



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

March 26, 2009

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

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS NOS. 1 AND 2 – REQUEST TO PARTIALLY IMPLEMENT SUBSEQUENT EDITION OF ASME CODE FOR OPERATION AND MAINTENANCE OF NUCLEAR POWER PLANTS (OM CODE) SECTION ISTC-5222, "CONDITION-MONITORING PROGRAM" AND MANDATORY APPENDIX II, "CHECK VALVE CONDITION MONITORING PROGRAM" (TAC NOS. ME0201 AND ME0202)

Dear Mr. Pardee:

By letter dated December 3, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML083390174), as supplemented by letter dated February 2, 2009 (ADAMS Accession No. ML0903307810), Exelon Generation Company, LLC, the licensee, requested U.S. Nuclear Regulatory Commission (NRC) staff approval to use portions of a more recent edition of the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code) for Quad Cities Nuclear Power Station, Units 1 and 2, pursuant to Section 50.55a(f)(4)(iv) of Title 10 of the *Code of Federal Regulations* (10 CFR). Specifically, the licensee requested approval to apply the requirements of the 2004 Edition of the ASME OM Code, Subsection ISTC, "Inservice Testing of Valves in Light-Water Reactor Nuclear Plants," for the conduct of check valve testing for all valves subject to inservice testing (IST) requirements, for the remainder of the fourth 120-month IST program interval.

The regulations in 10 CFR 50.55a(f)(4)(iv) state the inservice tests of pumps and valves may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in 10 CFR 50.55a(b), subject to the limitations and modifications listed in 10 CFR 50.55a(b), and the Nuclear Regulatory Commission (NRC) approval. The current Code of Record for Quad Cities Nuclear Power Station, Units 1 and 2 is the 1998 Edition through 2000 Addenda of the ASME OM Code. Portions of editions or addenda may be used provided that all related requirements of the respective edition or addenda are met. The 2004 Edition of the ASME OM Code was incorporated by reference into 10 CFR 50.55a(b) on September 10, 2008 (73 FR 52729), and became effective on October 10, 2008, subject to certain limitations and modifications.

The NRC staff has reviewed the licensee's analysis in support of its request and found it acceptable. Therefore, the NRC staff approves the use Subsection ISTC for the IST of check valves pursuant to 10 CFR 50.55a(f)(4)(iv) for the remainder of the QCNPS, Units 1 and 2 fourth 120-month IST program interval.

C. Pardee

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If you have any questions regarding this authorization, please contact Christopher Gratton at (301) 415-1055.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Gibbs", written in a cursive style.

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

Docket Nos. 50-254 and 50-265

Enclosure:
Safety Evaluation

cc w/encl: Distribution via Listserv



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST TO USE SUBSEQUENT EDITIONS AND ADDENDA OF

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

OPERATIONS AND MAINTENANCE CODE

EXELON GENERATION COMPANY, LLC.

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

By letter dated December 3, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML083390174), as supplemented by letter dated February 2, 2009 (ADAMS Accession No. ML0903307810), Exelon Generation Company, LLC, the licensee, requested U.S. Nuclear Regulatory Commission (NRC) staff approval to use portions of a more recent edition of the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code) for Quad Cities Nuclear Power Station, Units 1 and 2, pursuant to Section 50.55a(f)(4)(iv) of Title 10 of the *Code of Federal Regulations* (10 CFR). Specifically, the licensee requested approval to apply the requirements of the 2004 Edition of the ASME OM Code, Subsection ISTC, "Inservice Testing of Valves in Light-Water Reactor Nuclear Plants," for the conduct of check valve testing for all valves subject to inservice testing (IST) requirements, for the remainder of the fourth 120-month IST program interval.

2.0 REGULATORY EVALUATION

In the *Federal Register* (73 FR 52730) dated September 10, 2008, the Commission amended 10 CFR 50.55a, to incorporate by reference the 2004 Edition of the ASME OM Code. Subsection ISTC provides the requirements for IST of valves. The Code of record for Quad Cities Nuclear Power Station, Units 1 and 2 is the 1998 Edition through 2000 Addenda of the ASME OM Code.

3.0 TECHNICAL EVALUATION

3.1 Request to Implement Subsequent Edition of ASME OM Code

3.1.1 ASME Code Components Affected

All check valves within the IST program.

ENCLOSURE

3.1.2 Applicable Code Edition and Addenda

Quad Cities Nuclear Power Station, Units 1 and 2 are currently committed to the 1998 Edition through 2000 Addenda of the ASME OM Code.

3.1.3 Proposed Subsequent Code Edition and Addenda (or Portion)

Pursuant to 10 CFR 50.55a(f)(4)(iv), the licensee proposed to use Subsection ISTC of the 2004 Edition of the ASME OM Code for the conduct of check valve testing at Quad Cities Nuclear Power Station, Units 1 and 2.

3.1.4 Related Requirements (As Submitted)

The regulation at 10 CFR 50.55a(f)(4)(iv) states: "Inservice tests of pumps and valves may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in paragraph (b) of this section, subject to the limitations and modifications listed in paragraph (b) of this section, and subject to Commission approval. Portions of editions or addenda may be used provided all related requirements of the respective editions or addenda are met."

As stated in 73 FR 52730, the "...revision to 10 CFR 50.55a(b)(3) incorporates by reference the 2004 Edition of the ASME OM Code subject to no new modifications or limitations." The existing limitations and modifications that are applicable to Mandatory Appendix II are described in 10 CFR 50.55a(b)(3)(iv), *Appendix II*.

3.1.5 Duration of Proposed Request

The 2004 Edition of the ASME OM Code, Subsection ISTC will be used for check valve testing during the remainder of the fourth 120-month interval, which began February 19, 2004, and is scheduled to end on February 18, 2014.

3.2 Evaluation

By letter dated December 3, 2008, as supplemented by letter dated February 2, 2009, the licensee requested NRC approval to use portions of a more recent edition of the ASME OM Code for Quad Cities Nuclear Power Station, Units 1 and 2 pursuant to 10 CFR 50.55a(f)(4)(iv). Specifically, the licensee requested approval to apply the requirements of the 2004 Edition of the ASME OM Code, Subsection ISTC for the conduct of check valve testing for the remainder of the fourth 120-month IST program interval.

The current Code of record for Quad Cities Nuclear Power Station, Units 1 and 2 is the 1998 Edition through 2000 Addenda of the ASME OM Code. The regulations in 10 CFR 50.55a(f)(4)(iv) state that IST of pumps and valves may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in 10 CFR 50.55a(b), subject to the limitations and modifications listed in 10 CFR 50.55a(b), and subject to NRC approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions or addenda are met. The 2004 Edition of the ASME OM Code was

incorporated by reference into 10 CFR 50.55a(b) on September 10, 2008 (73 FR 52730, 52743), and became effective on October 10, 2008, subject to certain limitations and modifications.

The NRC staff has identified no related requirements in the specified later ASME OM Code edition that would also need to be met to implement Subsection ISTC for the conduct of check valve testing. Using the 2004 Edition of the ASME OM Code, Subsection ISTC for the conduct of check valve testing provides reasonable assurance of the operational readiness of the check valves in the IST program. Therefore, pursuant to 10 CFR 50.55a(f)(4)(iv), the use of the ASME OM Code 2004 Edition, Subsection ISTC for the IST of check valves, is approved for Quad Cities Nuclear Power Station, Units 1 and 2 for the remainder of the fourth 120-month IST program interval.

4.0 CONCLUSION

Pursuant to the requirements set forth in 10 CFR 50.55a(f)(4)(iv), the NRC staff has reviewed the licensee's request, as supplemented, and determined that the pertinent regulatory provisions were adequately addressed. Therefore, the NRC staff finds the licensee's request acceptable and approves the use of Subsection ISTC of the ASME OM Code 2004 Edition for the IST of check valves at Quad Cities Nuclear Power Station, Units 1 and 2, subject to the limitations and modifications listed in 10 CFR 50.55a(b), for the remainder of the fourth 120-month IST program interval.

Principal Contributor: William Poertner

Date: March 26, 2009

C. Pardee

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If you have any questions regarding this authorization, please contact Christopher Gratton at (301) 415-1055.

Sincerely,

/RA/

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

Docket Nos. 50-254 and 50-265

Enclosure:
Safety Evaluation

cc w/encl: Distribution via Listserv

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*concurrent via email

*SE Input dated

OFFICE	LPL3-2/PM	LPL3-2/LA*	DCI/CPTB/BC	OGC	LPL3-2/BC
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DATE	03/25/09	03/25/09	03/05/09	03/24/09	03/26/09

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