



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

December 8, 2010

Mr. David A. Heacock  
President & Chief Nuclear Officer  
Dominion Energy Kewaunee, Inc.  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

**SUBJECT: KEWAUNEE POWER STATION – ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR THE PROPOSED CONVERSION TO THE IMPROVED TECHNICAL SPECIFICATIONS (TAC NO. ME2139)**

Dear Mr. Heacock:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated August 24, 2009 (Agencywide Documents and Management System (ADAMS) Accession No. ML092440398), as supplemented by letters dated October 22, 2009 (ADAMS Accession No. ML093070092), April 13, 2010 (ADAMS Accession Nos. ML101060517 and ML101040090), May 12, 2010 (ADAMS Accession No. ML101380399), July 1, 2010 (ADAMS Accession No. ML101890176), July 16, 2010 (ADAMS Accession No. ML102370370), August 18, 2010 (ADAMS Accession No. ML102371064), September 7, 2010 (ADAMS Accession No. ML102730383), September 8, 2010 (ADAMS Accession No. ML102580700), October 15, 2010 (ADAMS Accession No. ML102920037), and December 2, 2010 (ADAMS Accession No. ML103400328).

The information provided to the Nuclear Regulatory Commission (NRC) staff through the joint NRC - Dominion Energy Kewaunee, Inc. improved technical specifications (ITS) conversion web page at [www.excelservices.com](http://www.excelservices.com), hosted by Excel Services Corporation, can be found in these supplements.

The proposed amendment would convert the current technical specifications (CTS) for Kewaunee Power Station to a set of ITS based upon NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Rev. 3.0, as modified by the following NRC approved TS Task Force (TSTF) Travelers: TSTF-475-A, Rev. 1; TSTF-479-A, Rev. 0; TSTF-482-A, Rev. 0; TSTF-485-A, Rev. 0; TSTF-490-A, Rev. 0; TSTF-491-A, Rev. 2; TSTF-493, Rev. 4; TSTF-497-A, Rev. 0; and TSTF-511-A, Rev. 0.

D. Heacock

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The assessment is being forwarded to the Office of the *Federal Register* for publication.

Sincerely,

A handwritten signature in black ink that reads "Karl Feintuch". The signature is written in a cursive style with a large, looped initial 'K'.

Karl Feintuch, Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosure:  
Environmental Assessment

cc w/encl: Distribution via Listserv

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOMINION ENERGY KEWAUNEE, INC.DOCKET NO. 50-305KEWAUNEE POWER STATIONENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an amendment to Facility Operating License No. DPR-43, issued to Dominion Energy Kewaunee, Inc. (DEK, the licensee), for operation of the Kewaunee Power Station (KPS) located in Ottawa County, Wisconsin, in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.90. Therefore, as required by 10 CFR 51.21, the NRC performed an environmental assessment. Based on the results of the environmental assessment, the NRC is issuing a finding of no significant impact in accordance with 10 CFR 51.32.

ENVIRONMENTAL ASSESSMENTIdentification of the Proposed Action:

The proposed action would be a full conversion from the current technical specifications (CTS) to the improved technical specifications (ITS) consistent with improved standard technical specifications as described in NUREG 1431, "Standard Technical Specifications – Westinghouse Plants, Rev. 3.0" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML041830612). Standard Technical Specifications (STS) Rev. 3.0 is modified by the following NRC-approved TS Task Force (TSTF) Travelers: TSTF-475-A, Rev. 1; TSTF-479-A, Rev. 0; TSTF-482-A, Rev. 0; TSTF-485-A, Rev. 0; TSTF-490-A, Rev. 0; TSTF-491-A, Rev. 2; TSTF-493, Rev. 4; TSTF-497-A, Rev. 0; and TSTF-511-A, Rev. 0. The proposed action

also encompasses beyond scope issues included in the Notice of Consideration of Issuance of Amendment.

The proposed action is in accordance with the licensee's application dated August 24, 2009 (ADAMS Accession No. ML092440398), as supplemented by letters dated October 22, 2009 (ADAMS Accession No. ML093070092), April 13, 2010 (ADAMS Accession Nos. ML101060517 and ML101040090), May 12, 2010 (ADAMS Accession No. ML101380399), July 1, 2010 (ADAMS Accession No. ML101890176), July 16, 2010 (ADAMS Accession No. ML102370370), August 18, 2010 (ADAMS Accession No. ML102371064), September 7, 2010 (ADAMS Accession No. ML102730383), September 8, 2010 (ADAMS Accession No. ML102580700), October 15, 2010 (ADAMS Accession No. ML102920037), and December 2, 2010 (ADAMS Accession No. ML103400328). The information provided to the NRC staff through the joint NRC-DEK ITS conversion web page, hosted by EXCEL Services Corporation (EXCEL) can be found in these supplements.

To expedite its review of the application, the NRC staff issued its requests for additional information (RAI) through the KPS ITS Conversion web page and the licensee addressed the RAI by providing responses on the web page. Entry into the database is protected so that only the licensee and NRC reviewers can enter information into the database to add RAIs (NRC) or provide responses to the RAIs (licensee); however, the public can enter the database to read the questions asked and the responses provided. To be in compliance with the regulations for written communications for license amendment requests, and to have the database on the KPS dockets before the amendment is issued, the licensee has submitted the information from the database in its supplements to the NRC. No further RAI items are being processed prior to the issuance of the amendment.

Members of the public can access the website by going to [www.excelservices.com](http://www.excelservices.com). Persons who visit the EXCEL website and are unable to locate Kewaunee ITS Conversion

information should contact EXCEL directly to acquire archived content. As an alternative, the licensee's submitted information cited above is available at the NRC website ([www.nrc.gov](http://www.nrc.gov)).

The Need for the Proposed Action:

The Commission's "Proposed Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (52 FR 3788), dated February 6, 1987, contained an Interim Policy Statement that set forth objective criteria for determining which regulatory requirements and operating restrictions should be included in the technical specifications (TS). When it issued the Interim Policy Statement, the Commission also requested comments on it. Subsequently, to implement the Interim Policy Statement, each reactor vendor owners group and the NRC staff began developing standard TS (STS) for reactors supplied by each vendor. The Commission then published its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58 FR 39132), dated July 22, 1993, in which it addressed comments received on the Interim Policy Statement, and incorporated experience in developing the STS. The Final Policy Statement formed the basis for a revision to 10 CFR 50.36 (60 FR 36953), dated July 19, 1995, that codified the criteria for determining the content of TSs. The NRC Committee to Review Generic Requirements reviewed the STS, made note of their safety merits, and indicated its support of conversion by operating plants to the STS.

For KPS the following document the STS and form the basis for the KPS conversion to the ITS:

NUREG-1431, Rev. 3.0, and the following NRC approved TSTF Travelers:

1. TSTF-475-A, Rev. 1 "Control Rod Notch Testing Frequency and [source range monitor] SRM Insert Control Rod Action",
2. TSTF-479-A, Rev. 0 "Changes to Reflect Revision of 10 CFR 50.55a",
3. TSTF-482-A, Rev. 0 "Correct LCO 3.0.6 Bases",
4. TSTF-485-A, Rev. 0 "Correct Example 1.4-1",

5. TSTF-490-A, Rev. 0 "Deletion of E Bar Definition and Revision to [Reactor Coolant System] RCS Specific Activity Technical Specification",
6. TSTF-491-A, Rev. 2 "Removal of Main Steam and Main Feedwater Valve Isolation Times from Technical Specifications",
7. TSTF 493, Rev. 4 "Clarify Application of Setpoint Methodology for [Limiting Safety System Setting] LSSS Functions",
8. TSTF-497-A, Rev. 0 "Limit Inservice Testing Program SR 3.0.2 Application to Frequencies of 2 Years or Less",
9. TSTF-511-A, Rev. 0 "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."

The proposed changes to the CTS are based on NUREG-1431, Rev. 3.0, associated TSTF documents, and the guidance provided in the Final Policy Statement. The objective of this action is to rewrite, reformat, and streamline the CTS (i.e., to convert the CTS to the ITS). Emphasis was placed on human factors principles to improve clarity and understanding. The ITS Bases section has been significantly expanded to clarify and better explain the purpose and foundation of each specification.

In addition to NUREG-1431, Rev. 3.0, and associated TSTF documents, portions of the CTS were also used as the bases for the development of the KPS ITS. The NRC staff discussed plant-specific issues (i.e., unique design features, requirements, and operating practices) with the licensee.

Relocated specifications include those changes to the CTS that relocate certain requirements, which do not meet the 10 CFR 50.36 selection criteria. These requirements may be relocated to the Bases section, the KPS Updated Safety Analysis Report (USAR), the core operating limits report, the operational quality assurance plan, plant procedures, or other licensee-controlled documents. Relocation of requirements to licensee-controlled documents

does not eliminate them, but rather, places them under more appropriate regulatory controls (i.e. 10 CFR 50.54(a)(3) and 10 CFR 50.59) to manage their implementation and future changes.

The proposed action is necessary to allow the licensee to implement the ITS. The ITS are based on Westinghouse STS and they are considered an improvement over the CTS.

Environmental Impacts of the Proposed Action:

The NRC has completed its environmental assessment of the proposed amendment action. The staff concludes that the proposed action to convert the CTS for the plant to ITS would not significantly affect plant safety and would not have a significant adverse effect on the probability of an accident occurring.

The proposed action would not result in an increased radiological hazard beyond those previously analyzed in the Updated Safety Analysis Report. There will be no change to radioactive effluents that affect radiation exposures to plant workers and members of the public. No changes will be made to plant buildings or the site property. Therefore, no changes or different types of radiological impacts are expected as a result of the proposed action.

The proposed action does not result in changes to any of the following: to land use or water use, or result in changes to the quality or quantity of non-radiological effluents. No changes to the National Pollution Discharge Elimination System permit are needed. No effects on the aquatic or terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act, or impacts to essential fish habitat covered by the Magnuson-Stevens Act are expected. There are no impacts to the air or ambient air quality.

The proposed action does not have a potential to affect any historical or cultural resources because no previously undisturbed area will be affected by the proposed amendment. There would be no impact to socioeconomic resources. Therefore, no changes to or different types of non-radiological environmental impacts are expected as a result of the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action, and thus, the proposed action will not have a significant effect on the quality of the human environment. The details of the NRC staff's safety evaluation will be provided with the license amendment approving the conversion to the approved technical specifications that will be issued to the licensee.

Environmental Impacts of the Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the application would result in no change in current environmental impacts. Thus, the environmental impacts of the proposed action and the "no-action" alternative are similar.

Alternative Use of Resources:

The action does not involve the use of any different resources than those previously considered in the "Final Environmental Statement for the KPS," dated December, 1972, and the "Generic Environmental Impact Statement for License Renewal of Nuclear Plants [NUREG-1437], Supplement 40, Regarding Kewaunee Power Station, Final Report," dated August 2010 (ADAMS Accession No. ML102150106).

Agencies and Persons Consulted:

On September 23, 2010, the NRC staff consulted with the Wisconsin State official, Jeff Kitsembel, Nuclear Engineer, of the Public Service Commission of Wisconsin and the State Liaison Official for Wisconsin, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

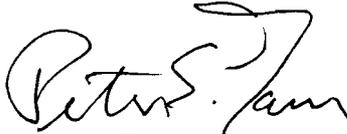
For further details with respect to the proposed action, see the licensee's previously referenced application letter and its supplemental letters. The information provided to the NRC staff through the joint NRC-DEK ITS conversion web page, hosted by Excel Services Corporation, can be found in the application document and its supplements.

Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the ADAMS Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html>.

Persons who do not have access to ADAMS or who encounter problems in 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 send an e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

Dated at Rockville, Maryland, this 8th day of December, 2010.

FOR THE NUCLEAR REGULATORY COMMISSION



Peter S. Tam, Senior Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

D. Heacock

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The assessment is being forwarded to the Office of the *Federal Register* for publication.

Sincerely,

**/RA/**

Karl Feintuch, Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosure:  
Environmental Assessment

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