

June 19, 2008

Mr. Mark B. Bezilla  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Mail Stop A-PY-A290  
P.O. Box 97, 10 Center Road  
Perry, OH 44081-0097

SUBJECT: PERRY NUCLEAR POWER PLANT, UNIT NO. 1 - ISSUANCE OF  
AMENDMENT RE: REVISE TECHNICAL SPECIFICATIONS 3.6.1, 3.6.4, AND  
3.6.5 FOR CONTAINMENT AND DRYWELL ISOLATION DEVICE  
(TAC NO. MD6744)

Dear Mr. Bezilla:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 149 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment revises the Technical Specifications (TSs) in response to your application dated September 5, 2007 (Agencywide Documents and Management System (ADAMS) Accession No. ML072550547).

This amendment would revise TSs 3.6.1, 3.6.4, and 3.6.5 to relax the position verification requirements for primary containment isolation devices, secondary containment isolation devices, and drywell isolation devices that are locked, sealed, or otherwise secured. These changes are based on TS Task Force (TSTF) change traveler, TSTF-45, Revision 2, and TSTF-269, Revision 2, which have been approved generically for the Boiling-Water Reactor (BWR) Standard TSs, NUREG-1434 (BWR/6).

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

Sincerely,

/RA/

Cameron S. Goodwin, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosures:

1. Amendment No. 149 to NPF-58
2. Safety Evaluation

cc w/encls: See next page

Mr. Mark B. Bezilla  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Mail Stop A-PY-A290  
P.O. Box 97, 10 Center Road  
Perry, OH 44081-0097

June 19, 2008

SUBJECT: PERRY NUCLEAR POWER PLANT, UNIT NO. 1 - ISSUANCE OF  
AMENDMENT RE: REVISE TECHNICAL SPECIFICATIONS 3.6.1, 3.6.4, AND  
3.6.5 FOR CONTAINMENT AND DRYWELL ISOLATION DEVICE  
(TAC NO. MD6744)

Dear Mr. Bezilla:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 149 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment revises the Technical Specifications (TSs) in response to your application dated September 5, 2007 (Agencywide Documents and Management System (ADAMS) Accession No. ML072550547).

This amendment would revise TSs 3.6.1, 3.6.4, and 3.6.5 to relax the position verification requirements for primary containment isolation devices, secondary containment isolation devices, and drywell isolation devices that are locked, sealed, or otherwise secured. These changes are based on TS Task Force (TSTF) change traveler, TSTF-45, Revision 2, and TSTF-269, Revision 2, which have been approved generically for the Boiling-Water Reactor (BWR) Standard TSs, NUREG-1434 (BWR/6).

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

Sincerely,

/RA/

Cameron S. Goodwin, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosures:

1. Amendment No. 149 to NPF-58
2. Safety Evaluation

DISTRIBUTION:

PUBLIC LPL3-2 R/F RidsNrrPMCGoodwin RidsNrrDirsltsb  
RidsOgcRp RidsNrrLAEWhitt RidsRgn3MailCenter RidsNrrDorLpl3-2  
RidsAcraAcnw&mMailCenter RidsNrrDorIDpr GHill (2)  
RidsNrrDssScvb RidsNrrDirslolb  
Package Accession Number: ML081360229  
Amendment Accession Number: ML081360209  
TS Accession Number: ML \*SE Dated

OFFICE	LPL3-2/PM	LPL3-2/LA	DIRS/ITSB/BC	DSS/SCVB/BC
NAME	CGoodwin	EWhitt	RElliott*	RDennig
DATE	6/2/08	6/2/08	05/02/08	05/23/08
DIRS/IOLB/BC	OGC	LPL3-2/BC		
NSalgado	RVHolmes	RGibbs		
06 /02/08	6/5/08	6/17/08		

OFFICIAL RECORD COPY

Perry Nuclear Power Plant, Unit No. 1

cc:

David W. Jenkins, Attorney  
FirstEnergy Corporation  
Mail Stop A-GO-15  
76 South Main Street  
Akron, OH 44308

Resident Inspector's Office  
U.S. Nuclear Regulatory Commission  
P.O. Box 331  
Perry, OH 44081-0331

Sue Hiatt  
OCRE Interim Representative  
8275 Munson  
Mentor, OH 44060

Manager, Site Regulatory Compliance  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
Mail Stop A-PY-A200  
P.O. Box 97, 10 Center Road  
Perry, OH 44081-0097

Mayor, Village of North Perry  
North Perry Village Hall  
4449 Lockwood Road  
North Perry Village, OH 44081

Dean Jagger, Chief Boiler Inspector  
Ohio Department of Commerce  
Division of Industrial Compliance  
Bureau of Operations & Maintenance  
6606 Tussing Road  
P.O. Box 4009  
Reynoldsburg, OH 43068-9009

Carol O'Claire, Chief, Radiological Branch  
Ohio Emergency Management Agency  
2855 West Dublin Granville Road  
Columbus, OH 43235-7150

Mayor, Village of Perry  
P.O. Box 100  
Perry, OH 44081-0100

Robert Owen  
Radiological Assistance Section Supervisor  
Bureau of Radiation Protection  
Ohio Department of Health  
P.O. Box 118  
Columbus, OH 43266-0118

Zack A. Clayton  
DERR  
Ohio Environmental Protection Agency  
ATTN: Mr. Zack A. Clayton  
P.O. Box 1049  
Columbus, OH 43266-0149

Chairman  
Perry Township Board of Trustees  
3750 Center Road, Box 65  
Perry, OH 44081

Daniel Z. Fisher  
Transportation Department  
Public Utilities Commission  
180 East Broad Street  
Columbus, OH 43215-3793

James H. Lash  
Senior Vice President of Operations and  
Chief Operating Officer  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

Director, Fleet Regulatory Affairs  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-2  
76 South Main Street  
Akron, OH 44308

Joseph J. Hagan  
President and Chief Nuclear Officer  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-19  
76 South Main Street  
Akron, OH 44308

Perry Nuclear Power Plant, Unit No. 1

cc:

Danny L. Pace  
Senior Vice President, Fleet Engineering  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

Jeannie M. Rinckel  
Vice President, Fleet Oversight  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

Manager, Fleet Licensing  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-2  
76 South Main Street  
Akron, OH 44308

Paul A. Harden  
Vice President, Nuclear Support  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

FIRSTENERGY NUCLEAR OPERATING COMPANY

FIRSTENERGY NUCLEAR GENERATION CORP.

OHIO EDISON COMPANY

DOCKET NO. 50-440

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 149

License No. NPF-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for license filed by FirstEnergy Nuclear Operating Company, et al., (the licensee) dated September 5, 2007, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-58 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 149 are hereby incorporated into this license. FENOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of its issuance and shall be implemented within 120 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/ **RA**/

Russell Gibbs, Chief  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications and Facility Operating License

Date of Issuance:  
June 19, 2008



ATTACHMENT TO LICENSE AMENDMENT NO. 149

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

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

Remove

License NPF-58

Page 4

TSs

3.6-10

3.6-11

3.6-12

3.6-13

3.6-16

3.6-16a

3.6-54

3.6-55

3.6-66

3.6-67

Insert

License NPF-58

Page 4

TSs

3.6-10

3.6-11

3.6-12

3.6-13

3.6-16

3.6-16a

3.6-54

3.6-55

3.6-66

3.6-67



renewal. Such sale and leaseback transactions are subject to the representations and conditions set forth in the above mentioned application of January 23, 1987, as supplemented on March 3, 1987, as well as the letter of the Director of the Office of Nuclear Reactor Regulation dated March 16, 1987, consenting to such transactions. Specifically, a lessor and anyone else who may acquire an interest under these transactions are prohibited from exercising directly or indirectly any control over the licenses of PNPP Unit 1. For purposes of this condition the limitations of 10 CFR 50.81, as now in effect and as may be subsequently amended, are fully applicable to the lessor and any successor in interest to that lessor as long as the license for PNPP Unit 1 remains in effect; these financial transactions shall have no effect on the license for the Perry Nuclear facility throughout the term of the license.

- (b) Further, the licensees are also required to notify the NRC in writing prior to any change in: (i) the terms or conditions of any lease agreements executed as part of these transactions; (ii) the PNPP Operating Agreement; (iii) the existing property insurance coverage for PNPP Unit 1; and (iv) any action by a lessor or others that may have an adverse effect on the safe operation of the facility.
- 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 and hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

FENOC 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. 149, are hereby incorporated into the license. FENOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

- a. FirstEnergy Nuclear Generation Corp. and Ohio Edison Company

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. NPF-58  
FIRSTENERGY NUCLEAR OPERATING COMPANY  
FIRSTENERGY NUCLEAR GENERATION CORP.  
OHIO EDISON COMPANY  
PERRY NUCLEAR POWER PLANT, UNIT NO. 1  
DOCKET NO. 50-440

## 1.0 INTRODUCTION

By letter to the U.S. Nuclear Regulatory Commission (NRC, the Commission) dated September 5, 2007 (Agencywide Documents and Management System (ADAMS) Accession No. ML072550547), FirstEnergy Nuclear Operating Company, et al. (the licensee) requested changes to the technical specifications (TSs) for the Perry Nuclear Power Plant (PNPP), Unit No. 1. The proposed changes would revise TSs 3.6.1, 3.6.4, and 3.6.5 to relax the position verification requirements for primary containment isolation devices, secondary containment isolation devices, and drywell isolation devices that are locked, sealed, or otherwise secured. These changes are based on TS Task Force (TSTF) change traveler, TSTF-45, Revision 2 and TSTF-269, Revision 2, which have been approved generically for the Boiling-Water Reactor (BWR) Standard TSs, NUREG-1434 (BWR/6). Specifically the proposed changes based on TSTF-45 would revise the following surveillance requirements (SRs), SR 3.6.1.3.3, SR 3.6.1.3.4, SR 3.6.4.2.1, and SR 3.6.5.3.3. The proposed changes based on TSTF-269 would revise the following TSs, TS 3.6.1.3, Required Actions A.2 and D.2, TS 3.6.4.2, Required Action A.2, and TS 3.6.5.3, Required Action A.2 to allow administrative verification of isolation devices that are locked, sealed, or otherwise secured.

In its license amendment request (LAR), the licensee stated that incorporating changes based on TSTF-45 and TSTF-269 in the TS of PNPP would provide dose savings by allowing certain primary containment isolation valves (PCIVs), secondary containment isolation valves (SCIVs), and drywell isolation valves (DIVs) to be exempted from position verification for applicable SRs and Required Action statements.

## 2.0 REGULATORY EVALUATION

10 CFR Part 50 includes the NRC's requirement that TSs shall be included by applicants for a license authorizing operation of a production or utilization facility. 10 CFR 50.36 (d) requires that TSs include items in five specific categories related to station operation. These categories are (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operations (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. The proposed changes to TSs 3.6.1, 3.6.4, and 3.6.5 are within the SRs category.

The PNPP containment systems are designed to prevent and mitigate the release of fission products to the environment during and after a design-basis accident. If a fission product release to the environment does occur, the design of the containment is such that the exposure limits of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 100, will not be exceeded. Containment isolation mechanisms such as valves and blind flanges serve as a barrier between fluids inside and outside the containment. The licensee's proposed TS changes pertain to containment isolations that are designed to be shut during accident conditions.

Title 10 of the *Code of Federal Regulations* 10 CFR Part 50, Appendix A, "General Design Criteria For Nuclear Power Plants," provides the minimum requirements for the principle design criteria for water-cooled nuclear power plants such as PNPP. Specifically, General Design Criteria (GDC) 16 "Containment Design," GDC 50 "Containment Design Basis," GDC 54 "Piping Systems Penetrating Containment," and GDC 56 "Primary Containment Isolation" contain the requirements for the containment and related systems. The licensee did not propose a change to the physical design or operation of any containment systems in its LAR.

The NRC published a set of Standard Technical Specifications (STS) in NUREG-1434, Revision 3, "Standard Technical Specifications, General Electric Plants, BWR/6." The STS are a guide to what a plant's TS should contain with regard to format and content. The STS are not requirements in a regulatory sense, but licensees adopting portions of the improved STS to existing TSs should adopt all related requirements, as applicable, to achieve a high degree of standardization and consistency.

The TS changes contained in the licensee's LAR were evaluated by comparing them to the applicable requirements in the GDC and 10 CFR Part 50.36. The amendment was also compared to the STS in NUREG-1434 for consistency.

### 3.0 TECHNICAL EVALUATION

The NRC reviews and approves generic changes to the STS. These changes are called TS Task Force (TSTF) Travelers, or simply TSTFs. TSTF-45 and TSTF-269 were approved by the NRC on July 26, 1999 and July 27, 1999, respectively. The licensee's proposed TS changes are similar in content and format to the changes incorporated in NUREG-1434, Revision 3, by TSTF-45 and TSTF-269. The licensee noted a minor deviation from TSTF-269.

TSTF-45 revised STS 3.6.1.3, "PCIVs," 3.6.4.2, "SCIVs," and 3.6.5.3, "DIV[s]," by changing valve position verification SRs. The revised surveillances (SRs 3.1.6.3.3, 3.1.6.3.4, 3.6.4.2.1, 3.6.5.3.3) exempt PCIVs, SCIVs, and DIVs that are locked, sealed, or otherwise secured from periodic position verification. Appropriate changes to the Bases for these surveillances were also made.

The changes proposed for the corresponding PCIV, SCIV, and DIV SRs in PNPP TSs 3.6.1.3, 3.6.4.2, and 3.6.5.3 conform to the changes made to the STSs by TSTF-45. Excluding locked, sealed, or otherwise secured valves from periodic position verification is acceptable because administrative controls exist for such valves. These controls have proven to be adequate to ensure that the valves are maintained in the positions required by the plant safety analyses when primary and secondary containment are required to be operable. The NRC staff reviewed the associated proposed Bases changes and found them to be consistent with the STS Bases.

TSTF-269 revised STS 3.6.1.3, "PCIVs," 3.6.4.2, "SCIVs," and 3.6.5.3, "DIV[s]," by adding a note to Required Actions that states, "Verify affected penetration flow path is isolated." The affected Required Actions are STS 3.6.1.3 Required Actions A.1, C.2, and E.2, STS 3.6.4.2 Required Action C.2, and STS 3.6.5.3 Required Action A2. The note states: "Isolation devices that are locked, sealed, or otherwise secured may be verified by use of administrative means." Appropriate changes to the Bases for these action requirements were also made.

The notes being added to the corresponding PCIV, SCIV, and DIV Required Actions in PNPP TSs 3.6.1.3, 3.6.4.2, and 3.6.5.3, conform to the changes made to the STSs by TSTF-269, with a minor deviation. Administrative controls for such valves have proven to be adequate to ensure that the valves are maintained in the positions required by the plant safety analyses when primary and secondary containment are required to be operable. Therefore, allowing the position of locked, sealed, or otherwise secured valves to be verified by administrative means, is acceptable. The NRC staff reviewed the associated proposed Bases changes and found them to be consistent with the STS Bases.

The licensee noted that TSTF-269 added a note to TS 3.6.1.3, Required Action C.2 and PNPP TS 3.6.1.3 does not contain a Required Action C.2. On Page 3 of Enclosure 1 of its LAR, the licensee stated that PNPP TS did not adopt STS Condition C of TS 3.6.1.3. Therefore, the addition of the note for Required Action C.2 of TS 3.6.1.3 is not required for PNPP TS and successive conditions are moved up one in the order. The staff finds the minor deviations between changes to STS by TSTF-269 and the proposed changes to PNPP TS acceptable.

The proposed changes to the TS SRs and Required Actions for PNPP PCIVs, SCIVs, and DIVs continue to ensure that the containment is isolated within the time limits assumed in the safety analyses and the respective LCOs are met. No changes to the physical design or operation of containment systems required by the applicable GDC were proposed. Therefore, the requirements of the GDC and 10 CFR Part 50.36 continue to be met with the proposed changes. The proposed changes are also consistent with the STS. The staff finds the proposed changes acceptable.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Ohio State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes a surveillance requirement. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding (73 FR 5221). Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

## 6.0 CONCLUSION

The NRC staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: M. Hamm, NRR

Date: June 19, 2008