July 17, 2006

Mr. David A. Christian
Senior Vice President and
Chief Nuclear Officer
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: KEWAUNEE POWER STATION - ISSUANCE OF AMENDMENT RE: STEAM GENERATOR TUBE INTEGRITY (TAC NO. MC9581)

Dear Mr. Christian:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No.188 to Facility Operating License No. DPR-43 for the Kewaunee Power Station. This amendment revises the Technical Specifications (TSs) in response to your application dated January 12, 2006, as supplemented by letter dated June 2, 2006.

The amendment revises the existing steam generator (SG) tube surveillance program to be consistent with TS Task Force (TSTF) Change TSTF-449, Revision 4, "Steam Generator Tube Integrity," and the model safety evaluation prepared by the NRC and published in the *Federal Register* on March 2, 2005 (70 FR 10298) under the consolidated line item improvement process.

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

Sincerely,

/RA/

David H. Jaffe, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosures:
1. Amendment No. 188 to License No. DPR-43
2. Safety Evaluation

cc w/encls: See next page

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OFFICE	NRR/LPL3-1/PM	NRR/LPL3-1/LA	NRR/TSB/BC	OGC	NRR/LPL3-1/BC
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DATE	6/30/06	6/30/06	6/15 /06	7/6/06	7/17/06

OFFICE	NRR/CSGB/BC	NRR/TSB/BC			
NAME	A Hetser ACH	CSchulten for TKobetz			
DATE	7/13/06	7/17/06			

OFFICIAL RECORD COPY ***SE Input via memorandum with minor changes.**

Kewaunee Power Station

cc:

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DOMINION ENERGY KEWAUNEE, INC.

DOCKET NO. 50-305

KEWAUNEE POWER STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 188
License No. DPR-43

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Dominion Energy Kewaunee, Inc. dated January 12, 2006, as supplemented by letter dated June 2, 2006, 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. DPR-43 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 188, are hereby incorporated in the license. The licensees shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

L. Raghavan, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License
and Technical Specifications

Date of Issuance: July 17, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 188

FACILITY OPERATING LICENSE NO. DPR-43

DOCKET NO. 50-305

Replace the following page of Facility Operating License No. DPR-43 with the attached revised page. The changed area is identified by a marginal line.

REMOVE	INSERT
Page 3	Page 3

Replace the following pages of the 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
TS i	TS i
TS ii	TS ii
TS iii	TS iii
TS iv	TS iv
TS v	TS v
-	TS 1.0-7
TS 3.1-8	TS 3.1-8
-	TS 3.1-11
TS 4.2-2	TS 4.2-2
TABLE TS 4.2-2	TABLE TS 4.2-2
-	TS 4.18-1
-	TS 4.19-1

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR, Chapter 1: (1) Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70, (2) 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 (3) is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady-state reactor core power levels not in excess of 1772 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 188, are hereby incorporated in the license. The licensee shall operate the facility In accordance with the Technical Specifications.

(3) Fire Protection

The licensee shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the licensee's Fire Plan, and as referenced in the Updated Safety Analysis Report, and as approved in the Safety Evaluation Reports, dated November 25, 1977, and December 12, 1978 (and supplement dated February 13, 1981) subject to the following provision:

The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission, only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(4) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and 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: “Nuclear Management Company Kewaunee Nuclear Power Plant Physical Security Plan (Revision 0)" submitted by letter dated October 18, as supplemented by letter dated October 21, 2004.

(5) Fuel Burnup

The maximum rod average burnup for any rod shall be limited to 60 GWD/MTU until completion of an NRC environmental assessment supporting an increased limit.

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATING TO AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. DPR-43

DOMINION ENERGY KEWAUNEE, INC.

KEWAUNEE POWER STATION

DOCKET NO. 50-305

1.0 INTRODUCTION

By letter dated January 12, 2006, as supplemented on June 2, 2006 (Agencywide Documents Access and Management System Accession Nos. ML060250524 and ML061560144, respectively), Dominion Energy Kewaunee (the licensee) submitted a request for changes to the Kewaunee Power Station Technical Specifications (TSs). The requested changes would revise the existing steam generator (SG) tube surveillance program to be consistent with TS Task Force (TSTF) Change TSTF-449, Revision 4, "Steam Generator Tube Integrity," and the model safety evaluation prepared by the U.S. Nuclear Regulatory Commission (NRC) and published in the *Federal Register* on March 2, 2005 (70 FR 10298) under the consolidated line item improvement process (CLIIP). In this regard, the scope of the application includes changes to the definition of leakage, changes to the primary-to-secondary leakage requirements, changes to the SG tube surveillance program (SG tube integrity), changes to the SG reporting requirements, and associated changes to the TS Bases.

The June 2, 2006, letter provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on February 14, 2006 (71 FR 7806).

2.0 REGULATORY EVALUATION

The background, description, and applicability of the proposed changes associated with the SG tube integrity issue and the applicable regulatory requirements were included in the NRC staff's model safety evaluation (SE) published in the *Federal Register* on March 2, 2005 (70 FR 10298). The "Notice of Availability of Model Application Concerning Technical Specification; Improvement To Modify Requirements Regarding Steam Generator Tube Integrity; Using the Consolidated Line Item Improvement Process," published in the *Federal Register* on May 6, 2005 (70 FR 24126), made the model SE available to licensees for use.

ENCLOSURE

3.0 TECHNICAL EVALUATION

3.1 Overview

In its January 12, 2006, application, as supplemented by a letter dated June 2, 2006, the licensee proposed changes to the TSs that are consistent, with one exception, with the proposed changes approved in TSTF-449. The NRC model SE provides a detailed evaluation of the proposed changes that are requested based upon the NRC's Standard Technical Specifications (STS) as contained NUREGs 1430 - 1432. Since the licensee uses TS that do not conform to the STS, the TS section numbers in its application do not reflect those listed in TSTF-449. Consistent with TSTF-449, the proposed TS changes include: (1) new TS 1.0.t, "LEAKAGE," (2) a revised TS 3.1.d, "RCS Operational LEAKAGE," (3) a new TS 3.1.g, "Steam Generator (SG) Tube Integrity," (4) a new TS 4.18, "RCS Operational Leakage," (5) a new TS 4.19, "Steam Generator (SG) Tube Integrity" which replaces existing TS 4.2.b, "Steam Generator Tubes," (6) a new TS 6.9.b.3, "Steam Generator Tube Inspection Report,", (7) a new TS 6.22, "Steam Generator (SG) Program," and (8) revised Table of Content pages to reflect the proposed changes.

The NRC staff reviewed the licensee's application for consistency with TSTF-449 to ensure the generic safety evaluation was bounding. The NRC staff made the following observations as a result of its review.

In TSTF-449, the limit on normal operating primary-to-secondary leakage rate through any one SG was significantly less than that assumed in the Kewaunee safety analysis. However, for Kewaunee, the normal operational primary-to-secondary leakage limit (150 gallons per day per steam generator) is identical to the accident induced primary-to-secondary leakage limit for design basis accidents (DBAs) other than a steam generator tube rupture. Given this situation, the NRC staff evaluated the acceptability of this difference between TSTF-449 and the licensee's submittal. Since the leakage rate observed during operation may increase during a design-basis accident, in order to meet both limits, it may be necessary to ensure that the operational leak rate is kept well below the operational leak rate limit. This increase in leak rate can be a result of either: (1) the higher differential pressure between the primary coolant system and the secondary system associated with a DBA causing the leak rate from flaws leaking during normal operation to leak at higher rates; or (2) the higher loadings associated with a DBA causing a flaw that was not leaking during normal operation to leak during the accident.

Responding to the NRC staff's question on this issue, the licensee, in its letter dated June 2, 2006, described controls and procedures to ensure that the accident-induced leakage limit is not exceeded as a result of operational leakage. These controls and procedures are intended to ensure that the accident-induced leakage limit (and operational leakage limit) is not exceeded. These controls and procedures include combinations of monitoring, notifications, setpoint verifications, and shutdown preparations when the primary-to-secondary steam generator tube leak rate reaches certain values. The NRC staff reviewed the adequacy of the proposed TS criteria for operational and accident-induced leakage. The TS criteria on operational and accident-induced leakage are consistent with TSTF-449 and the licensee's accident analysis; therefore, the NRC staff finds the licensee's proposed TS criteria on these values acceptable.

As a result of adopting TSTF-449, the licensee also proposed changes to the requirements pertaining to reactor coolant system operational leakage (e.g., adding definitions to TS 1.0.t, modifying action statements in TS 3.1.d, and adding surveillance requirements in TS 4.18). These TS changes were necessary to facilitate adopting the proposed changes in TSTF-449. Since these proposed TS changes pertaining to reactor coolant system operational leakage were generally consistent with the STS and the plant's licensing basis, the NRC staff determined that the proposed changes were acceptable.

3.2 Conclusion

The proposed TS changes establish a programmatic, largely performance-based regulatory framework for ensuring SG tube integrity is maintained. The NRC staff finds that it addresses key shortcomings of the current framework by ensuring that SG programs are focused on accomplishing the overall objective of maintaining tube integrity. It incorporates performance criteria for evaluating tube integrity that the NRC staff finds consistent with the structural margins and the degree of leak tightness assumed in the current plant licensing basis. The NRC staff finds that maintaining these performance criteria provides reasonable assurance that the SGs can be operated safely without increase in risk.

The proposed TSs changes contain limited specific details concerning how the SG Program is to achieve the required objective of maintaining tube integrity; the intent being that the licensee will have the flexibility to determine the specific strategy for meeting this objective. However, the NRC staff finds that the revised TSs include sufficient regulatory constraints on the establishment and implementation of the SG Program such as to provide reasonable assurance that tube integrity will be maintained.

Failure to meet the performance criteria will be reportable pursuant to the requirements in 10 CFR Parts 50.72 and 50.73. The NRC reactor oversight process provides a process by which the NRC staff can verify that the licensee has identified any SG Program deficiencies that may have contributed to such an occurrence and that appropriate corrective actions have been implemented.

In conclusion, the NRC staff finds that the TS changes proposed by the licensee in its January 12, 2006, application, as supplemented by a letter dated June 2, 2006, conform to the requirements of 10 CFR 50.36 and establish a TS framework that will provide reasonable assurance that SG tube integrity is maintained without undue risk to public health and safety.

4.0 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. 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 (71 FR 7806). 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.

5.0 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: Eric M. Thomas

Date: July 17, 2006