



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

October 30, 2009

Mr. Charles G. Pardee
President and Chief Nuclear Officer
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT
RE: TO INCORPORATE PREVIOUSLY NRC-APPROVED TECHNICAL
SPECIFICATION TASK FORCE (TSTF) TRAVELERS ASSOCIATED WITH
TS 5.5.6, "INSERVICE TESTING PROGRAM." (TAC NO. ME1153)

Dear Mr. Pardee:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 189 to Facility Operating License No. NPF-62, for the Clinton Power Station, Unit No. 1. The amendment is in response to your application dated April 22, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091130421).

The amendment would revise the inservice testing (IST) requirements from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, to the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) and applicable addenda. This change would eliminate the ASME Code inconsistency between the IST program and the TS as required by Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(f)(5)(ii). Additionally, the amendment would extend the applicability of surveillance requirement (SR) 3.0.2 provisions to other normal and accelerated frequencies specified as two years or less in the IST program. Finally, the amendment will remove the phrase "including applicable supports" from TS Section 5.5.6. TS Section 5.5.6, IST Program, and the associated TS Bases would be revised under this TS amendment.

C. Pardee

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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,

A handwritten signature in cursive script, appearing to read "Cameron S. Goodwin".

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

Docket No. 50-461

Enclosures:

1. Amendment No. 189 to NPF-62
2. Safety Evaluation

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

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 189
License No. NPF-62

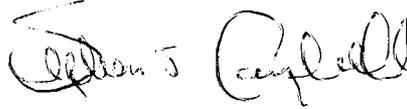
1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee), dated April 22, 2009, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-62 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No.189, are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Stephen J. Campbell". The signature is written in a cursive style with a large initial "S" and "C".

Stephen J. Campbell, 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: October 30, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 189

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

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

Insert

License NPF-62
Page 3

License NPF-62
Page 3

TSs
5.0-11

TSs
5.0-11

- (4) Exelon Generation Company, pursuant to the Act and to 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (6) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
Exelon Generation Company is authorized to operate the facility at reactor core power levels not in excess of 3473 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.
 - (2) Technical Specifications and Environmental Protection Plan
The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 189 , are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

5.5 Programs and Manuals (continued)

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the cyclic and transient occurrences identified on USAR Table 3.9-1(b) to ensure that the reactor vessel is maintained within the design limits.

5.5.6 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies applicable to the ASME Code for Operations and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as follows:

<u>ASME OM Code and applicable Addenda terminology for inservice testing activities</u>	<u>Required frequencies for performing inservice testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days;

- b. The provisions of SR 3.0.2 are applicable to the above required frequencies and to other normal and accelerated frequencies specified as 2 years or less in the Inservice Testing Program for performing inservice testing activities;
- c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- d. Nothing in the ASME OM Code shall be construed to supersede the requirements of any Technical Specification.

(continued)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 189 TO FACILITY OPERATING LICENSE NO. NPF-62

EXELON GENERATION COMPANY, LLC

CLINTON POWER STATION, UNIT NO. 1

DOCKET NO. 50-461

1.0 INTRODUCTION

By letter to the Nuclear Regulatory Commission (NRC, the Commission) dated April 22, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091130421), Exelon Generation Company, LLC (the licensee) requested changes to the technical specifications (TSs), facility operating license, and surveillance requirements (SRs) for Clinton Power Station, Unit No. 1 (CPS). The proposed changes would revise the inservice testing (IST) requirements from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI, to the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) and applicable addenda. This change would eliminate the ASME Code inconsistency between the IST program and the TS as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(f)(5)(ii). Additionally, the amendment would extend the applicability of SR 3.0.2 provisions to other normal and accelerated frequencies specified as 2 years or less in the IST program. Finally, the amendment will remove the phrase "including applicable supports" from TS Section 5.5.6. TS Section 5.5.6, "IST Program," and the associated TS Bases would be revised under this TS amendment.

2.0 REGULATORY EVALUATION

Section 50.36(c) of 10 CFR requires that TS include items in five specific categories, which include the category of administrative controls. The proposed change to CPS TS 5.5.6 affects the administrative controls section of the CPS TS.

Section 50.55a(f)(5)(ii) of 10 CFR requires that, if a revised inservice test program for a facility conflicts with the TS for that facility, the licensee shall apply to the NRC for amendment of the TS to conform the TS to the revised program. The licensee is required to submit the application, as specified in 10 CFR 50.4, at least 6 months before the start of the period during which the provisions become applicable, as determined by 10 CFR 50.55a(f)(4).

In 1990, the ASME published the initial edition of the ASME OM Code, which provides requirements for IST of pumps and valves. The ASME OM Code was developed and is maintained by the ASME Committee on Operation and Maintenance of Nuclear Power Plants. The ASME OM Code was developed in response to the ASME Board on Nuclear Codes and Standards directive that transferred responsibility for development and maintenance of

requirements for the IST of pumps and valves from the ASME Section XI Subcommittee on Nuclear Inservice Inspection to the ASME OM Committee. The ASME intended the ASME OM Code to replace Section XI rules for IST of pumps and valves, and the Section XI requirements for IST of pumps and valves that had been incorporated by reference into NRC regulations were deleted from Section XI in the 2000 Addenda. The CPS third 10-year interval IST program were developed to meet the requirements of the 2004 Edition of the ASME OM Code pursuant to 10 CFR 50.55a(f)(4)(ii) as required by 10 CFR 50.55a(f)(4). The TS 5.5.6 reference to Section XI of the ASME Code for IST requirements results in a reference to a deleted portion of the Section XI ASME Code. The licensee submitted this TS amendment to revise the TS to reference the current ASME OM Code requirements. The third 10-year IST interval for CPS will begin on April 1, 2010.

This amendment to the CPS TS incorporates the NRC's approval of Technical Specification Task Force Travelers (TSTFs) 279, 479, and 497, with respect to NUREG-1434, "Standard Technical Specifications [STS] General Electric Plans, BWR/6," Revision 3.0, as documented in the letters dated July 16, 1998 (ADAMS Legacy Library Accession Number 9807280010), December 6, 2005 (ADAMS Accession No. ML053460302), and October 4, 2006 (ADAMS Accession No. ML062780321), respectively. The NRC approved the TSTF-279 proposal to revise the STS IST program (NUREG-1434, Revision 3.0, Specification 5.5.7) by removing the phrase "including applicable supports." The NRC approved the TSTF-479 proposal to revise STS references to the ASME Boiler and Pressure Vessel Code to reflect the current edition of the Code specified in 10 CFR 50.55a(b). The NRC approved the TSTF-497 proposal to revise the STS IST program to enhance the intention of applying the 25 percent IST interval extension for SR 3.0.2 to test frequencies of two years or less.

3.0 TECHNICAL EVALUATION

3.1 Specific Changes Requested

The licensee has proposed the following changes to the CPS TS:

For TS Section 5.5.6, "IST Program," the reference to Section XI of the ASME BPV Code for IST requirements would be replaced with "ASME OM Code" in TS Sections: 5.5.6.a and 5.5.6.d.

For TS Section 5.5.6, "IST Program," Section 5.5.6.b would be revised to apply SR 3.0.2 to other normal and accelerated frequencies specified as 2 years or less in the IST Program.

For TS Section 5.5.6, "IST Program," the phrase "including applicable supports" would be removed.

The associated TS SRs Bases Sections B 3.4-22, B 3.4-32, B 3.4-32a, B 3.3-10, B 3.5-14a, B 3.6-43, and B 3.6-59 would be revised to replace references to the ASME BPV Code, Section XI with references to the ASME OM Code for consistency with the TS changes.

3.2 Basis for Changes

TS 5.5.6, "IST Program," establishes the SR's for IST of ASME Class 1, 2, and 3 components for CPS. TS Section 5.5.6 currently references Section XI of the ASME Boiler and Pressure Vessel Code as the source of requirements for the IST of ASME Code Class 1, 2, and 3 pumps

Vessel Code as the source of requirements for the IST of ASME Code Class 1, 2, and 3 pumps and valves.

The regulations in 10 CFR 50.55a(f)(4) establish the effective Code edition and addenda to be used by licensees for performing IST of pumps and valves. The regulations in 10 CFR 50.55a(f)(4)(ii) require licensees to update their IST program to the latest approved edition and addenda of the ASME OM Code incorporated by reference into 10 CFR 50.55a(b). The licensee states that the IST Program for the CPS third interval was updated to comply with the appropriate revisions of the ASME OM Code and included the 2004 Edition as the new Code of Record for performing IST at CPS. As a consequence, the TS 5.5.6 reference to Section XI of the ASME Code results in a reference to a deleted portion of the Code.

According to 10 CFR 50.55a(f)(5)(ii), if a revised IST program for a facility conflicts with the TS for the facility, the licensee is required to apply to the NRC for amendment of the TS to conform to the TS to the revised program. The licensee must submit the application, as specified in 10 CFR 50.4, at least 6 months before the start of the period during which the provisions become applicable as determined by 10 CFR 50.55a(f)(4). Since TS 5.5.6 and several TS bases reference ASME Section XI for the IST requirements for pumps and valves, the TS for CPS require revision to change the IST code references from ASME Section XI to the ASME OM Code.

This amendment to CPS TS 5.5.6 to apply SR 3.0.2 to other normal and accelerated frequencies specified as 2 years or less in the IST Program is based on the NRC's approval of TSTF-497. IST programs may have frequencies for testing that are based on risk and do not conform to standard testing frequencies specified in the TS. Therefore, in addition to updating the ASME Code in STS, TSTF-479 proposed a change to the STS contained in NUREG-1434, Revision 3.0, to extend the applicability of SR 3.0.2 to "other normal and accelerated frequencies specified in the IST program." The NRC staff approved the proposal in its letter dated December 6, 2005. However, the NRC staff subsequently expressed concern that applying the 25 percent extension permitted by SR 3.0.2 to frequencies in excess of 2 years (such as 5 or 10 years as permitted by the ASME OM Code in certain cases) would be inappropriate and requested a change to TSTF-479 to revise the provision for applying SR 3.0.2 to IST test frequencies. In its letter dated October 4, 2006, the NRC staff approved the TSTF-497 proposal to revise STS 5.5.7.b in NUREG-1434, Revision 3.0 to allow the 25 percent extension only for surveillance intervals of 2 years or less. Application of SR 3.0.2 to frequencies of 2 years or less is also consistent with the NRC staff position contained in NUREG-1482, "Guidelines for IST at Nuclear Power Plants."

This amendment to CPS TS 5.5.6 to remove the phrase "including applicable supports" is based on the NRC's approval of the TSTF-279 proposal to revise STS 5.5.7.b in NUREG-1434 by removing the phrase "including applicable supports" because pipe and component supports are addressed in the Inservice Inspection Program, not the IST program.

3.3 Evaluation

In 1990, the ASME published the initial edition of the ASME OM Code, which provides requirements for IST of pumps and valves. The OM Code was developed and is maintained by the ASME Committee on Operation and Maintenance of Nuclear Power Plants.

The ASME OM Code was developed in response to the ASME Board on Nuclear Codes and Standards directive that transferred responsibility for development and maintenance of rules for the IST of pumps and valves from the ASME Section XI Subcommittee on Nuclear Inservice Inspection to the ASME OM Committee. The ASME intended the ASME OM Code to replace Section XI rules for IST of pumps and valves, and the Section XI rules for IST of pumps and valves that had been incorporated by reference into NRC regulations have been deleted from Section XI in the 2000 Addenda of the ASME code. The ASME publishes a new edition of the ASME OM Code every 3 years, and a new addendum every year. The CPS third 10-year interval IST program was updated to comply with the 2004 Edition of the ASME OM Code as required by 10 CFR 50.55a(f)(4)(ii).

As a consequence, the TS 5.5.6 reference to Section XI of the ASME Code for IST requirements results in a reference to a deleted portion of the ASME Code. The TS changes do not eliminate any tests and do not relinquish the licensee of its responsibility to seek relief from Code test requirements when they are impractical. The proposed change of the ASME Code from "ASME Section XI" to "ASME OM Code" will eliminate the ASME Code inconsistency between the IST program and the TSs as required by 10 CFR 50.55a(f)(5)(ii); therefore, the NRC staff finds these proposed changes to be acceptable. Additionally, the proposed changes are consistent with the comparable Section 5.5.7 of the STS contained in NUREG-1434, Revision 3.0, incorporated with NRC-approved TSTF-479.

The licensee's proposed change to TS 5.5.6.b applies SR 3.0.2 to the frequencies specified in TS 5.5.6.a and other normal and accelerated frequencies specified as 2 years or less in the IST program. This change recognizes that the IST program may direct that additional tests be performed in accordance with the ASME OM Code that are not at the standard intervals listed in TS 5.5.6.a. This is consistent with the intent of the 25 percent extension as described in the STS Bases for SR 3.0.2, in that the extension would provide operational flexibility, but would not significantly degrade the reliability that results from performing the surveillance at the specified frequency. Further, the licensee's proposal to limit application of SR 3.0.2 to frequencies specified as 2 years or less limits the maximum incremental time period between surveillances that could be added by the 25 percent extension. Without this limitation, some components, such as safety and relief valves which may be tested at surveillance intervals significantly greater than 2 years, could have extensions applied which would be much greater than needed for operational flexibility. These aspects of the proposed change support Code provisions which provide the basis for the IST program and are consistent with guidance contained in NUREG-1482 regarding maximum allowable extensions of test intervals. Therefore, the NRC staff finds this proposed change to be acceptable.

The licensee's proposed change to TS 5.5.6 applies to the IST of ASME Code Class 1, 2, and 3 component supports. The licensee's proposal to modify the CPS TS by removing "including applicable supports" from TS 5.5.6 is consistent with the NRC's approval of TSTF-279. Additionally, this TS change does not eliminate any required inspections or testing and does not relinquish the licensee of its responsibility to seek relief from inspection requirements when they are impractical. The regulation at 10 CFR 50.55a(g) requires licensees to follow ASME BPV Code Section XI for component supports. The removal of the phrase is consistent with Revision 3.0 of NUREG-1434 and does not eliminate any inspections or testing; therefore, the NRC staff finds this proposed change to be acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements with respect to installation or use of a facility's components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (74 FR 40238; August 11, 2009). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

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

Principal Contributor: M. Orenak

Date: October 30, 2009

C. Pardee

- 2 -

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. 50-461

Enclosures:

- 1. Amendment No. 189 to NPF-62
- 2. Safety Evaluation

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NRR-058

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