement. Following incorporation into the UFSAR, the need for prior Commission approval of any changes will be governed by 10 CFR 50.59.
- H. Capsule Withdrawal Schedule – For the renewed operating license term, all capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation.
- I. Containment Liner Volumetric Inspection –
- a) If degradation (greater than 10 percent of the nominal thickness not attributable to fabrication/erection practices) is identified in the non-random areas examined using ultrasonic testing (UT) as described in Supplement 1 of NUREG-1929, UT examinations shall be performed at additional non-random areas, to be selected based on this operating experience. Should additional degradation be identified, additional non-random areas shall be UT examined until no further degradation (greater than 10 percent of the nominal thickness) is identified. All areas with degradation shall be reexamined over at least the next three successive inspection periods to ensure that progression of the degradation is not occurring.
 - b) If degradation (greater than 10 percent of the nominal thickness not attributable to fabrication/erection practices) is identified in the random samples examined using ultrasonic testing (UT) as described in Supplement 1 of NUREG 1929, UT examinations shall be performed on additional random samples, to ensure a 95 percent confidence that 95 percent of the unexamined accessible containment liner is not degraded. If additional degradation is identified, the sample size for UT examinations shall be further expanded until the statistical sampling has achieved the 95 percent confidence goal described previously. All areas with degradation shall be reexamined over at least the next three successive inspection periods to ensure that progression of the degradation is not occurring.
3. This renewed operating license is effective as of the date of issuance and shall expire at midnight on January 29, 2036.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

Attachments:

- 1. Appendix A - Technical Specifications
- 2. Appendix C - Additional Conditions

Date of Issuance: November 05, 2009

APPENDIX C

ADDITIONAL CONDITIONS
OPERATING LICENSE NO. DPR-66

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
202	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated September 9, 1996, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from April 14, 1997
209	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated March 14, 1997, as supplemented July 29 and August 13, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from December 10, 1997
210	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated September 11, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 30 days from January 20, 1998

APPENDIX C

ADDITIONAL CONDITIONS OPERATING LICENSE NO. DPR-66

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
225	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these Technical Specification requirements to the appropriate documents as described in the licensee's application dated December 24, 1998, as supplemented June 15, June 17, and July 7, 1999, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from August 30, 1999
269	On the closing date(s) of the transfers to FENGenCo* of their interests in Beaver Valley Power Station, Unit No. 1, Pennsylvania Power Company and Ohio Edison Company shall transfer to FENGenCo* all of each transferor's respective accumulated decommissioning funds for Beaver Valley Power Station, Unit No. 1, and tender to FENGenCo* additional amounts equal to remaining funds expected to be collected in 2005, as represented in the application dated June 1, 2005, but not yet collected by the time of closing. All of the funds shall be deposited in a separate external trust fund for the reactor in the same amount as received with respect to the unit to be segregated from other assets of FENGenCo* and outside its administrative control, as required by NRC regulations, and FENGenCo* shall take all necessary steps to ensure that this external trust fund is maintained in accordance with the requirements of the order approving the transfer of the license and consistent with the safety evaluation supporting the order and in accordance with the requirements of 10 CFR Section 50.75, "Reporting and recordkeeping for decommissioning planning."	The amendment shall be implemented within 30 days from December 16, 2005

* FirstEnergy Nuclear Generation Corp. (FENGenCo) has been renamed OwnerCo.

APPENDIX C

ADDITIONAL CONDITIONS OPERATING LICENSE NO. DPR-66

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
269	<p>By the date of closing of the transfer of the ownership interests in Beaver Valley Power Station, Unit No. 1 from Pennsylvania Power Company to FENGenCo*, FENGenCo* shall obtain a parent company guarantee from FirstEnergy in an initial amount of at least \$80 million (in 2005 dollars) to provide additional decommissioning funding assurance regarding such ownership interests. Required funding levels shall be recalculated annually and, as necessary, FENGenCo* shall either obtain appropriate adjustments to the parent company guarantee or otherwise provide any additional decommissioning funding assurance necessary for FENGenCo* to meet NRC requirements under 10 CFR 50.75.</p> <p>The Support Agreements described in the applications dated May 18, 2005 (up to \$80 million), and June 1, 2005 (up to \$400 million), shall be effective consistent with the representations contained in the applications. FENGenCo* shall take no action to cause FirstEnergy, or its successors and assigns, to void, cancel, or modify the Support Agreements without the prior written consent of the NRC staff, except, however, the \$80 million Support Agreement in connection with the transfer of the Pennsylvania Power Company interests may be revoked or rescinded if and when the \$400 million support agreement described in the June 1, 2005, application becomes effective. FENGenCo* shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than ten days after any funds are provided to FENGenCo* by FirstEnergy under either Support Agreement.</p>	The amendment shall be implemented within 30 days from December 16, 2005

* FirstEnergy Nuclear Generation Corp. (FENGenCo) has been renamed OwnerCo.

APPENDIX C

ADDITIONAL CONDITIONS OPERATING LICENSE NO. DPR-66

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
278	<p><u>Schedule for New and Revised Surveillance Requirements (SRs)</u></p> <p>The schedule for performing SRs that are new or revised in Amendment No. 278 shall be as follows:</p> <p>For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval, which begins on the date of implementation of this amendment.</p> <p>For SRs that existed prior to this amendment, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.</p> <p>For SRs that existed prior to this amendment, whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.</p> <p>For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance subject to the modified acceptance criteria is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.</p>	<p>The amendment shall be implemented within 150 days from date of issuance</p>
278	<p><u>Relocation of Certain Technical Specification Requirements</u></p> <p>License Amendment No. 278 authorizes the relocation of certain Technical Specifications to other licensee-controlled documents. Implementation of this amendment shall include relocation of the requirements to the specified documents, as described in (1) Sections 4D and 4E of the NRC staff's Safety Evaluation, and (2) Table LA, Removed Detail Changes, and Table R, Relocated Specifications, attached to the NRC staff's Safety Evaluation, which is enclosed in this amendment.</p>	<p>The amendment shall be implemented within 150 days from date of issuance</p>

APPENDIX C

ADDITIONAL CONDITIONS OPERATING LICENSE NO. DPR-66

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
281	<u>Initial Performance of New Surveillance and Assessment Requirements</u> Upon implementation of Amendment No. 281 adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by Surveillance Requirement (SR) 3.7.10.4, in accordance with Specification 5.5.14.c(i), the assessment of CRE habitability as required by Specification 5.5.14.c(ii), and the measurement of CRE pressure as required by Specification 5.5.14.d, shall be considered met. Following implementation: (a) The first performance of SR 3.7.10.4, in accordance with Specification 5.5.14.c(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from the date of the most recent successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years. (b) The first performance of the periodic assessment of CRE habitability, Specification 5.5.14.c(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from the date of the most recent successful tracer gas test, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years. (c) The first performance of the periodic measurement of CRE pressure, Specification 5.5.14.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from the date of the most recent successful pressure measurement test.	The amendment shall be implemented within 120 days from date of issuance

APPENDIX C

ADDITIONAL CONDITIONS OPERATING LICENSE NO. DPR-66

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
	<p>Based on the Commission's approval regarding the change in the parent company issuing a \$400 million Support Agreement to OwnerCo, OwnerCo shall comply with the conditions noted below. This \$400 million Support Agreement supersedes all previous parent support agreements.</p> <p>A. The Support Agreement in the amount of \$400 million described in the application dated April 26, 2019, is effective. OwnerCo shall take no action to void, cancel, or modify the Support Agreement without the prior written consent of the NRC staff. OwnerCo shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than 10 working days after any funds are provided to OwnerCo by New HoldCo under the terms of the Support Agreement.</p> <p>B. OwnerCo shall create a provisional trust in the amount of \$267 million for spent fuel management activities for Beaver Valley Power Station, Unit Nos. 1 and 2. The trust shall be fully funded by December 31, 2021. Upon completion of the specified spent fuel management activities in the Irradiated Fuel Management Plan, dated August 22, 2019, the provisional trust may be terminated. The provisional trust may also be modified or terminated upon NRC approval of a revised Irradiated Fuel Management Plan that supersedes the plan dated August 22, 2019.</p> <p>C. OwnerCo shall obtain performance bonds if a settlement agreement with the U.S. Department of Energy (DOE) on DOE reimbursements for spent fuel management expenses is not entered into by January 1, 2027. The performance bonds will be effective December 31, 2026, initially in the amount of \$9.3 million and \$4.7 million for BVPS, Units 1 and 2, respectively, and they will be renewed annually. This amount covers 1.3 times the highest annual amount of ISFSI operation and maintenance (O&M) costs projected.</p>	<p>The amendment shall be implemented within 7 days from date of issuance</p>

ENCLOSURE 3

DRAFT CONFORMING LICENSE AMENDMENT

BEAVER VALLEY POWER STATION, UNIT NO. 2

RENEWED FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412



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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION, LLC

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No.
Renewed License No. NPF-73

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by FirstEnergy Nuclear Operating Company* (the licensee, FENOC), dated April 26, 2019, as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019, 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.

* FENOC is authorized to act as agent for FirstEnergy Nuclear Generation, LLC, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, Renewed Facility Operating License No. NPF-73; Appendix B, Environmental Protection Plan (Nonradiological); and Appendix D, Additional Conditions, are amended as indicated in the attachment to this license amendment.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 7 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Ho K. Nieh, Director
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-73,
Appendix B, Environmental Protection
Plan (Nonradiological), and Appendix D,
Additional Conditions

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO. _____

BEAVER VALLEY POWER STATION, UNIT NO. 2

RENEWED FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412

Replace the following pages of the Renewed Facility Operating License; Appendix B, Environmental Protection Plan (Nonradiological); and Appendix D, Additional Conditions, with the attached revised pages. The revised pages are identified by amendment numbers and contain marginal lines indicating the areas of change.

Renewed Facility Operating License

REMOVE

1
2
3
4
6
8
11

INSERT

1
2
3
4
6
8
11

Appendix B, Environmental Protection Plan (Nonradiological)

REMOVE

B-i
B-1

INSERT

B-i
B-1

Appendix D, Additional Conditions

REMOVE

D-1
D-2
D-3
D-4
D-5
D-6
--

INSERT

D-1
D-2
D-3
D-4
D-5
D-6
D-7

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

OpCo

OwnerCo

DOCKET NO. 50-412

BEAVER VALLEY POWER STATION, UNIT 2

RENEWED FACILITY OPERATING LICENSE

License No. NPF-73

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application to Renewed Facility Operating License No. NPF-73 filed by OpCo* acting on its own behalf and as agent for OwnerCo (the licensees), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Beaver Valley Power Station, Unit 2 (the facility), has been substantially completed in conformity with Construction Permit No. CPPR-105 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license can be conducted without endangering the health and safety of the public and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);

*OpCo is authorized to act as agent for OwnerCo and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

Amendment No.
Renewed Operating License NPF-73

- E. OpCo is technically qualified to engage in the activities authorized by this renewed operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Renewed Operating License No. NPF-73 is subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations, and all applicable requirements have been satisfied;
 - I. The receipt, possession and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.
 - J. Actions have been identified and have been or will be taken with respect to: (1) managing the effects of aging on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1) during the period of extended operation, and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3 for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;
2. Renewed Facility Operating License NPF-73 is hereby issued to OpCo and OwnerCo (the licensees) to read as follows:
- A. This renewed license applies to the Beaver Valley Power Station, Unit 2, a pressurized water reactor and associated equipment (the facility), owned by OwnerCo (owner) and operated by OpCo (collectively the licensees). The facility is located on the licensees' site on the southern shore of the Ohio River in Beaver County, Pennsylvania, approximately 22 miles northwest of Pittsburgh and 5 miles east of East Liverpool, Ohio, and is described in OpCo's Updated Final Safety Analysis Report, as supplemented and amended, and in its Environmental Report, as supplemented and amended;
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, OpCo to possess, use, and operate the facility at the designated location in Beaver County, Pennsylvania, in accordance with the procedures and limitations set forth in this license;

- (2) Pursuant to the Act and 10 CFR Part 50, OwnerCo to possess the facility at the designated location in Beaver County, Pennsylvania, in accordance with the procedures and limitations set forth in the license;
- (3) Pursuant to the Act and 10 CFR Part 70, OpCo, 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;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, OpCo to receive, possess, and use at any time any byproduct, source, and special nuclear material such 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) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, OpCo 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 other activity associated with radioactive apparatus or components;
- (6) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, OpCo to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein.
- (7) Deleted

- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations set forth in 10 CFR Chapter 1 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

OpCo is authorized to operate the facility at a steady state reactor core power level of 2900 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 193, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. OpCo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(8) Detailed Control Room Design Review (DCRDR)

Deleted

(9) Safety Parameter Display System (SPDS)

Deleted

(10) Fire Protection Modifications (Section 9.5.1 of SER Supplement 6)

Deleted

(11) Additional Conditions

The Additional Conditions contained in Appendix D, as revised through Amendment No. , are hereby incorporated into this license. OpCo shall operate the facility in accordance with the Additional Conditions.

(12) Steam Generator Surveillance Interval Extension

Deleted

(13) Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders

- (2) The facility requires an exemption from the requirements of 10 CFR 50, Appendix J, Section III.D.2(b)(ii). The justification of this exemption is contained in Section 6.2.6 of Supplement 5 to the Safety Evaluation Report and modified by a letter dated July 26, 1995. The staff's environmental assessment was published on May 12, 1987 (52 FR 17651) and on June 9, 1995 (60 FR 30611). Therefore, pursuant to 10 CFR 50.12(a)(1) and 10 CFR 50.12(a)(2)(ii) and (iii), Beaver Valley Power Station, Unit 2 is exempt from the quoted requirements and instead, is required to perform the overall air lock leak test at pressure P_a before establishing containment integrity if air lock maintenance has been performed that could affect the air lock sealing capability. Local leak rate testing at a pressure of not less than P_a may be substituted for an overall air lock test where the design permits.

E. Physical Security

OpCo 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 to the authority 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21 is entitled: "Beaver Valley Power Station (BVPS) Physical Security Plan" submitted by letter September 9, 2004, and supplemented September 30, 2004, October 14, 2004, and May 12, 2006.

OpCo 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 Beaver Valley Power Station CSP was approved by License Amendment No. 174, and amended by License Amendment No. 183.

F. Fire Protection Program

OpCo 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 license amendment request dated December 23, 2013, (as supplemented by letters dated February 14, 2014; April 27, May 27, June 26, November 6, and December 21, 2015; February 24 and May 12, 2016; and January 30, April 21, June 23, August 22, October 25, and November 29, 2017), and as approved in the safety evaluation dated January 22, 2018. 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.

evaluation (with the exception of Items BV1-1633, BV1-2974, BV1-3060, BV1-3108, BV1- 3109, BV2-1580, BV2-1622, BV2-1623, and BV2-1750, which are to be completed by the end of the second Unit 2 refueling outage after issuance of the safety evaluation).

G. Reporting to the Commission

DELETED

H. Financial Protection

The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

- I. License Renewal Commitments - The UFSAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to and/or during the period of extended operation. OpCo shall complete these activities in accordance with Appendix A of NUREG-1929, Safety Evaluation Report Related to the Beaver Valley Power Station, Units 1 and 2, dated October 2009, and Supplement 1 of NUREG-1929, dated October 2009, and shall notify the NRC in writing when activities to be completed prior to the period of extended operation are complete and can be verified by NRC inspection.
- J. UFSAR Supplement Changes - The information in the UFSAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be incorporated into the UFSAR as required by 10 CFR 50.71(e) following the issuance of this renewed operating license. Until that update is complete, OpCo may not make changes to the information in the supplement. Following incorporation into the UFSAR, the need for prior Commission approval of any changes will be governed by 10 CFR 50.59.
- K. Capsule Withdrawal Schedule - For the renewed operating license term, all capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation.
- L. Containment Liner Volumetric Inspection -
- a) If degradation (greater than 10 percent of the nominal thickness not attributable to fabrication/erection practices) is identified in the non-random areas examined using ultrasonic testing (UT) as described in Supplement 1 of NUREG-1929, UT examinations shall be performed at additional non-random areas, to be selected based on this operating experience. Should additional degradation be identified, additional non-random areas shall be UT examined until no further degradation (greater than 10 percent of the nominal thickness) is identified. All areas with degradation shall be reexamined over at least the next three successive inspection periods to ensure that progression of the degradation is not occurring.

APPENDIX B
TO FACILITY OPERATING LICENSE NO. NPF-73
BEAVER VALLEY POWER STATION
UNIT 2

OpCo, ET AL
DOCKET NO. 50-412

ENVIRONMENTAL PROTECTION PLAN
(NONRADIOLOGICAL)

AUGUST 1987

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the Beaver Valley Power Station, Unit 2 (facility). The principal objectives of the EPP are as follows:

- (1) Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement - Operating License Stage (FES-OL) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State, and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES-OL (September 1985, NUREG-1094) which relate to water quality matters are regulated by way of the licensee's* NPDES permit.

2.0 Environmental Protection Issues

In the FES-OL (NUREG-1094, September 1985), the staff considered the environmental impacts associated with the operation of the Beaver Valley Power Station, Unit 2. No aquatic/water quality, terrestrial, or noise issues were identified.

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP*. Changes in station design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in additional construction or operational activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. Such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

*"Licensee" refers to OpCo, operator of the facility, and acting as agent for OwnerCo, owner of the facility.

APPENDIX D

ADDITIONAL CONDITIONS
OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
83	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated September 9, 1996, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from April 14, 1997
87	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated March 14, 1997, as supplemented July 29 and August 13, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from December 10, 1997
88	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated September 11, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 30 days from January 20, 1998
98	The licensee commits to perform visual acceptance examinations of sleeve welds; post weld heat treatment of sleeve welds; and the NRC-recommended inspections of repaired tubes as described in the licensee's application dated March 10, 1997, as supplemented July 28, 1997, September 17, 1997, April 30, 1998, and January 29, 1999, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from March 26, 1999

APPENDIX D

ADDITIONAL CONDITIONS OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
102	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these Technical Specification requirements to the appropriate documents as described in the licensee's application dated December 24, 1998, as supplemented June 15, June 17, and July 7, 1999, and evaluated in the staff's evaluation attached to this amendment.	The amendment shall be implemented within 60 days from August 30, 1999
151	On the closing date(s) of the transfers to FENGenCo* of their interests in Beaver Valley Power Station, Unit No. 2, Pennsylvania Power Company, The Cleveland Electric Illuminating Company, Ohio Edison Company, and The Toledo Edison Company shall transfer to FENGenCo* all of each transferor's respective accumulated decommissioning funds for Beaver Valley Power Station, Unit No. 2, except for funds associated with the leased portions of Beaver Valley Power Station, Unit No. 2, and tender to FENGenCo* additional amounts equal to remaining funds expected to be collected in 2005, as represented in the application dated June 1, 2005, but not yet collected by the time of closing. All of the funds shall be deposited in a separate external trust fund for the reactor in the same amount as received with respect to the unit to be segregated from other assets of FENGenCo* and outside its administrative control, as required by NRC regulations, and FENGenCo* shall take all necessary steps to ensure that this external trust fund is maintained in accordance with the requirements of the order approving the transfer of the license and consistent with the safety evaluation supporting the order and in accordance with the requirements of 10 CFR Section 50.75, "Reporting and recordkeeping for decommissioning planning."	The amendment shall be implemented within 30 days from December 16, 2005

* FirstEnergy Nuclear Generation Corp. (FENGenCo) has been renamed OwnerCo.

APPENDIX D

ADDITIONAL CONDITIONS OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
151	<p>By the date of closing of the transfer of the ownership interests in Beaver Valley Power Station, Unit No. 2 from Pennsylvania Power Company to FENGenCo*, FENGenCo* shall obtain a parent company guarantee from FirstEnergy in an initial amount of at least \$80 million (in 2005 dollars) to provide additional decommissioning funding assurance regarding such ownership interests. Required funding levels shall be recalculated annually and, as necessary, FENGenCo* shall either obtain appropriate adjustments to the parent company guarantee or otherwise provide any additional decommissioning funding assurance necessary for FENGenCo* to meet NRC requirements under 10 CFR 50.75.</p> <p>The Support Agreements described in the applications dated May 18, 2005 (up to \$80 million), and June 1, 2005 (up to \$400 million), shall be effective consistent with the representations contained in the applications. FENGenCo* shall take no action to cause FirstEnergy, or its successors and assigns, to void, cancel, or modify the Support Agreements without the prior written consent of the NRC staff, except, however, the \$80 million Support Agreement in connection with the transfer of the Pennsylvania Power Company interests may be revoked or rescinded if and when the \$400 million support agreement described in the June 1, 2005, application becomes effective. FENGenCo* shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than ten days after any funds are provided to FENGenCo* by FirstEnergy under either Support Agreement.</p>	The amendment shall be implemented within 30 days from December 16, 2005

* FirstEnergy Nuclear Generation Corp. (FENGenCo) has been renamed OwnerCo.

APPENDIX D

ADDITIONAL CONDITIONS OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
161	<p><u>Schedule for New and Revised Surveillance Requirements (SRs)</u></p> <p>The schedule for performing SRs that are new or revised in Amendment No. 161 shall be as follows:</p> <p>For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval, which begins on the date of implementation of this amendment.</p> <p>For SRs that existed prior to this amendment, whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.</p> <p>For SRs that existed prior to this amendment, whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.</p> <p>For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance subject to the modified acceptance criteria is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.</p>	<p>The amendment shall be implemented within 150 days from date of issuance</p>
161	<p><u>Relocation of Certain Technical Specification Requirements</u></p> <p>License Amendment No. 161 authorizes the relocation of certain Technical Specifications to other licensee-controlled documents. Implementation of this amendment shall include relocation of the requirements to the specified documents, as described in (1) Sections 4D and 4E of the NRC staff's Safety Evaluation, and (2) Table LA, Removed Detail Changes, and Table R, Relocated Specifications, attached to the NRC staff's Safety Evaluation, which is enclosed in this amendment.</p>	<p>The amendment shall be implemented within 150 days from date of issuance</p>

APPENDIX D

ADDITIONAL CONDITIONS OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
163	<p><u>Initial Performance of New Surveillance and Assessment Requirements</u></p> <p>Upon implementation of Amendment No. 163 adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air leakage as required by Surveillance Requirement (SR) 3.7.10.4, in accordance with Specification 5.5.14.c(i), the assessment of CRE habitability as required by Specification 5.5.14.c(ii), and the measurement of CRE pressure as required by Specification 5.5.14.d, shall be considered met. Following implementation:</p> <ul style="list-style-type: none">(a) The first performance of SR 3.7.10.4, in accordance with Specification 5.5.14.c(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from the date of the most recent successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.(b) The first performance of the periodic assessment of CRE habitability, Specification 5.5.14.c(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from the date of the most recent successful tracer gas test, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.(c) The first performance of the periodic measurement of CRE pressure, Specification 5.5.14.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from the date of the most recent successful pressure measurement test.	<p>The amendment shall be implemented within 120 days from date of issuance</p>

APPENDIX D

ADDITIONAL CONDITIONS
OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
187	<p>Based on the Commission's Order dated April 14, 2017, regarding the direct transfer from Ohio Edison Company (OE) and The Toledo Edison Company (TE) to FirstEnergy Nuclear Generation, LLC (FENGen), FENOC and FENGen shall comply with the following conditions noted Below.</p> <p>A. By June 1, 2017, OE and TE shall initiate the transfer to FENGen the accumulated decommissioning funds held by OE and TE for Beaver Valley Unit 2. All such funds shall be deposited and held in the FENGen nuclear decommissioning trust for Beaver Valley Unit 2 along with other funds maintained by FENGen for Beaver Valley Unit 2 and shall be maintained in such trust outside of FENGen's administrative control and in accordance with the requirements of 10 CFR 50.75(h)(1). Such transfer of the accumulated decommissioning funds by OE and TE shall be completed within a reasonable period of time.</p> <p>B. The Support Agreement in the amount of \$400 million from FirstEnergy Solutions Corp. (FES) described in the application dated June 24, 2016 shall be effective and consistent with the representations in the application. FENGen shall take no action to void, cancel, or modify the Support Agreement without the prior written consent of the NRC staff. FENGen shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than 10 working days after any funds are provided to FENGen by FES under the terms of the Support Agreement.</p>	<p>The amendment shall be implemented within 90 days from June 1, 2017</p>

APPENDIX D

ADDITIONAL CONDITIONS
OPERATING LICENSE NO. NPF-73

OpCo and OwnerCo shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
	<p>Amendment Number 187 described a \$400 million Support Agreement between FirstEnergy Solutions Corp. (FES) and FirstEnergy Nuclear Generation. LLC (FENGen). However, the amendment did not clearly state that this Support Agreement superseded entirely a similar agreement between FirstEnergy Corp. and FirstEnergy Nuclear Generation Corp. (predecessor of FENGen).</p> <p>Based on the Commission's approval regarding the change in the parent company issuing a \$400 million Support Agreement to OwnerCo, OwnerCo shall comply with the conditions noted below. This \$400 million Support Agreement supersedes all previous parent support agreements.</p>	<p>The amendment shall be implemented within 7 days from date of issuance</p>
	<p>A. The Support Agreement in the amount of \$400 million described in the application dated April 26, 2019 is effective. OwnerCo shall take no action to void, cancel, or modify the Support Agreement without the prior written consent of the NRC staff. OwnerCo shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than 10 working days after any funds are provided to OwnerCo by New HoldCo under the terms of the Support Agreement.</p> <p>B. OwnerCo shall create a provisional trust in the amount of \$267 million for spent fuel management activities for Beaver Valley Power Station, Unit Nos. 1 and 2. The trust shall be fully funded by December 31, 2021. Upon completion of the specified spent fuel management activities in the Irradiated Fuel Management Plan, dated August 22, 2019, the provisional trust may be terminated. The provisional trust may also be modified or terminated upon NRC approval of a revised Irradiated Fuel Management Plan that supersedes the plan dated August 22, 2019.</p> <p>C. OwnerCo shall obtain performance bonds if a settlement agreement with the U.S. Department of Energy (DOE) on DOE reimbursements for spent fuel management expenses is not entered into by January 1, 2027. The performance bonds will be effective December 31, 2026, initially in the amount of \$9.3 million and \$4.7 million for BVPS, Units 1 and 2, respectively, and they will be renewed annually. This amount covers 1.3 times the highest annual amount of ISFSI operation and maintenance (O&M) costs projected.</p>	

ENCLOSURE 4

DRAFT CONFORMING LICENSE AMENDMENT

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346



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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION, LLC

DOCKET NO. 50-346

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No.
Renewed License No. NPF-3

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by FirstEnergy Nuclear Operating Company* (the licensee, FENOC), dated April 26, 2019, as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019, 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.

* FENOC is authorized to act as agent for FirstEnergy Nuclear Generation, LLC, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, Renewed Facility Operating License No. NPF-3 is amended as indicated in the attachment to this license amendment.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 7 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Ho K. Nieh, Director
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-3

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO. _____

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

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

Renewed Facility Operating License

REMOVE

L-1
L-2
L-3
L-4
L-5
L-6
L-7
L-7b
L-8
L-11
L-17
L-18
L-19

INSERT

L-1
L-2
L-3
L-4
L-5
L-6
L-7
L-7b
L-8
L-11
L-17
L-18
L-19

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

OpCo

AND

OwnerCo

DOCKET NO. 50-346

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

RENEWED FACILITY OPERATING LICENSE

Renewed License No. NPF-3

1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The application for renewed license filed by OpCo¹, acting on its own behalf and as agent for OwnerCo (licensees) 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 and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Davis-Besse Nuclear Power Station, Unit No. 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-80 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

¹ OpCo is authorized to act as agent for OwnerCo and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- 1.D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. The OpCo is technically qualified and the licensees are financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Renewed Facility Operating License No. NPF-3 subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 (formerly Appendix D to 10 CFR Part 50), of the Commission's regulations and all applicable requirements have been satisfied;
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this renewed license will be in accordance with the Commission's regulations in 10 CFR Part 30, 40, and 70, including 10 CFR Sections 30.33, 40.32, 70.23, and 70.31; and
 - J. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations.
2. Renewed Facility Operating License No. NPF-3 is hereby issued to OpCo, and OwnerCo to read as follows:
- A. This renewed license applies to the Davis-Besse Nuclear Power Station, Unit No. 1, a pressurized water nuclear reactor and associated equipment

(the facility), owned by OwnerCo. The facility is located on the south-western shore of Lake Erie in Ottawa County, Ohio, approximately 21 miles east of Toledo, Ohio, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 14 through 44) and the Environmental Report as supplemented and amended (Supplements 1 through 2).

2.B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

- (1) OpCo, pursuant to Section 103 of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility;
- (2) OwnerCo, to possess the facility at the designated location in Ottawa County, Ohio in accordance with the procedures and limitations set forth in this renewed license;
- (3) OpCo, 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;
- (4) OpCo, 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;
- (5) OpCo, 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
- (6) OpCo, 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.

- 2.C. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 *CFR* Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, 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

OpCo is authorized to operate the facility at steady state reactor core power levels not in excess of 2817 megawatts (thermal). Prior to attaining the power level, Toledo Edison Company shall comply with the conditions identified in Paragraph (3) (o) below and complete the preoperational tests, startup tests and other items identified in Attachment 2 to this license in the sequence specified. Attachment 2 is an integral part of this renewed license.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 298, are hereby incorporated in the renewed license. OpCo shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the renewed license or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the renewed license supported by a favorable evaluation by the Commission:

- (a) OpCo shall not operate the reactor in operational Modes 1 and 2 with less than three reactor coolant pumps in operation.
- (b) Deleted per Amendment 6
- (c) Deleted per Amendment 5

- 2.C(3)(d) Prior to operation beyond 32 Effective Full Power Years, OpCo shall provide to the NRC a reanalysis and proposed modifications, as necessary, to ensure continued means of protection against low temperature reactor coolant system overpressure events.
- (e) Deleted per Amendment 33
- (f) Deleted per Amendment 33
- (g) Deleted per Amendment 33
- (h) Deleted per Amendment 24
- (i) Deleted per Amendment 11
- (j) Revised per Amendment 3
Deleted per Amendment 28
- (k) Within 60 days of startup following the first (1st) regularly scheduled refueling outage, Toledo Edison Company shall complete tests and obtain test results as required by the Commission to verify that faults on non-Class IE circuits would not propagate to the Class IE circuits in the Reactor Protection System and the Engineered Safety Features Actuation System.
- (l) Revised per Amendment 7
Deleted per Amendment 15
- (m) Deleted per Amendment 7
- (n) Deleted per Amendment 10
- (o) Deleted per Amendment 2
- (p) Deleted per Amendment 29
- (q) Deleted per Amendment 7
- (r) Deleted per Amendment 30
- (s) Toledo Edison Company shall be exempted from the requirements of Technical Specification 3/4.7.8.1 for the two (2) Americium-Beryllium-Copper startup sources to be installed or already installed for use during the first refueling cycle until such time as the sources are replaced.
- (t) Added per Amendment 83
Deleted per Amendment 122

2.C(4) Fire Protection

OpCo 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 license amendment request dated December 16, 2015, as supplemented by letters dated February 2, March 7, July 28, and December 16, 2016; January 17, June 16, and May 13, 2019, and as approved by Amendment No. 298. 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 changes does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

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 probabilistic risk assessment model, methods that have been approved by the NRC through a plant-specific license amendment or NRC approvals of generic methods specifically for use in NFPA 805 risk impact.

- (a) 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.
- (b) Prior NRC review and approval is not required for individual changes that result in a risk increase less than 10^{-7} /year for core damage frequency and less than 10^{-8} /year for large early release frequency. 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.

(2) Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process, as approved by Amendment No. 298, to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

Transition License Conditions

- (1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in (2) above.
- (2) The licensee shall implement the modification described in Attachment S, Table S-1, "Plant Modifications Committed," to the FENOC letter dated November 20, 2018, within 2 years following issuance of the license amendment. The licensee shall maintain appropriate compensatory measures in place until completion of this modification.
- (3) The licensee shall implement the items listed in Attachment S, Table S-2, "Implementation Items," to the FENOC letter dated November 20, 2018, within 2 years following issuance of the license amendment.
- (5) Deleted per Amendment No. 279.
- (6) Antitrust Conditions

OpCo and OwnerCo shall comply with the antitrust conditions delineated in Condition 2.E of this renewed license as if named therein. OpCo shall not market or broker power or energy from the Davis-Besse Nuclear Power Station, Unit No. 1. OwnerCo is responsible and accountable for the actions of OpCo to the extent that said actions affect the marketing or brokering of power or energy from the Davis-Besse Nuclear Power Station, Unit No. 1, and in any way, contravene the antitrust license conditions contained in the renewed license.

2.C(7) Steam Generator Tube Circumferential Crack Report

Following each inservice inspection of steam generator tubes, the NRC shall be notified by OpCo of the following prior to returning the steam generators to service:

- a. Indications of circumferential cracking inboard of the roll repair.
- b. Indication of circumferential cracking in the original roll or heat affected zone adjacent to the tube-to-tubesheet seal weld if no reroll is present.
- c. Determination of the best-estimate total leakage that would result from an analysis of the limiting LBLOCA based on circumferential cracking in the original tube-to-tubesheet rolls, tube-to-tubesheet reroll repairs, and heat affected zones of seal welds as found during each inspection.

OpCo shall demonstrate by evaluation that the primary-to-secondary leakage following a LBLOCA, if any, as described in Appendix A to topic Report BAW-2374, July 2000, continues to be acceptable, based on the as-found condition of the steam generators. For the purpose of this evaluation, acceptable means that a best estimate of the leakage expected in the event of a LBLOCA would not result in a significant increase of radionuclide release (e.g., in excess of 10 CFR Part 100 limits). This is required to demonstrate that adequate margin and defense-in-depth continue to be maintained. A written summary of this evaluation shall be provided to the NRC within three months following completion of the steam generator tube inservice inspection.

2.C(8) Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions that include the follow key area:

- (a) Fire fighting response strategy with the following elements:
 1. Predefined coordinated fire response strategy and guidance
 2. Assessment of mutual aid fire fighting assets
 3. Designated staging areas for equipment and materials
 4. Command and control
 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 1. Protection and use of personnel assets
 2. Communications
 3. Minimizing fire spread
 4. Procedures for implementing integrated fire response strategy
 5. Identification of readily-available pre-staged equipment
 6. Training on integrated fire response strategy
 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 1. Water spray scrubbing
 2. Dose to onsite responders

- 2.D. OpCo 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 to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Davis-Besse Nuclear Power Station Physical Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan Revision 4," submitted by letter dated May 18, 2006.

OpCo 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 OpCo CSP was approved by License Amendment No. 283 and is amended by License Amendment No. 290.

- E. This license is subject to the following antitrust conditions:

Definitions

Entity shall mean any electric generation and/or distribution system or municipality or cooperative with a statutory right or privilege to engage in either of these functions.

Wheeling shall mean transportation of electricity by a utility over its lines for another utility, including the receipt from and delivery to another system of like amounts but not necessarily the same energy. Federal Power Commission, The 1970 National Power Survey, Part 1, p. I-24-8.

License Conditions Approved By the Atomic Safety and Licensing Appeal Board*

- (1) Applicants shall not condition the sale or exchange of wholesale power or coordination services upon the condition that any other entity:
 - (a) enter into any agreement or understanding restricting the use of or alienation of such energy or services to any customers or territories;

* "Applicants" as used by the Appeal Board refers to the Toledo Edison Company, Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company and Pennsylvania Power Company although none of these entities are currently Licensees for this facility.

2.F. This renewed license is subject to the following additional conditions for the protection of the environment:

- (1) OpCo shall operate Davis-Besse Unit No. 1 within applicable Federal and State air and water quality standards.
- (2) Before engaging in an operational activity not evaluated by the Commission, OpCo will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the Final Environmental Statement, OpCo shall provide a written evaluation of such activities and obtain prior approval of the Director, Office of Nuclear Reactor Regulation for the activities.

- G. In accordance with the requirement imposed by the October 8, 1976, order of the United States Court of Appeals for the District of Columbia Circuit in Natural Resources Defense Council v. Nuclear Regulatory Commission, No. 74-1385 and 74-1586, that the Nuclear Regulatory Commission "shall make any licenses granted between July 21, 1976 and such time when the mandate is issued subject to the outcome of such proceedings herein," this license shall be subject to the outcome of such proceedings.
- H. This renewed license is effective as of the date of issuance and shall expire at midnight April 22, 2037.
3. Based on the Commission's Order dated December 16, 2005 and conforming Amendment No. 270 dated December 16, 2005 regarding the direct transfer of the license from the Cleveland Electric Illuminating Company (Cleveland Electric) and the Toledo Edison Company (Toledo Edison) to FirstEnergy Nuclear Generation Corp. (FENGenCo)*, FirstEnergy Nuclear Operating Company**, and FENGenCo* shall comply with the following conditions noted below:
- A. On the closing date of the transfers to FENGenCo* of their interests in Davis-Besse, Cleveland Electric and Toledo Edison shall transfer to FENGenCo* all of each transferor's respective accumulated decommissioning funds for Davis-Besse and tender to FENGenCo* additional amounts equal to remaining funds expected to be collected in 2005, as represented in the application dated June 1, 2005, but not yet collected by the time of closing. All of the funds shall be deposited in a separate external trust fund for the reactor in the same amount as received with respect to the unit to be segregated from other assets of FENGenCo* and outside its administrative control, as required by NRC regulations, and FENGenCo* shall take all necessary steps to ensure that this external trust fund is maintained in accordance with the requirements of the order approving the transfer of the license and consistent with the safety evaluation supporting the order and in accordance with the requirements of 10 CFR Section 50.75, "Reporting and recordkeeping for decommissioning planning."

* FirstEnergy Nuclear Generation Corp. (FENGenCo)* has been renamed OwnerCo.

** FirstEnergy Nuclear Operating Company has been renamed OpCo.

- B. The Support Agreement in the amount of \$400 million described in the application dated April 26, 2019 is effective. OwnerCo shall take no action to void, cancel, or modify the Support Agreement without the prior written consent of the NRC staff. OwnerCo shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than ten days after any funds are provided to OwnerCo by New HoldCo under the Support Agreement.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

William M. Dean

William M. Dean, Director

Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A - Technical Specifications
2. Preoperational Tests, Startup Tests and Other Items Which Must Be Completed Prior to Proceeding to Succeeding Operational Modes

Date of Issuance: December 8, 2015

ENCLOSURE 5

DRAFT CONFORMING LICENSE AMENDMENT

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440



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

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION, LLC

DOCKET NO. 50-440

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.
License No. NPF-58

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by FirstEnergy Nuclear Operating Company* (the licensee, FENOC), dated April 26, 2019, as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019, 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.

* FENOC is authorized to act as agent for FirstEnergy Nuclear Generation, LLC, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, Facility Operating License No. NPF-58; Appendix A, Technical Specifications; Appendix B, Environmental Protection Plan (Nonradiological); and Appendix C, Antitrust Conditions, are amended as indicated in the attachment to this license amendment.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 7 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Ho K. Nieh, Director
Office of Nuclear Reactor Regulation

Attachment:
Changes to Facility Operating License
No. NPF-58, Appendix A, Technical
Specifications, Appendix B,
Environmental Protection Plan
(Nonradiological), and Appendix C,
Antitrust Conditions

Date of Issuance:

ATTACHMENT TO LICENSE AMENDMENT NO.

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

Replace the following pages of the Facility Operating License; Appendix A, Technical Specifications; Appendix B, Environmental Protection Plan (Nonradiological); and Appendix C, Antitrust Conditions, with the attached revised pages. The revised pages are identified by amendment numbers and contain marginal lines indicating the areas of change.

Facility Operating License

REMOVE

1
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INSERT

1
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8

Appendix A, Technical Specifications

REMOVE

Title page

INSERT

Title page

Appendix B, Environmental Protection Plan (Nonradiological)

REMOVE

Title page

INSERT

Title page

Appendix C, Antitrust Conditions

REMOVE

1

INSERT

1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 29555-0001

OpCo
OwnerCo

DOCKET NO. 50-440
PERRY NUCLEAR POWER, PLANT, UNIT NO. 1
FACILITY OPERATING LICENSE

License No. NPF-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for license filed by OpCo¹ acting on its own behalf and as agent for OwnerCo (licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Perry Nuclear Power Plant, Unit No. 1 (the facility), has been substantially completed in conformity with Construction Permit No. CPPR-148 and the application, as amended, the provisions of the Act, and the regulations of the Commission;

¹ OpCo is authorized to act as agent for OwnerCo and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D below);
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D below);
 - E. The OpCo is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-58, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.
2. Based on the foregoing findings regarding this facility, the Partial-Initial Decisions issued December 2, 1983, and September 3, 1985, by the Atomic Safety and Licensing Board in regard to this facility (affirmed by ALAB-841, dated July 25, 1986) and pursuant to approval by the Nuclear Regulatory Commission at a meeting on November 7, 1986, Facility Operating License No. NPF-58, which supersedes the license for fuel loading and low power testing, License No. NPF-45, issued on March 18, 1986, is hereby issued to OpCo and OwnerCo (the licensees) to read as follows:
- A. The license applies to the Perry Nuclear Power Plant, Unit No. 1, a boiling water nuclear reactor and associated equipment (the facility), owned by OwnerCo (owner).

The facility is located on the shore of Lake Erie in Lake County, Ohio, approximately 35 miles northeast of Cleveland, Ohio, and is described in the licensees' Final Safety Analysis Report, as supplemented and amended, and in the licensees' Environmental Report, as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

- (1) OpCo, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Lake County, Ohio, in accordance with the procedures and limitations set forth in this license;
- (2) OwnerCo to possess the facility at the designated location in Lake County, Ohio, in accordance with the procedures and limitations set forth in this license;
- (3) OpCo, 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;
- (4) OpCo, 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 such as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and fission detectors in amounts as required;
- (5) OpCo, 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 as to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) OpCo, 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.
- (7) Deleted

- 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

OpCo is authorized to operate the facility at reactor core power levels not in excess of 3758 megawatts thermal (100% 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. xxx, are hereby incorporated into the license. OpCo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

- a. OwnerCo shall comply with the antitrust conditions delineated in Appendix C to this license; Appendix C is hereby incorporated into this license.

- b. OpCo shall comply with the antitrust conditions delineated in Appendix C to this license as if named therein. OpCo shall not market or broker power or energy from the Perry Nuclear Power Plant, Unit No. 1. The Owner is responsible and accountable for the actions of OpCo to the extent that said actions affect the marketing or brokering of power or energy from the Perry Nuclear Power Plant, Unit No. 1, and in any way, contravene the antitrust condition contained in the license.

(4) Deleted

(5) Deleted

(6) Fire Protection (Section 9.5, SER, SSER #1, 2, 3, 4, 7, and 8)

OpCo shall comply with the following requirements of the fire protection program: OpCo shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report, as amended, for the Perry Nuclear Power Plant and as approved in the Safety Evaluation Report (NUREG-0887) dated May 1982 and Supplement Nos. 1 through 10 thereto, subject to the following provisions:

- a. OpCo 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.

(7) Deleted

(8) Deleted

(9) Deleted

(10) Deleted

(11) Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions and that include the follow key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Predefined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials

- D. OpCo is exempted from: 1) the requirements of Section III.D.2(b)(ii), containment airlock testing requirements, Appendix J to 10 CFR Part 50, due to the special circumstance described in Section 6.2.6 of SER Supplement No. 7 authorized by 10 CFR 50.12(a)(2)(iii) and 2) the requirements of Section IV.F., Full Participation Exercise, of Appendix E to 10 CFR Part 50, due to the special circumstance described in the Exemption dated November 6, 1986. These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. The exemptions are hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.
- E. OpCo shall fully implement and maintain in effect all provision 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 (61 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Perry Nuclear Power Plant Physical Security Plan" Revision 2, submitted by letter dated May 18, 2006.
- OpCo 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 OpCo CSP was approved by License Amendment No. 158, and amended by License Amendment No. 167.
- F. Deleted
- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1964, as amended, to cover public liability claims.

- H. This license is effective as of the date of issuance and shall expire at midnight on March 18, 2026.
3. Based on the Commission's Order dated April 15, 2016 regarding the direct transfer from Ohio Edison Company (OE) to FirstEnergy Nuclear Generation, LLC (FENGen)*, FENOC**, and FENGen* shall comply with the following conditions noted below.
- A. On June 1, 2016, OE shall transfer to FENGen* the accumulated decommissioning funds held by OE for Perry. All such funds shall be deposited and held in FENGen* nuclear decommissioning trust for Perry along with the other funds maintained by FENGen* for Perry and shall be maintained in such trust outside of FENGen's* administrative control and in accordance with the requirements of 10 CFR 50.75(h)(1).
 - B. The Support Agreement in the amount of \$400 million from FirstEnergy Solutions Corp. (FE Solutions)*** described in the application dated June 30, 2015 shall be effective and consistent with the representations in the application. FENGen* shall take no action to void, cancel or modify the Support Agreement without the prior written consent of the NRC staff. FENGen* shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than 10 working days after any funds are provided to FENGen* by FirstEnergy Solutions*** under the terms of the Support Agreement.

* FirstEnergy Nuclear Generation, LLC (FENGen) has been renamed OwnerCo.

** FirstEnergy Nuclear Operating Company (FENOC) has been renamed OpCo.

*** FirstEnergy Solutions Corp. (FE Solutions) has been renamed New HoldCo.

C. Deleted

4. Based on the Commission's approval regarding the change in the parent company issuing a \$400 million Support Agreement to OwnerCo, OwnerCo shall comply with the conditions noted below. This \$400 million Support Agreement supersedes all previous parent support agreements.
 - A. The Support Agreement in the amount of \$400 million described in the application dated April 26, 2019 is effective. OwnerCo shall take no action to void, cancel, or modify the Support Agreement without the prior written consent of the NRC staff. OwnerCo shall inform the Director of the Office of Nuclear Reactor Regulation, in writing, no later than 10 working days after any funds are provided to OwnerCo by New HoldCo under the terms of the Support Agreement.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachments/Appendices

1. Attachments 1-2
2. Appendix A - Technical Specifications
(NUREG-1204)
3. Appendix B - Environmental Protection
Plan
4. Appendix C - Antitrust Conditions

Date of Issuance: November 13, 1986

APPENDIX A

TO FACILITY OPERATING LICENSE NO. NPF-58

PERRY NUCLEAR POWER PLANT

UNIT 1

OpCo

DOCKET NO. 50-440

TECHNICAL SPECIFICATIONS

ARE FILED IN THE

TECHNICAL SPECIFICATION MANUAL

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-58

PERRY NUCLEAR POWER PLANT

UNIT 1

OpCo

DOCKET NOS. 50-440 AND 50-441

ENVIRONMENTAL PROTECTION PLAN

(NONRADIOLOGICAL)

November 13, 1986

APPENDIX C

PERRY NUCLEAR POWER PLANT. UNIT NO. 1

NPF-58

ANTITRUST CONDITIONS

FOR

OwnerCo

A. The licensees are subject to the following antitrust conditions:

Definitions

Applicant shall mean the company listed above.

Entity shall mean any electric generation and/or distribution system or municipality or cooperative with a statutory right or privilege to engage in either of these functions.

Wheeling shall mean transportation of electricity by a utility over its lines for another utility, including the receipt from and delivery to another system of like amounts but not necessarily the same energy. Federal Power Commission, The 1970 National Power Survey, Part 1, P. 1-24-B.

Licensing Conditions

- (1) Applicant shall not condition the sale or exchange of wholesale power or coordination services upon the condition that any other entity:
 - (a) enter into any agreement or understanding restricting the use of or alienation of such energy or services to any customers or territories;
 - (b) enter into any agreement or understanding requiring the receiving entity to, give up any other power supply alternatives or to deny itself any market opportunities;
 - (c) withdraw any petition to intervene or forego participation in any proceeding before the Nuclear Regulatory Commission or refrain from instigating or prosecuting any antitrust action in any other forum.

ENCLOSURE 6

NON-PROPRIETARY

**SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
TRANSFER OF CONTROL OF FACILITY OPERATING LICENSES AND GENERAL
LICENSES FOR INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS
AND DRAFT CONFORMING AMENDMENTS**

(ADAMS Accession No. ML19305B131)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO TRANSFER OF CONTROL OF LICENSES

FROM FIRSTENERGY NUCLEAR OPERATING COMPANY AND

FIRSTENERGY NUCLEAR GENERATION, LLC TO OPCO AND OWNERCO

FOR

RENEWED FACILITY OPERATING LICENSE NOS. DPR-66, NPF-73, AND NPF-3 AND

FACILITY OPERATING LICENSE NO. NPF-58 AND THEIR RESPECTIVE GENERALLY

LICENSED INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS

BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NOS. 50-334, 50-412, 72-1043, 50-346, 72-14, 50-440, AND 72-69

1.0 INTRODUCTION

By letter dated April 26, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19116A087), as supplemented by letters dated May 31, 2019; August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019 (ADAMS Accession Nos. ML19151A531, ML19214A100, ML19241A462, ML19268A053, ML19268B133, and ML19290D432, respectively), FirstEnergy Nuclear Operating Company (FENOC), acting on behalf of itself and FirstEnergy Nuclear Generation, LLC (FENGen) (together, the Applicants), requested, pursuant to Section 184 of the Atomic Energy Act of 1954, as amended (the Act), and Section 50.80, "Transfer of licenses," of Title 10 of the *Code of Federal Regulations* (10 CFR), that the U.S. Nuclear Regulatory Commission (NRC, the Commission) consent to the transfer of Renewed Facility Operating License (RFOL) Nos. DPR-66 and NPF-73 for Beaver Valley Power Station (BVPS), Unit Nos. 1 and 2; RFOL No. NPF-3 for Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS); and Facility Operating License (FOL) No. NPF-58 for Perry Nuclear Power Plant, Unit No. 1 (PNPP), and their respective generally licensed independent spent fuel storage installations (ISFSIs) (together, the Facilities).

Specifically, the Applicants requested a direct transfer of operating authority for the Facilities from FENOC to an as-yet unnamed company, herein identified as OpCo; a direct transfer of ownership of the Facilities from FENGen to an as-yet unnamed company, herein identified as

OwnerCo; and an indirect transfer of ownership of the Facilities to an as-yet unnamed parent company, herein identified as New HoldCo (FirstEnergy Corp. (FE) is currently the ultimate parent company). The Applicants also requested the NRC's prior written consent and issuance of conforming amendments to the licenses pursuant to 10 CFR 50.80 and 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit."

A notice of the application was published in the *Federal Register* (FR) on June 27, 2019 (84 FR 30775). The supplemental letters dated August 2, 2019; August 29, 2019; September 25, 2019 (two submissions); and October 17, 2019, provided additional information that clarified the application and did not expand the scope of the application as originally noticed.

2.0 BACKGROUND

According to the application, on March 31, 2018, FirstEnergy Solutions Corp. (FES), together with FENOC, FENGen, and FES's other subsidiaries, filed voluntary petitions for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Northern District of Ohio, Eastern Division (Bankruptcy Court). By letter dated April 2, 2018 (ADAMS Accession No. ML18094A661), in accordance with 10 CFR 50.54(cc)(1), FENOC notified the NRC of the bankruptcy filing. The proposed direct and indirect license transfers would support the emergence from bankruptcy of the Applicants, along with FES and other affiliated companies that are currently debtors in the bankruptcy process, pursuant to the Eighth Amended Joint Plan of Reorganization (the Bankruptcy Reorganization Plan) filed with the Bankruptcy Court on October 11, 2019, and the Revised Eighth Amended Plan filed with the Bankruptcy Court on October 14, 2019, and confirmed by the Bankruptcy Court on October 16, 2019, as noted in the Applicants' supplemental letter dated October 17, 2019.

Under the Bankruptcy Reorganization Plan, at emergence from bankruptcy, a new privately-held holding company, New HoldCo, will be formed with shares initially held by certain current creditors of one or more of FES, FENOC, FENGen, or FirstEnergy Generation, LLC (FG) (a sister company of FENGen holding fossil fuel generation assets) and management of the new holding company. Both OpCo and OwnerCo will become wholly-owned subsidiaries of New HoldCo. New HoldCo will also have ultimate ownership of FES's existing non-nuclear generating assets as well as the retail and wholesale load-serving business.

According to the application, the proposed transaction will not change the role of OpCo (reorganized FENOC), as the licensed operator of the Facilities, or OwnerCo (reorganized FENGen), as the licensed owner of the Facilities, nor will it result in any adverse changes to their financial qualifications, decommissioning funding assurance, or technical qualifications. OpCo will continue to operate the Facilities, while OwnerCo will continue to own the Facilities, in a substantially similar manner as before the emergence from bankruptcy, consistent with the Facilities' licenses and applicable NRC requirements.

3.0 REGULATORY EVALUATION

The proposed transaction described in the application involves both direct and indirect transfers of control of the Facilities' licenses, requiring prior NRC approval. Generally, for direct transfers of control of a license, the NRC must find that the proposed transferee is qualified to be the holder of the license and that transfer of the license is otherwise consistent with applicable provisions of law, NRC regulations, and orders issued by the NRC; for indirect transfers of

control of a license, the NRC must find that the proposed indirect transfer does not affect the technical and financial qualifications of the licensee to hold the license.

The request for approval of the direct and indirect transfers of control of the Facilities' licenses as described above, and as discussed in this safety evaluation (SE), is made pursuant to 10 CFR 50.80(a), which states:

No license for a production or utilization facility (including, but not limited to, permits under this part and part 52 of this chapter, and licenses under parts 50 and 52 of this chapter), or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission gives its consent in writing.

In addition, the regulations at 10 CFR 50.80(b) and (c) apply. Section 50.80(b) of 10 CFR states that an application for a license transfer shall include as much of the information described in 10 CFR 50.33, "Contents of applications; general information," and 10 CFR 50.34, "Contents of applications; technical information," with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license.

Section 50.80(c) of 10 CFR states, in part:

...the Commission will approve an application for the transfer of a license, if the Commission determines: (1) That the proposed transferee is qualified to be the holder of the license; and (2) That transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

In 10 CFR 50.33(a) through (d), the NRC requires applicants to provide information including the name of the applicant, address of the applicant, description of the corporate structure of the applicant, citizenship of the applicant, and foreign ownership, control, or domination (FOCD) of the applicant, as applicable.

In addition, 10 CFR 50.33(f) states, in part:

Except for an electric utility applicant for a license to operate a utilization facility of the type described in § 50.21(b) or § 50.22, [each application shall state] information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought.

Section 50.2, "Definitions," of 10 CFR states, in part, that an electric utility means:

[A]ny entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority.

The NRC staff applies the guidance in NUREG-1577, Revision 1, "Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance,"

dated February 1999 (ADAMS Accession No. ML013330264), to evaluate the financial qualifications of applicants to carry out the activities for which the permit or license is sought.

In addition, 10 CFR 50.33(k)(1) requires that applicants provide the information described in 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning," indicating how reasonable assurance will be provided that funds will be available to decommission the facility.

The regulation under 10 CFR 50.75 specifies how a licensee will provide reasonable assurance that funds will be available for the decommissioning process. Specifically, 10 CFR 50.75(b) requires that decommissioning financial assurance be provided in an amount not less than the minimum formula amount in 10 CFR 50.75(c). In 10 CFR 50.75(e), the NRC includes the methods acceptable to the agency for covering this decommissioning financial assurance amount, including using a decommissioning trust fund (DTF). Finally, 10 CFR 50.75(f) and (h) provide additional requirements on the reporting and management of DTFs.

In addition, 10 CFR 50.82(a)(8)(i) states that licensees may use DTFs if:

- (A) The withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in § 50.2;
- (B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise; and
- (C) The withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.

In accordance with 10 CFR 50.2, the term "decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license or (2) release of the property under restricted conditions and termination of the license.

In 10 CFR 50.82(a)(8)(v), the NRC also requires power reactor licensees that have permanently ceased operations to provide to the NRC annually, by March 31, a decommissioning financial assurance status report. The report must include additional financial assurance to cover any projected shortfalls.

In 10 CFR 50.54(bb), the NRC requires, in part, a licensee to submit, for NRC review and preliminary approval, the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel, also known as spent fuel, at the reactor following permanent cessation of operation of the reactor until title to the spent fuel and possession of the spent fuel is transferred to the U.S. Department of Energy (DOE) for its ultimate disposal in a repository. In addition, 10 CFR 50.82(a)(8)(vii) provides, in part, for the licensee's annual submittal to the NRC of a report on the status of its funding for managing spent fuel. If the funds accumulated do not cover the projected cost, a plan to obtain additional funds to cover the cost must be included.

In addressing FOCD issues, Sections 103d and 104d of the Act provide, in relevant parts, that no license may be issued to the following:

[A]ny corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

The NRC's regulation at 10 CFR 50.38, "Ineligibility of certain applicants," is the regulatory provision that implements the FOCD provisions of the Act. The NRC staff evaluates license transfer applications in a manner that is consistent with the guidance provided in the NRC Standard Review Plan (SRP) on FOCD, published in the *Federal Register* on September 28, 1999, to determine whether the proposed transferee is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government (64 FR 52355). The NRC's position on FOCD, outlined in the SRP, states that "the foreign control limitation should be given an orientation toward safeguarding the national defense and security." Further, the SRP on FOCD outlines how the effects of foreign ownership may be mitigated through implementation of a "negotiation action plan" to ensure that any foreign interest is effectively denied control or domination over the licensee.

In 10 CFR 50.34(b)(6), the NRC requires that applicants provide certain information on facility operation. It requires, in part, that the information provided by the applicant includes the following:

- (i) The applicant's organizational structure, allocations or responsibilities and authorities, and personnel qualification requirements.
- (ii) Managerial and administrative controls to be used to assure safe operation.

In 10 CFR 50.34(b)(7), the NRC also requires that applicants provide the following information in the final safety analysis report:

The technical qualifications of the applicant to engage in the proposed activities in accordance with the regulations in this chapter.

The NRC staff uses, in part, the following regulatory guidance to evaluate whether the qualifications of licensees would be affected by proposed transfers:

- (1) NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition," Chapter 13, "Conduct of Operations," Section 13.1.1, Revision 6, "Management and Technical Support Organization," dated August 2016 (ADAMS Accession No. ML15005A449), which provides guidance for the review of changes to the technical organization or personnel qualifications proposed as a result of an operating license transfer. Specifically, Section I.4, "Reviews of Operating License Transfers," states that the applicant for transfer of an operating license should provide a description of the organization to support plant operations, which should include (1) organizational charts of the corporate-level management and technical support organizations, emphasizing the changes to be made as a result of the transfer, (2) the relationship of the nuclear-oriented parts of the organization to the rest of the corporate organization, and (3) description

of the specific provisions which have been made for uninterrupted technical support for operations.

- (2) NUREG-0800, Chapter 13, Sections 13.1.2–13.1.3, Revision 7, "Operating Organization," dated August 2017 (ADAMS Accession No. ML15007A296), which provides guidance for the review of changes to the operating organization proposed as a result of an operating license transfer.

The purpose of this evaluation is to ensure that the proposed corporate management is involved with, informed of, and dedicated to the safe operation, maintenance, and decommissioning of the facility and that adequate technical and financial resources will be provided to support these activities.

The NRC staff also reviews information that relates to nuclear onsite property damage insurance requirements under 10 CFR 50.54(w), the Price-Anderson insurance and indemnity requirements under Section 170 of the Act, and 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements."

With respect to the transfer of control of a license for an ISFSI, 10 CFR 72.50(a) states:

No license or any part included in a license issued under this part for an ISFSI or MRS [monitored retrievable storage installation] shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission gives its consent in writing.

4.0 FINANCIAL QUALIFICATIONS AND DECOMMISSIONING FUNDING ASSURANCE FOR DBNPS AND PNPP

In the application dated April 26, 2019, the Applicants stated that on March 28, 2018, FES announced that it intended to permanently cease operation of the Facilities. DBNPS was scheduled for deactivation by May 31, 2020, and PNPP was scheduled for deactivation by May 31, 2021. FENOC separately certified to the NRC this planned permanent cessation of operations for DBNPS and PNPP by letter dated April 25, 2018 (ADAMS Accession No. ML18115A007). However, in the letter dated July 26, 2019 (ADAMS Accession No. ML19207A097), the Applicants withdrew their certification of permanent cessation of operations for DBNPS and PNPP. Subsequently, in the supplemental letter dated September 25, 2019, the Applicants provided revised pro forma data for 5 years of operation for DBNPS and PNPP. Therefore, the NRC staff's financial qualifications and decommissioning funding assurance evaluation of these plants is based on their continuing operation until the end of their respective licenses.

4.1 Financial Qualifications for DBNPS and PNPP

In accordance with 10 CFR 50.33(f), a non-electric utility applicant must provide information sufficient to demonstrate its financial qualifications to carry out the activities for which the license is being sought. The information must show that the applicant possesses, or has reasonable assurance of obtaining, the funds necessary to cover estimated operating costs for the period of the license. In making this showing, the applicant must submit estimated total annual operating costs for each of the first 5 years of facility operations and indicate the

source(s) of funds to cover these costs. For license transfers, the relevant 5-year period is that time immediately following the transfer.

The Applicants do not assert that OwnerCo will be an “electric utility” as defined in 10 CFR 50.2, because OwnerCo will not recover the cost of electricity through rates established by itself or by a separate regulatory authority. Therefore, the NRC staff has determined that OwnerCo must meet the financial qualifications requirements for a non-electric utility pursuant to 10 CFR 50.33(f). According to the application, OwnerCo, as the owner of DBNPS and PNPP, will have the benefit of the power output of the plants. OwnerCo will be responsible to pay OpCo for all costs associated with operations, maintenance, and capital investment at DBNPS and PNPP.

In their supplemental letter dated September 25, 2019, the Applicants provided pro forma income statements for DBNPS and PNPP, which are presented in Tables 1 and 2, respectively, as follows:

TABLE 1

DBNPS
Pro Forma Income Statement
(\$ in millions)

	2020	2021	2022	2023	2024
Operating Revenues:	[[]]	[[]]	[[]]	[[]]	[[]]
Operating Expenses:	[[]]	[[]]	[[]]	[[]]	[[]]
Other Income/ (Expenses):	[[]]	[[]]	[[]]	[[]]	[[]]
Income before Income Taxes:	[[]]	[[]]	[[]]	[[]]	[[]]
Net Income:	[[]]	[[]]	[[]]	[[]]	[[]]

TABLE 2

PNPP
Pro Forma Income Statement
(\$ in millions)

	2020	2021	2022	2023	2024
Operating Revenues:	[[]]	[[]]	[[]]	[[]]	[[]]
Operating Expenses:	[[]]	[[]]	[[]]	[[]]	[[]]
Other Income/ (Expenses):	[[]]	[[]]	[[]]	[[]]	[[]]
Income before Income Taxes:	[[]]	[[]]	[[]]	[[]]	[[]]
Net Income:	[[]]	[[]]	[[]]	[[]]	[[]]

In these pro forma income statements, the Applicants provide the information necessary to evaluate the financial qualifications of OwnerCo and OpCo with respect to their proposed owning and operating, respectively, of DBNPS and PNPP. This information includes revenue, expense, and net income. The pro forma income statements indicate that total annual operating costs for each of the first 5 years of operation of DBNPS and PNPP will be covered by the revenues generated from the sale of electricity and from Nuclear Resource Credits received from the State of Ohio at each of the plants. Therefore, the application demonstrates that OwnerCo and OpCo possess or have reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license and, thus, that they are financially qualified. This information is consistent with the Bankruptcy Court's findings in confirming the Bankruptcy Reorganization Plan on October 16, 2019.

The application also states that there currently exists a \$400 million support agreement between FES and FENGen that provides support to FENGen for the safe operation and maintenance of the Facilities, including DBNPS and PNPP. As part of the proposed transaction, the support agreement will be assigned by FES to New HoldCo for the benefit of OwnerCo. The NRC staff finds that this is acceptable because this funding source is sufficient to provide assurance that adequate funds will remain available to fund ongoing operations and maintenance expenses. The application proposes conforming amendments to the existing support agreement license conditions, which are acceptable to the staff for DBNPS and PNPP. This provides additional assurance of financial qualification.

Based on the above, the Applicants have provided information sufficient to demonstrate that OwnerCo and OpCo are financially qualified to own and operate, respectively, DBNPS and PNPP. Therefore, the NRC staff finds that the proposed DBNPS and PNPP license transfers satisfy 10 CFR 50.80 with respect to financial qualifications.

4.2 Decommissioning Funding Assurance for DBNPS and PNPP

At the time of the proposed transfer, FENGen's existing trust funds for DBNPS and PNPP will be transferred to OwnerCo. FENGen's nuclear decommissioning trusts (NDTs) are held in external trust funds segregated from FENGen's assets and outside

its administrative control. The funds are governed by the Master NDT Agreement with the Bank of New York Mellon as Trustee. The terms of that agreement comply with the requirements of 10 CFR 50.75(h)(1) and will remain in effect and govern the funds that are to be transferred.

As required by 10 CFR 50.75(f)(1), FENOC provided to the NRC decommissioning funding status (DFS) reports for the Facilities as of December 31, 2018, by letter dated March 15, 2019, and supplemented by letter dated August 29, 2019 (ADAMS Accession Nos. ML19074A242 and ML19241A462, respectively). The letters noted that there was sufficient funding for DBNPS and PNPP.

In the DFS reports, the amount of decommissioning funds required for DBNPS and PNPP to establish reasonable assurance of decommissioning funding using the table of minimum amounts formula (in 2018 dollars) were approximately \$491.3 million and \$682.0 million, respectively. The amount of decommissioning funds required for decommissioning pursuant to the site-specific cost estimates provided by FENOC in the DFS reports (in 2014 dollars) were \$842.4 million and \$1,043.3 million, respectively. The amount of funds available in decommissioning trusts as of December 31, 2018, were approximately \$563.0 million and \$517.1 million, respectively. The letter noted that as of December 31, 2018, the PNPP DTF did not meet the minimum requirements for reasonable assurance, but that by January 31, 2019, the amount in the DTF (\$541.9 million) did meet the minimum requirements and, therefore, that no further action was needed.

The NRC staff analyzed FENOC's site-specific decommissioning cost estimates for DBNPS and PNPP against total current funding levels as provided and evaluated these data over a 60-year SAFSTOR¹ period. The staff calculated the balance of funds at the end of SAFSTOR, which resulted in a surplus of funds in excess of current site-specific requirements. Accordingly, based on its review of the DFS reports provided by FENOC, the staff determined that OwnerCo demonstrated adequate decommissioning funding assurance with respect to DBNPS and PNPP in accordance with the NRC's regulations.

Based on the above, the Applicants have provided information sufficient to demonstrate that there is reasonable assurance that, after the proposed license transfer, funds will be available for the decommissioning process for DBNPS and PNPP. Therefore, the NRC staff finds that the proposed DBNPS and PNPP license transfers satisfy 10 CFR 50.80 with respect to decommissioning funding.

5.0 FINANCIAL QUALIFICATIONS AND DECOMMISSIONING FUNDING ASSURANCE FOR BVPS, UNITS 1 AND 2

In the application dated April 26, 2019, the Applicants stated that on March 28, 2018, FES announced that it intended to permanently cease operation of the Facilities. BVPS Unit 1 was scheduled for deactivation by May 31, 2021, and BVPS Unit 2 was scheduled for deactivation by October 31, 2021. FENOC separately certified to the NRC this planned permanent cessation of operations for BVPS, Units 1 and 2, by letter dated April 25, 2018 (ADAMS Accession

¹ A method of decommissioning in which a nuclear facility is placed and maintained in a condition that allows the facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for unrestricted use.

No. ML18115A007). Therefore, the NRC staff's financial qualifications and decommissioning funding assurance evaluation of these plants is based on their continuing operation until the announced deactivation dates.

For a facility in decommissioning, a licensee is required to execute financial plans for spent fuel management under 10 CFR 50.54(bb) and report annually on the status of funding dedicated to radiological decommissioning and spent fuel management under 10 CFR 50.82(a)(8)(v)-(vii).

Accordingly, as described in this SE, for BVPS, Units 1 and 2, the NRC staff's review of the Applicants' financial qualifications and decommissioning financial assurance pursuant to 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.54(bb), 10 CFR 50.75, and 10 CFR 50.82(a), includes an analysis of the projected costs for operating BVPS, Units 1 and 2, until their permanent cessation of operations, as well as decommissioning the plants and terminating the licenses, and managing spent fuel until the DOE takes title to and possession of the fuel.

5.1 Financial Qualifications for BVPS, Units 1 and 2, until Permanent Cessation of Operations

After the permanent cessation of operations for BVPS, Units 1 and 2, they will not have normal operating expenses, but will instead have expenses for radiological decommissioning and managing spent fuel. Those portions of the financial qualifications evaluation are discussed below in Sections 5.2 and 5.3 of this SE.

In accordance with 10 CFR 50.33(f), a non-electric utility applicant must provide information sufficient to demonstrate its financial qualifications to carry out the activities for which the license is being sought. The information must show that the applicant possesses, or has reasonable assurance of obtaining, the funds necessary to cover estimated operating costs for the period of the license. In making this showing, the applicant must submit estimated total annual operating costs for each of the first 5 years of facility operations and indicate the source(s) of funds to cover these costs. For license transfers, the relevant 5-year period is that time immediately following the transfer.

The Applicants do not assert that OwnerCo will be an "electric utility" as defined in 10 CFR 50.2, because OwnerCo will not recover the cost of electricity through rates established by itself or by a separate regulatory authority. Therefore, the NRC staff has determined that OwnerCo must meet the financial qualifications requirements for a non-electric utility pursuant to 10 CFR 50.33(f). According to the application, OwnerCo, as the owner of BVPS, Units 1 and 2, will have the benefit of the power output of the plants. OwnerCo will be responsible to pay OpCo for all costs associated with operations, maintenance, and capital investment at BVPS, Units 1 and 2.

In their supplemental letter dated September 25, 2019, the Applicants provided pro forma income statements for BVPS, Units 1 and 2, for their remaining years of operation, which are presented in Tables 3 and 4, respectively, as follows:

TABLE 3

BVPS, Unit 1
Pro Forma Income Statement
(\$ in millions)

	2020	2021
Operating Revenues:	[[]]	[[]]
Operating Expenses:	[[]]	[[]]
Other Income/(Expenses):	[[]]	[[]]
Income before Income Taxes:	[[]]	[[]]
Net Income:	[[]]	[[]]

TABLE 4

BVPS, Unit 2
Pro Forma Income Statement
(\$ in millions)

	2020	2021
Operating Revenues:	[[]]	[[]]
Operating Expenses:	[[]]	[[]]
Other Income/(Expenses):	[[]]	[[]]
Income before Income Taxes:	[[]]	[[]]
Net Income:	[[]]	[[]]

In these pro forma income statements, the Applicants provide the information necessary to evaluate the financial qualifications of OwnerCo and OpCo with respect to their proposed owning and operating, respectively, of BVPS, Units 1 and 2. This information includes revenue, expense, and net income. The pro forma income statements indicate that total annual operating costs for the two remaining years of operation of BVPS, Units 1 and 2, will be covered by the revenues generated from the sale of electricity at each of the plants.

Therefore, the application demonstrates that OwnerCo and OpCo possess or have reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license and, thus, that they are financially qualified. This information is consistent with the Bankruptcy Court's findings in confirming the Bankruptcy Reorganization Plan on October 16, 2019.

The application also states that there currently exists a \$400 million support agreement between FES and FENGen that provides support to FENGen for the safe operation and maintenance of the Facilities, including BVPS, Units 1 and 2. As part of the proposed transaction, the support agreement will be assigned by FES to New HoldCo for the benefit of OwnerCo. The NRC staff

finds that this is acceptable because this funding source is sufficient to provide assurance that adequate funds will remain available to fund ongoing operations and maintenance expenses. The application proposes conforming amendments to the existing support agreement license conditions, which are acceptable to the staff for BVPS, Units 1 and 2. This provides additional assurance of financial qualification.

Based on the above, the Applicants have provided information sufficient to demonstrate that OwnerCo and OpCo are financially qualified to own and operate, respectively, BVPS, Units 1 and 2. Therefore, the NRC staff finds that the proposed BVPS, Units 1 and 2, license transfers satisfy 10 CFR 50.80 with respect to financial qualifications prior to the units' permanent cessation of operations.

After the permanent cessation of operations for BVPS, Units 1 and 2, the units will not have normal operating expenses, but will instead have expenses for radiological decommissioning and managing spent fuel. Those portions of the financial qualifications evaluation are discussed in the following sections of this SE.

5.2 Radiological Decommissioning

As noted above, pursuant to 10 CFR 50.2, "decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license or (2) release of the property under restricted conditions and termination of the license. As described below, the NRC staff's review of decommissioning funding assurance assesses whether the Applicants have provided reasonable assurance that funds will be available to cover estimated costs for radiological decommissioning of BVPS, Units 1 and 2, and its ISFSI.

The existing DTFs for BVPS, Units 1 and 2, were created in compliance with 10 CFR 50.75. As required by 10 CFR 50.75(f)(1), and by letter dated March 15, 2019 (ADAMS Accession No. ML19074A242), FENOC provided to the NRC DFS reports for the Facilities as of December 31, 2018. The letter noted that there was sufficient funding for BVPS Unit 2. For BVPS Unit 1, a shortfall in the NDT of approximately \$78 million was identified, and the letter provided a regulatory commitment to reconcile the shortfall by March 31, 2020. The application dated April 26, 2019, relied on the March 15, 2019, commitment to demonstrate that reasonable assurance of adequate funding for radiological decommissioning exists for BVPS Unit 1. On May 29, 2019, the NRC staff requested supplemental information to complete its acceptance review of the license transfer application (ADAMS Accession No. ML19143A073). Specifically, the staff requested, in accordance with 10 CFR 50.33(k)(1), supplemental information demonstrating how the Applicants will provide reasonable assurance that funds will be available to decommission BVPS Unit 1, including how the projected shortfall in decommissioning funding will be corrected on or prior to the date the license transfer is consummated. FENOC supplemented the application by letter dated May 31, 2019 (ADAMS Accession No. ML19151A531), which included a proposed condition to the NRC order approving the license transfer that on or by the closing date of the license transfer transaction, the Applicants would take all necessary steps to ensure that the decommissioning funding assurance mechanism to address any shortfall identified for BVPS Unit 1 is implemented and maintained consistent with the staff's SE.

In their supplemental letter dated August 29, 2019 (ADAMS Accession No. ML19241A462), the Applicants provided information that the shortfall was reduced from the amount previously reported in March 2019 to approximately \$55 million. The Applicants reiterated the commitment

to reconcile the shortfall prior to or on the closing date of the transfer. In their supplemental letter dated September 25, 2019 (ADAMS Accession No. ML19268A053), the Applicants provided a provisional trust agreement for NRC review.

As a result, the following condition will be imposed as part of the license transfer:

On or by the closing date of the license transfer transaction, the Applicants shall take all necessary steps to ensure that the provisional trust agreement submitted on September 25, 2019, to address the shortfall identified for BVPS, Unit 1 is implemented and maintained consistent with the safety evaluation supporting this Order.

In the DFS reports, the amount of decommissioning funds required for BVPS, Units 1 and 2, to establish reasonable assurance of decommissioning funding using the table of minimum amounts formula (in 2018 dollars) were approximately \$507.9 million and \$507.9 million, respectively. The amount of decommissioning funds required for decommissioning pursuant to the site-specific cost estimates provided by FENOC in the DFS reports (in 2014 dollars) were approximately \$693.8 million and \$700.7 million, respectively. The amount of funds available in decommissioning trusts as of December 31, 2018, were approximately \$286.9 million and \$383.2 million, respectively. The amount of funds available in the decommissioning trust for BVPS Unit 1 was approximately \$319.4 million on June 30, 2019.

The NRC staff analyzed FENOC's site-specific decommissioning cost estimates for BVPS, Units 1 and 2, and the associated ISFSI against total current funding levels as provided and evaluated these data over a 60-year SAFSTOR period, beginning with permanent cessation of operations at BVPS on May 31, 2021, for Unit 1, and on October 31, 2021, for Unit 2. The staff reviewed the cash flow analysis in the site-specific decommissioning cost estimate for BVPS Unit 2 and the revised cash flow analysis for BVPS Unit 1 (dated August 29, 2019, which includes the provisional trust amount) that calculated the balance of funds at the end of SAFSTOR. These result in a surplus of funds in excess of current site-specific requirements. Accordingly, based on its review of the DFS reports provided by FENOC, the staff determined that OwnerCo demonstrated adequate decommissioning funding assurance with respect to BVPS, Units 1 and 2, in accordance with the NRC's regulations.

The NRC staff determined that the transfer of control, including the transfer of decommissioning funds, will not affect the decommissioning funding arrangements currently in place for BVPS, Units 1 and 2. Based on its review, in consideration of the above analysis and the condition in the Order regarding the creation of the provisional trust to address the projected shortfall in decommissioning funding for BVPS Unit 1, the NRC staff finds that the Applicants have provided reasonable assurance of obtaining the funds necessary to cover estimated costs for decommissioning BVPS, Units 1 and 2, in accordance with the requirements of 10 CFR 50.33(f), 10 CFR 50.33(k)(1), 10 CFR 50.75, and 10 CFR 50.82(a).

5.3 Spent Fuel Management

By letter dated March 15, 2019 (ADAMS Accession No. ML19074A244), FENOC submitted to the NRC Irradiated Fuel Management Plans (IFMPs) for BVPS Unit 1, BVPS Unit 2, DBNPS, and PNPP. The application dated April 26, 2019, relied on these IFMPs to support its plans for spent fuel management. By letter dated August 22, 2019 (ADAMS Accession No. ML19234A158), FENOC withdrew the IFMPs for DBNPS and PNPP. As FENOC noted,

IFMPs for DBNPS and PNPP are no longer required because DBNPS and PNPP will no longer permanently cease operations as originally stated in the application.

The letter dated August 22, 2019, also provided revised versions of the BVPS, Units 1 and 2, IFMPs contained in the letter dated March 15, 2019. The supplemental letter dated August 29, 2019, revised the application to rely on the BVPS, Units 1 and 2, IFMPs submitted in the letter dated August 22, 2019.

With regard to spent fuel removal from the site, the Applicants indicated that fuel is expected to be removed beginning in 2029. This plan remains dependent upon the DOE's ability to remove spent fuel from the site in a timely manner. According to the revised IFMPs, assuming that the DOE's generator allocation/receipt schedules are based upon the oldest fuel receiving the highest priority and that the DOE begins removing spent fuel from commercial facilities in 2025 with an annual capacity of 3,000 metric tons of uranium, spent fuel is projected to remain at the site for approximately 39 years after the termination of operations in 2021. Any delay in transfer of fuel to the DOE or decrease in the rate of acceptance will correspondingly prolong the transfer process and result in spent fuel remaining at the site longer than anticipated. Accordingly, in the revised IFMPs, the Applicants based their cost assumptions on fuel removal from BVPS, Units 1 and 2, from 2029 through 2060. The NRC staff finds that these assumptions with regard to the final disposition of BVPS, Units 1 and 2, spent fuel are reasonable because the DOE, according to the Nuclear Waste Policy Act of 1982, is authorized to ultimately enter into contracts with owners and generators of commercial spent nuclear fuel to begin taking title to (legal ownership of) spent nuclear fuel. Spent fuel storage operations will continue at the site, independent of decommissioning operations, until the transfer of the fuel to the DOE is complete.

As noted in the supplemental letter dated August 22, 2019, the funding for spent fuel management will be provided by a combination of a provisional trust in the amount of \$267 million from 2021 through 2026 (Periods 1 and 2a) and payments from the DOE due to its partial breach of the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste (Standard Contract) from 2026 through 2060 (Period 2b).

The Applicants note that upon emergence from bankruptcy, New HoldCo and its subsidiaries are projected to have approximately \$2 billion in current assets, including cash and cash equivalents. The Applicants anticipate that such assets would be able to fund Periods 1 and 2a spent fuel management activities for BVPS, Units 1 and 2, by placement of \$267 million into a provisional trust by the end of 2021. The provisional trust will enable use of the funds for spent fuel management activities occurring during Periods 1 and 2a. Upon the completion of the spent fuel activities in Periods 1 and 2a, the terms of the provisional trust will provide that it can be terminated, and its balance released back to OwnerCo. As assurance regarding their reliance on the provisional trust, the Applicants agreed to the following license condition for BVPS, Units 1 and 2, reflecting their commitment:

OwnerCo shall create a provisional trust in the amount of \$267 million for spent fuel management activities for Beaver Valley Power Station, Unit Nos. 1 and 2. The trust shall be fully funded by December 31, 2021. Upon completion of the specified spent fuel management activities in the Irradiated Fuel Management Plan, dated August 22, 2019, the provisional trust may be terminated. The provisional trust may also be modified or terminated upon NRC approval of a revised Irradiated Fuel Management Plan that supersedes the plan dated August 22, 2019.

The Applicants expect to recover the majority of the costs for Periods 1 and 2a by making claims for damages resulting from the DOE's partial breach of the Standard Contract. The Applicants also expect that by no later than January 1, 2027, they will be able to obtain a settlement agreement to recover Period 2b costs annually.

The Applicants also committed to having a performance bond in place to cover annual spent fuel management costs in the event that a settlement with the DOE is not reached. The bond will be renewed annually until a settlement is reached. As assurance regarding their reliance on a future DOE settlement agreement, the Applicants agreed to the following license condition for BVPS, Units 1 and 2, reflecting their commitment:

OwnerCo shall obtain performance bonds if a settlement agreement with the U.S. Department of Energy (DOE) on DOE reimbursements for spent fuel management expenses is not entered into by January 1, 2027. The performance bonds will be effective December 31, 2026, initially in the amount of \$9.3 million and \$4.7 million for BVPS, Units 1 and 2, respectively, and they will be renewed annually. This amount covers 1.3 times the highest annual amount of ISFSI operation and maintenance (O&M) costs projected.

The NRC staff finds that the assumption of DOE reimbursement is a reasonable source of additional funding. In recent years, the DOE reimbursements have become more consistent and predictable despite the longevity of the litigation process and complexity of the DOE standard settlement agreements. Moreover, FENGen (to be renamed OwnerCo) has successfully recovered more than \$193 million from the DOE. Finally, as further assurance of their reliance on a future DOE settlement agreement, the Applicants agreed to a license condition to obtain a performance bond to cover spent fuel management costs if a settlement agreement has not been reached in the timeframe anticipated. Therefore, the NRC staff concludes that DOE reimbursements, as proposed by the Applicants, provide a reasonable source of funds to cover costs associated with the management of spent fuel for this financial qualifications review.

Based on its review, in consideration of the above analysis and the license conditions, and the Bankruptcy Court's confirmation of the Bankruptcy Reorganization Plan on October 16, 2019, the NRC staff finds that the Applicants have demonstrated reasonable assurance of obtaining the funds necessary to cover estimated costs for spent fuel management in accordance with the requirements of 10 CFR 50.33(f) and 10 CFR 50.54(bb).

6.0 TECHNICAL QUALIFICATIONS

The purpose of this technical qualifications evaluation is to ensure that the proposed corporate management is involved with, informed of, and dedicated to the safe operation, maintenance, and decommissioning of the Facilities. In addition, the review is intended to ensure that sufficient technical resources have been, are being, and will continue to be provided to adequately accomplish these activities.

6.1 Management and Technical Support Organization

The NRC staff reviewed the application to determine whether the corporate management and technical support organization of the licensee/owner/operator will change due to the proposed organization changes. The NRC staff evaluated the application using, in part, the guidance provided in NUREG-0800, Section 13.1.1, Revision 6.

In Section III.C, "Technical Qualifications," of the application, the Applicants indicated that management and technical personnel of the Facilities will not change as a result of the reorganization. The qualifications and structure of management and the technical personnel of the Facilities is unchanged.

The NRC staff concludes that the proposed organization chart is appropriate because it provides access to resources in the event of a safety concern. There are no changes to the management and technical support personnel or organization, therefore, the staff finds this treatment to be acceptable.

The NRC staff also used the requirements in 10 CFR 50.34(c) and (d), and 10 CFR 72.44(e) for the physical security related review.

The application, as supplemented, indicated that OpCo, as the licensed operator, will manage and perform the day-to-day activities, including decommissioning activities, to maintain compliance with the licenses and NRC regulations, subject to the direct oversight and control of OwnerCo, as the licensed owner. Further, the OpCo site organization will include the existing BVPS, DBNPS, and PNPP site personnel at the site at the time of the consummation of the transaction. This includes the plant operations, emergency planning, and security organizations.

The BVPS, DBNPS, and PNPP programs and procedures existing at the time of the consummation of the transaction, including the emergency and security plans and the fire protection, radiological protection, licensed operator training, certified fuel handler training (for BVPS only), and quality assurance programs, will also be implemented post-license transfer. Any subsequent changes to these programs and procedures will be determined by OpCo and OwnerCo and made in accordance with NRC regulations, including 10 CFR 50.59, 10 CFR 50.54(a), 10 CFR 50.54(p), 10 CFR 50.54(q), 10 CFR 50.48(f), and 10 CFR 50.71(e).

OwnerCo will have exclusive responsibility under the licenses for the possession, maintenance, and decommissioning of BVPS, DBNPS, and PNPP, including responsibility for spent fuel management and the maintenance and security of the ISFSI.

The application also indicated that OwnerCo will ensure that positions filled by incumbent employees that are vacated due to attrition are backfilled with qualified personnel, subject to a determination of need to fill the position. A normal attrition strategy would include filling vacant positions with other qualified employees, hiring from the community of retired BVPS, DBNPS, and PNPP employees, assigning qualified personnel from the OwnerCo and OpCo parent companies, and seeking qualified personnel from industry staff augmentation firms. In all cases, the individuals will be qualified to BVPS, DBNPS, and PNPP programs and procedures.

Based on its review, the NRC staff finds that through the implementation of NRC-approved programs and procedures, OwnerCo and OpCo will be able to continue to protect the site.

6.2 Operating Organization

The NRC staff reviewed the application to evaluate changes to the operating organization proposed as a result of the transaction. The NRC staff evaluated the application using, in part, the guidance provided in NUREG-0800, Sections 13.1.2–13.1.3, Revision 7.

The application stated that the current operating organization, including the licensed operators, will be maintained. The new operating organization is referred to as OpCo in the application; however, it is essentially the same as the current organization, with an administrative name change. Therefore, there are no changes to the operating organization. OpCo will continue to operate and maintain the Facilities consistent with the existing licensing bases.

The NRC staff reviewed the above information and because no changes are required for this transaction, the staff concludes that the operations organization proposed for OpCo continues to be acceptable.

7.0 ANTITRUST CONSIDERATION

The Act does not require or authorize antitrust reviews of post-operating license transfer applications.² The application post-dates the issuance of the operating licenses for the units under consideration in this SE and, therefore, no antitrust review is required or authorized. Additionally, no changes have been proposed in the subject licenses that contain antitrust conditions. Therefore, there are no antitrust issues to be considered in connection with the conforming license amendments.

8.0 FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

According to the application, New HoldCo is not owned, controlled, or dominated by any alien, foreign corporation, or foreign government. New HoldCo is a privately-owned company incorporated under the laws of the state of Delaware, with its principal office located in Akron, Ohio. OwnerCo and OpCo are wholly-owned subsidiaries of New HoldCo. The supplemental letter dated August 2, 2019, contains the names and addresses of the directors and officers of New HoldCo and indicates that all are United States citizens.

The NRC staff conducted an independent analysis, including open-source research and verification of the information provided in the application related to the ownership of New HoldCo and found no evidence of FOCD.

Based on its independent analysis of the information provided in the application, the NRC staff concludes that it does not know or have reason to believe that New HoldCo is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government; therefore, it meets the FOCD requirement of 10 CFR 50.38.

9.0 NUCLEAR INSURANCE AND INDEMNITY

Pursuant to the requirements of the Price-Anderson Act (Section 170 of the Act) and the NRC's implementing regulations at 10 CFR Part 140, the current indemnity agreements must be modified to reflect the transfer of control of the licenses for the Facilities.

² Kansas Gas and Electric Co., et al. (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441 (1999).

Consistent with NRC practice, the NRC staff will require OwnerCo and OpCo to provide evidence that they have obtained the appropriate amount of insurance pursuant to 10 CFR 140.11(a)(4) and 10 CFR 50.54(w), and that the insurance is effective concurrent with the date of the license transfers and amended indemnity agreement. Because the issuance of the amended licenses is directly tied to completion of the proposed license transfers, the Order approving the transfers will be conditioned as follows:

OwnerCo and OpCo shall provide satisfactory documentary evidence to the Director of the NRC Office of Nuclear Reactor Regulation that, as of the date of the license transfer, the licensees reflected in the amended licenses have obtained the appropriate amount of insurance required of a licensee under 10 CFR Part 140 and 10 CFR 50.54(w).

As required by 10 CFR 140.21, each reactor licensee should be able to demonstrate its financial capacity to pay into the secondary tier of financial protection for each reactor it is licensed to operate and insure pursuant to 10 CFR 140.11(a)(4) \$131.056 million per incident and up to \$20.496 million per year. In the supplemental letter dated September 25, 2019, the Applicants submitted financial documents demonstrating a balance sheet that showed sufficient cash and cash equivalents that would be available for payment of retrospective premiums. The Applicants' submittal also demonstrates the financial capacity to provide secondary financial protection for its entire nuclear fleet. Based on its review of this information, including the Bankruptcy Court's confirmation of the Bankruptcy Reorganization Plan on October 16, 2019, the NRC staff concludes that OwnerCo and OpCo have met the requirements under 10 CFR 140.21 for proof of financial capacity to pay into the secondary tier of financial protection.

10.0 DISCUSSION OF HEARING REQUESTS AND COMMENTS

On June 27, 2019, the NRC published in the *Federal Register* an opportunity to request a hearing and to comment on the license transfer application (84 FR 30775). In response, on July 17, 2019, the Environmental Law & Policy Center filed a hearing request. The hearing request is currently pending before the Commission. The NRC did not receive any comments on the application.

Because a hearing request is pending on the application, the Order approving the transfers will be conditioned as follows:

The NRC staff's approval of these license transfers is subject to the Commission's authority to rescind, modify, or condition the approved transfers based on the outcome of any post-effectiveness hearing on the license transfer application.

11.0 SUMMARY – TECHNICAL EVALUATION

Based on its review of the information provided in the license transfer application and supplemental letters, the NRC staff finds that OwnerCo and OpCo, with respect to their proposed owning and operating, respectively, of the Facilities, have satisfied the NRC's financial qualifications; decommissioning funding assurance; antitrust; FOCD; and nuclear insurance and indemnity requirements. The NRC staff also finds that no physical changes will be made to the Facilities; there will be no changes in the day-to-day operation of the Facilities; there will be no changes to the management and technical support personnel or organization; the Facilities'

programs and procedures existing at the time of the consummation of the transaction will be implemented post-license transfer; and there will be no changes (other than administrative changes) to the current operating organization. Therefore, the NRC staff concludes that, with the above license transfer and license conditions, OwnerCo and OpCo are qualified to own and operate, respectively, the Facilities and that the transfer of the licenses is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto. Additionally, the indirect transfer of ownership of the Facilities to New HoldCo will not affect the qualifications of OwnerCo and OpCo to own and operate the Facilities, respectively.

12.0 CONFORMING AMENDMENTS

12.1 Proposed Amendments

In the application, as supplemented, the Applicants requested the NRC's issuance of administrative license amendments necessary to reflect the approved license transfers by updating the entity names on the licenses for the Facilities and the license conditions regarding the \$400 million support agreement.

12.2 Discussion

The conforming amendments to be made to the respective licenses are indicated in Enclosures 2, 3, 4, and 5 to the letter transmitting the NRC's Orders regarding the subject transfers (ADAMS Accession No. ML19326A759). The amendments replace references to "FENGen," "FENOC," and "FES" or "FE" with "OwnerCo," "OpCo," and "New HoldCo," respectively.

Entity names in the application, as supplemented, are placeholders. When final names for OwnerCo, OpCo, and New HoldCo are selected, the Applicants will inform the NRC of the final legal entity names and submit updated proposed license revision pages. The proposed changes in the conforming amendments do no more than reflect the approved license transfer actions and distinguish the roles of OwnerCo, as owner, and OpCo, as operator. The amendments involve no safety questions and are administrative in nature. Accordingly, the proposed amendments are acceptable.

As stated above, the NRC staff concludes that the Applicants have provided sufficient information to address the applicable regulatory requirements of 10 CFR 50.33 and 10 CFR 50.80. Therefore, in accordance with 10 CFR 50.80, the NRC staff concludes that the proposed license transfers are acceptable.

12.3 Conclusion with Respect to Conforming Amendments

The conforming amendments requested by the Applicants do not affect technical specifications. Further, the Applicants requested no physical or operational changes to the Facilities. The conforming amendments only reflect the approved license transfer actions. The conforming amendments involve no safety questions and are administrative in nature. Accordingly, the proposed amendments are acceptable.

The NRC staff concludes that the license amendments as indicated in Enclosures 2, 3, 4, and 5 to the letter transmitting the NRC's Order regarding the subject transfers (ADAMS Accession No. ML19326A759) are administrative license amendments necessary to reflect the approved

license transfers. Therefore, the amendments shall be issued and made effective at the time of the completion of the proposed transaction.

13.0 STATE CONSULTATION

In accordance with the Commission's regulations, the NRC staff notified the Commonwealth of Pennsylvania and the Ohio State officials of the proposed license transfers and issuance of the conforming amendments on October 31, 2019. The officials had no comments.

14.0 ENVIRONMENTAL CONSIDERATION AND NO SIGNIFICANT HAZARDS CONSIDERATION

The subject application is for approval of the transfers of licenses issued by the NRC and for approval of associated amendments of licenses required to reflect the approval of the transfers. Accordingly, the actions involved meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(21). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the approval of the transfer application and conforming license amendments.

As provided in 10 CFR 2.1315, unless otherwise determined by the Commission with regard to a specific application, the Commission has determined that any amendment to the license of a utilization facility or to the license of an ISFSI, which does no more than conform the license to reflect the transfer action involves no significant hazards consideration. No contrary determination has been made by the Commission with regard to this specific application.

15.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) the proposed transferees are qualified to be the holders of the licenses and (2) transfers of the licenses are otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

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.

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Date of issuance: December 2, 2019

D. Hamilton

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SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2; DAVIS-BESSE
NUCLEAR POWER STATION, UNIT NO. 1; AND PERRY NUCLEAR POWER
PLANT, UNIT NO. 1 - ORDER APPROVING TRANSFER OF LICENSES AND
DRAFT CONFORMING LICENSE AMENDMENTS (EPID L-2019-LLM-0000)
DATED DECEMBER 2, 2019

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KMorgan-Butler, EDO

ADAMS Accession Nos.

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Encl 1 (Order) ML19303C953

Encl 6 (Non-Proprietary SE): ML19305B131

Encl 7 (Proprietary SE): ML19302F535

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(*) via email

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