



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

February 24, 2011

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Dominion Energy Kewaunee, Inc.  
Innsbrook Technical Center—2SW  
5000 Dominion Boulevard  
Glen Allen, VA 23060

SUBJECT: ISSUANCE OF RENEWED FACILITY OPERATING LICENSE NO. DPR-43 FOR  
KEWAUNEE POWER STATION

Dear Mr. Heacock:

The U.S. Nuclear Regulatory Commission (NRC) has issued Renewed Facility Operating License No. DPR-43 for the Kewaunee Power Station (KPS). The NRC issued the renewed facility operating license based on the staff's review of your application dated August 12, 2008, as supplemented by letters submitted to the NRC through November 23, 2010. The technical specifications for KPS were not amended as a result of our review.

Renewed Facility Operating License No. DPR-43 expires at midnight on December 21, 2033.

NUREG-1958, "Safety Evaluation Report Related to the License Renewal of the Kewaunee Power Station," issued January 2011, sets forth the technical basis for issuing the renewed license. The results of the environmental reviews related to the issuance of the renewed license appear in NUREG-1437, Supplement 40, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 40, Regarding Kewaunee Power Station," issued August 2010.

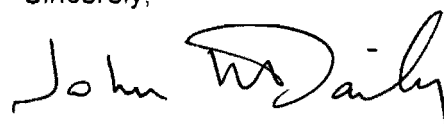
Enclosure 1 contains Renewed Facility Operating License No. DPR-43. Enclosure 2 contains Appendix A, "Technical Specifications," as revised through Amendment 207, to Renewed Facility Operating License No. DPR-43. Enclosure 3 is a copy of the related *Federal Register* notice of issuance of the renewed license. The original has been sent to the Office of the Federal Register for publication.

D. Heacock

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If you have any questions about this issue, please feel free to contact me by telephone at 301-415-3873 or by e-mail at [john.daily@nrc.gov](mailto:john.daily@nrc.gov).

Sincerely,

A handwritten signature in black ink that reads "John W. Daily". The signature is written in a cursive style with a large, looped "D" at the end.

John W. Daily, Senior Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosures:

1. Renewed Facility Operating License  
No. DPR-43
2. Renewed License Appendix A, "Technical Specifications,"  
as revised through Amendment 207
3. Copy of *Federal Register* notice

cc w/encls 1 and 3: Listserv

**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, DC 20555-0001

DOMINION ENERGY KEWAUNEE, INC.

DOCKET NO. 50-305

KEWAUNEE POWER STATION

RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-43

1. The U.S. Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application to renew Facility Operating License No. DPR-43, filed by Dominion Energy Kewaunee, Inc. (the licensee) 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 1, and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Kewaunee Power Station (facility) has been substantially completed in conformity with Provisional Construction Permit No. CPPR-50, as amended, and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
  - E. Dominion Energy Kewaunee, Inc., is technically qualified and financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
  - F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - G. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;

- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Renewed Facility Operating License No. DPR-43 is in accordance with 10 CFR Part 51 (formerly Appendix D of 10 CFR Part 50) of the Commission's regulations and all applicable requirements have been satisfied;
  - I. The receipt, possession, and use of byproduct, source, and special nuclear material as authorized by this renewed operating license will be in accordance with the Commission's regulations in 10 CFR Parts 30 and 70, including 10 CFR Sections 30.33, 70.23, and 70.31; and
  - J. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations.
2. Renewed Facility Operating License No. DPR-43 is hereby issued to Dominion Energy Kewaunee, Inc., to read as follows:
- A. This license applies to the Kewaunee Power Station, a pressurized water nuclear reactor and associated equipment (the facility), owned by Dominion Energy Kewaunee, Inc. The facility is located in Kewaunee County, Wisconsin, and is described in the "Final Safety Analysis Report" as supplemented and amended, and in the Environmental Report as supplemented and amended.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Dominion Energy Kewaunee, Inc.:
    - (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use, and operate the facility at the designated location in Kewaunee County, Wisconsin in accordance with the procedures and limitations set forth in this renewed license;
    - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
    - (3) Pursuant to the Act and 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;

- (4) 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;
  - (5) Pursuant to the Act and 10 CFR Parts 30 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 renewed operating 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, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and (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. 207, are hereby incorporated in the renewed 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 (USAR), 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 contains 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, 2004, and supplemented by letter dated October 21, 2004, July 26, 2005, and May 15, 2006.

(5) Deleted

(6) Steam Generator Upper Lateral Supports

The design of the steam generator upper lateral supports may be modified by reducing the number of snubbers from four (4) to one (1) per steam generator.

(7) Deleted

(8) Deleted

(9) Deleted

(10) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
  1. Pre-defined coordinated fire response strategy and guidance
  2. Assessment of mutual aid fire fighting assets
  3. Designated staging areas for equipment and materials
  4. Command and control
  5. Training of response personnel

- (b) Operations to mitigate fuel damage considering the following:
  - 1. Protection and use of personnel assets
  - 2. Communications
  - 3. Minimizing fire spread
  - 4. Procedures for implementing integrated fire response strategy
  - 5. Identification of readily-available pre-staged equipment
  - 6. Training on integrated fire response strategy
  - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
  - 1. Water spray scrubbing
  - 2. Dose to onsite responders

(11) Seismic Analysis Methodology for Auxiliary Building Crane

The licensee shall use the seismic analysis methodology submitted by letter dated July 7, 2008, supplemented on September 19, 2008, and March 17, 2009, and approved by the NRC staff in Amendment No. 205, for analysis of the Auxiliary Building crane. The licensee shall update the USAR to reflect this approval and in accordance with the schedule specified by 10 CFR 50.71(e).

(12) Implementation of New and Revised Surveillance Requirements

- (a) For Surveillance Requirements (SRs) that are new in Amendment No. 207, the first performance is due at the end of the first surveillance interval, which begins on the date of implementation of that amendment.
- (b) For SRs that existed prior to Amendment No. 207 whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of that amendment.
- (c) For SRs that existed prior to Amendment No. 207 that have modified acceptance criteria, the first performance subject to the modified acceptance criteria is due at the end of the surveillance interval that began on the date the surveillance was last performed prior to the implementation of that amendment.
- (d) For SRs that existed prior to Amendment No. 207 whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to the implementation of that amendment.

(13) Removed Details and Requirements Relocated to Other Controlled Documents

License Amendment No. 207 authorizes the relocation of certain technical specifications and operating license conditions, if applicable, to other licensee-controlled documents. Implementation of that amendment shall include relocation of these requirements to the specified documents.

(14) Deferral of Certain Technical Specification Requirements

Following implementation of License Amendment No. 207, the requirement for the reactor coolant system (RCS) Hot Leg A Temperature Indication to be OPERABLE as required by technical specification (TS) 3.3.3 and TS 3.3.4 may be deferred until startup after the first outage of sufficient duration to repair the RCS Hot Leg A Temperature Indication. Specifically, TS Table 3.3.3-1, Function 3 will only require 1 channel to be OPERABLE, and TS Table B 3.3.4-1, Function 4.a will not be applicable. Following the startup after the first outage of sufficient duration to repair the RCS Hot Leg A Temperature Indication, TS Table 3.3.3-1 Function 3 and TS Table B 3.3.4-1, Function 4.a requirements will be applicable.

(15) License Renewal License Conditions

- (a) The USAR supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the USAR required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, the licensee may make changes to the programs and activities described in the supplement without prior Commission approval, provided that the licensee evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- (b) The USAR supplement, as revised, describes certain future activities to be completed prior to and/or during the period of extended operation. The licensee shall complete these activities in accordance with Appendix A of NUREG-1958, "Safety Evaluation Report Related to the Kewaunee Power Station," dated January 2011. The licensee shall notify the NRC in writing when activities to be completed prior to the period of extended operation are complete and can be verified by NRC inspection.
- (c) All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC.

- D. The licensee shall comply with applicable effluent limitations and other limitations and monitoring requirements, if any, specified pursuant to Section 401(d) of the Federal Water Pollution Control Act Amendments of 1972.
- E. This renewed operating license is effective as of the date of issuance and shall expire at midnight on December 21, 2033.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Eric J. Leeds". The signature is written in a cursive style with a large, prominent "L" at the end.

Eric J. Leeds, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Appendices A and B – Technical Specifications

Date of Issuance: February 24, 2011

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOMINION ENERGY KEWAUNEE, INC.

KEWAUNEE POWER STATION

NOTICE OF ISSUANCE OF RENEWED FACILITY OPERATING LICENSE NO. DPR-43

FOR AN ADDITIONAL 20-YEAR PERIOD

RECORD OF DECISION

DOCKET NO. 50-305

NRC-2010-xxxx

Notice is hereby given that the U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued a renewed facility operating license No. DPR-43 to Dominion Energy Kewaunee, Inc. (licensee), the operator of the Kewaunee Power Station (KPS). Renewed facility operating license No. DPR-43 authorizes operation of KPS by the licensee at reactor core power levels not in excess of 1772 megawatts thermal, in accordance with the provisions of the KPS renewed license and its technical specifications.

The notice also serves as the record of decision for the renewal of facility operating license No. DPR-43, consistent with Title 10 of the *Code of Federal Regulations* Section 51.103 (10 CFR 51.103). As discussed in the final supplemental environmental impact statement (FSEIS) for KPS, dated August 2010, the Commission has considered a range of reasonable alternatives that included supercritical coal-fired generation; natural gas combined-cycle generation; a combination of conservation, efficiency, wood-fired generation, and wind power; and non-renewal of the operating license. The factors considered in the record of decision can be found in the supplemental environmental impact statement (SEIS) for KPS.

KPS is a pressurized-water reactor located near the Town of Carlton, Wisconsin. The application for the renewed license complied with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. As required by the Act and the Commission's regulations in 10 CFR Chapter I, the Commission has made appropriate findings, which are set forth in the license. Prior public notice of the action involving the proposed issuance of the renewed license and of an opportunity for a hearing regarding the proposed issuance of the renewed license was published in the *Federal Register* on October 1, 2008 (73 FR 57154).

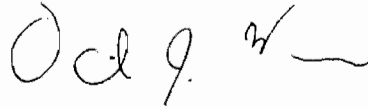
For further details with respect to this action, see: (1) Dominion Energy Kewaunee, Inc. license renewal application for KPS dated August 12, 2008, as supplemented by letters through November 23, 2010; (2) the Commission's safety evaluation report (NUREG-1958), published in January 2011; (3) the licensee's updated safety analysis report; and (4) the Commission's final environmental impact statement (NUREG-1437, Supplement 40), for KPS, published in August 2010. These documents are available at the NRC's Public Document Room, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, and can be viewed from the NRC Public Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>.

Copies of renewed facility operating license No. DPR-43 may be obtained by writing to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, Attention: Director, Division of License Renewal. Copies of the KPS safety evaluation report (NUREG-1958) and the final environmental impact statement (NUREG-1437, Supplement 40) may be purchased from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161 (<http://www.ntis.gov>), 703-605-6000, or Attention: Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954 (<http://www.gpoaccess.gov>), 202-512-1800. All orders should clearly identify the NRC

publication number and the requestor's Government Printing Office deposit account number or VISA or MasterCard number and expiration date.

Dated at Rockville, Maryland, this 24<sup>th</sup> day of February, 2011.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "D. J. Wrona", with a stylized flourish at the end.

David J. Wrona, Chief  
Projects Branch 2  
Division of License Renewal  
Office of Nuclear Reactor Regulation

D. Heacock

-2-

If you have any questions regarding this issue, please feel free to contact me by telephone at 301-415-3873 or by e-mail at [john.daily@nrc.gov](mailto:john.daily@nrc.gov).

Sincerely,

*/RA/*

John W. Daily, Sr. Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosures:

1. Renewed Facility Operating License  
No. DPR-43
2. Renewed License Appendix A, "Technical Specifications,"  
as revised through Amendment 207
3. Copy of *Federal Register* notice

cc w/encls 1 and 3: Listserv

DISTRIBUTION:

See next page

ADAMS Accession Nos.:

**ML110100574** (Package)

**ML110100575** (Letter),

**ML110100600** (Renewed Operating License)

**ML102020664** (Appendix A, KPS Improved Technical Specifications, Amendment 207))

**ML110100594** (*Federal Register* Notice)

\*concurrence via e-mail

OFFICE	PM:RPB1:DLR	LA:RPOB:DLR*	Tech Editor*	PM:DORL	BC:DORL
NAME	JDaily	IKing	KAzariah-Kribbs	KFeintuch	RPascarelli
DATE	01/19/2011	01/13/2011	01/21/2011	01/19/2011	01/24/2011
OFFICE	BC:RPB1:DLR	D:DLR	OGC (NLO)	D:NRR	PM:RPB1:DLR
NAME	BPham	BHolian	SUttal	ELeeds	JDaily
DATE	01/31/2011	02/16/2011	01/19/2011	02/24/2011	02/24/2011

OFFICIAL RECORD COPY

Letter to David A. Heacock from John W. Daily dated February 24, 2011

SUBJECT: ISSUANCE OF RENEWED FACILITY OPERATING LICENSE NO. DPR-43 FOR  
KEWAUNEE POWER STATION

DISTRIBUTION:

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