



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

May 21, 2014

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

SUBJECT: KEWAUNEE POWER STATION - EXEMPTIONS FROM THE REQUIREMENTS  
OF 10 CFR PART 50, SECTION 50.82(a)(8)(i)(A) AND SECTION 50.75(h)(1)(iv)  
(TAC NO. MF1438)

Dear Mr. Heacock:

The U.S. Nuclear Regulatory Commission (NRC) has approved the enclosed exemptions from specific requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 50.82(a)(8)(i)(A) and Section 50.75(h)(1)(iv), for the Kewaunee Power Station. This action is in response to your application dated April 4, 2013, as supplemented by letter dated November 6, 2013, that requested the exemptions to allow use of funds from the decommissioning trust fund for irradiated fuel management without prior notification of the NRC.

A copy of the exemptions is enclosed. The exemptions have been forwarded to the Office of the *Federal Register* for publication.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher Gratton".

Christopher Gratton, Senior Project Manager  
Plant Licensing IV-2 and  
Decommissioning Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-305

Enclosure:  
Exemption

cc w/encl: Distribution via Listserv

**NUCLEAR REGULATORY COMMISSION**

**Docket No. 50-305; NRC-20YY-XXXX**

**License Exemption Request for Dominion Energy Kewaunee, Inc.**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is granting exemptions in response to a request from Dominion Energy Kewaunee, Inc. (DEK or the licensee) dated April 4, 2013, as supplemented by letter dated November 6, 2013. The exemptions would permit the use of a portion of the Kewaunee Power Station (KPS) decommissioning trust fund (Trust) for expenses related to irradiated fuel management, and to be able to make such withdrawals from the trust fund without prior notification of the NRC. The NRC has reviewed the KPS Trust, the decommissioning approach and cost estimates in the KPS Post-Shutdown Decommissioning Activities Report (PSDAR), and the KPS updated Irradiated Fuel Management Plan and determined that, at this time, there is sufficient financial resources in the trust for both irradiated fuel management and to complete decommissioning activities.

**ADDRESSES:** Please refer to Docket ID <**INSERT:** NRC-20YY-XXXX> when contacting the NRC about the availability of information regarding this document. You may access publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID <**INSERT:** NRC-20YY-XXXX>. Address questions about NRC dockets to

Carol Gallagher; telephone: 301-287-3422; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

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- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Jeanne A. Dion, Office of Nuclear Reactor Regulation, telephone: 301-415-1349, e-mail: [Jeanne.Dion@nrc.gov](mailto:Jeanne.Dion@nrc.gov); William Huffman, Office of Nuclear Reactor Regulation, telephone: 301-415-2046, email [William.Huffman@nrc.gov](mailto:William.Huffman@nrc.gov); U.S. Nuclear Regulatory Commission, Washington DC 20555-0001.

## I. Background.

Dominion Energy Kewaunee is the holder of Renewed Facility Operating License No. DPR-43. By letter dated February 25, 2013 (ADAMS Accession No. ML13058A065), DEK, submitted a certification to the U.S. Nuclear Regulatory Commission (NRC) indicating it would permanently cease power operations at the Kewaunee Power Station (KPS) on May 7, 2013. On

May 7, 2013, DEK permanently ceased power operation at KPS. On May 14, 2013, DEK certified that it had permanently defueled the KPS reactor vessel (ADAMS Accession No. ML13135A209).

The facility consists of a permanently shutdown and defueled pressurized water reactor located in Kewaunee County, Wisconsin.

## **II. Request/Action.**

On April 4, 2013, DEK submitted a request for exemptions (ADAMS Accession No. ML13098A031) from Section 50.82(a)(8)(i)(A) and Section 50.75(h)(1)(iv) of Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR). The exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would permit withdrawal and use of a portion of the funds from the KPS Trust for irradiated fuel management consistent with the KPS updated Irradiated Fuel Management Plan and the KPS PSDAR. The licensee also requested an exemption from 10 CFR 50.75(h)(1)(iv) that would permit withdrawals from the Trust for irradiated fuel management activities without prior notification of the NRC, in the same manner as withdrawals are made under 10 CFR 50.82(a)(8) for decommissioning activities. By separate letters dated February 26, 2013, and April 25, 2014, DEK submitted updates to the KPS Irradiated Fuel Management Plan as required by 10 CFR 50.54(bb) (ADAMS Accession Nos. ML13059A028 and ML14119A120, respectively). By separate letters dated February 26, 2013, and April 25, 2014, DEK submitted its PSDAR and a revision to the PSDAR, as required by 10 CFR 50.82(a)(4)(i) (ADAMS Accession Nos. ML13063A248 and ML14118A382, respectively). In addition, DEK supplemented the April 4, 2013, submittal with a letter dated November 6, 2013 (ADAMS Accession No. ML13312A916), in which DEK committed to executing a Parent Company Guarantee in the amount of up to \$60 million if supplemental decommissioning funds

are needed in the future. This Parent Company Guarantee will provide additional financial assurance that sufficient funding is available for decommissioning and irradiated fuel management beyond those funds already available in the Trust.

The requirements of 10 CFR 50.82(a)(8)(i)(A) restrict the use of decommissioning trust fund withdrawals to expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2, which reads as follows:

“to remove a facility or site safely from service and reduce residual radioactivity to a level that permits-

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.”

The definition does not include activities associated with irradiated fuel management. The requirements of 10 CFR 50.75(h)(1)(iv) also restrict the use of decommissioning trust fund disbursements (other than for ordinary and incidental expenses) to decommissioning expenses until final decommissioning is completed. Therefore, exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) are needed to allow DEK to withdraw funds from the Trust for irradiated fuel management prior to completion of all decommissioning activities.

The requirements of 10 CFR 50.75(h)(1)(iv) further provide that, except for decommissioning withdrawals being made under 10 CFR 50.82(a)(8) or for payment of ordinary and incidental expenses, no disbursement may be made from the Trust without written notice to the NRC at least 30 working days in advance. Therefore an exemption from 10 CFR 50.75(h)(1)(iv) is also needed to allow DEK to withdraw funds from the Trust for irradiated fuel management without prior NRC notification.

### **III. Discussion.**

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when 1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and 2) any of the special circumstances listed in 10 CFR 50.12(a)(2) are present. These special circumstances include, among other things, the following:

- a) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule, or
- b) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

#### **A. Special Circumstances**

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the rule.

The underlying purposes of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) are to provide reasonable assurance that adequate funds will be available for decommissioning of power reactors. Strict application of these requirements would prohibit withdrawal of funds from the Trust for activities associated with irradiated fuel management until final decommissioning at KPS has been completed.

DEK's total Trust balance as of December 31, 2013, was \$649.3 million. According to the PSDAR, DEK intends to use SAFSTOR as its initial decommissioning approach. The DEK

analysis in the PSDAR projects that the total cost of decommissioning KPS to be approximately \$532.8 million (2012 dollars). As required by 10 CFR 50.54(bb), DEK estimated the costs associated with the long-term irradiated fuel management at \$278.4 million (2012 dollars). DEK estimated expenditures for site restoration at \$34.8 million (2012 dollars).

The staff performed an independent cash flow analysis of the Trust over the projected 60 years of decommissioning activities (assuming an annual real rate of return of 2%, as allowed by 10 CFR 50.75(e)(1)(ii)) and determined a projected earnings of the Trust of \$393.3 million. The staff confirms that there is presently adequate funding to complete all decommissioning activities based on the current funds and projected earnings of the Trust. In addition, DEK committed to executing a Parent Company Guarantee in the amount of up to \$60 million if supplemental decommissioning funds are needed in the future pursuant to 10 CFR 50.82(a)(8)(iv). This Parent Company Guarantee provides additional financial assurance that sufficient funding is available for decommissioning and irradiated fuel management beyond those funds already available in the Trust.

The staff concludes, at this time, that the site-specific decommissioning cost analysis demonstrates adequate funds are available in the Trust for irradiated fuel management and completion of decommissioning within 60 years. The staff's review and conclusions are based on DEK's specific financial situation and decommissioning approach as described in the KPS PSDAR and the updated Irradiated Fuel Management Plan. Therefore, DEK has demonstrated reasonable assurance that sufficient funding will be available for both decommissioning and for irradiated fuel management and that the exemptions from the requirements of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv), with respect to use of the trust funds for irradiated fuel management, will still achieve the underlying purposes of the rules.

In its submittal, DEK also requested exemption from the requirements of 10 CFR 50.75(h)(1)(iv) concerning prior written notification to the NRC for withdrawals from the

Trust for irradiated fuel management activities. The underlying purpose of notifying the NRC prior to withdrawal of funds from the Trust is to provide opportunity for NRC intervention, when deemed necessary, if the withdrawals are for expenses other than those authorized by 10 CFR 50.75(h)(1)(iv) and 10 CFR 50.82(a)(8) that could result in insufficient funds in the Trust to accomplish radiological decontamination of the site.

By granting the exemptions to 10 CFR 50.75(h)(1)(iv) and 10 CFR 50.82(a)(8) to allow withdrawals from the Trust for irradiated fuel management, the staff considers that the withdrawals consistent with the KPS updated Irradiated Fuel Management Plan are authorized. As stated previously, the staff has determined that there are sufficient funds in the Trust to complete legitimate decommissioning activities, as well as management of irradiated fuel consistent with the KPS PSDAR and updated Irradiated Fuel Management Plan. Pursuant to the annual reporting requirements in 10 CFR 50.82(a)(8)(v) – (vii), licensees are required to monitor and report the status of the decommissioning trust fund and the funding status for managing irradiated fuel. These reports provide NRC awareness of and the ability to take action on any actual or potential funding deficiencies. The requested exemption would not allow withdrawal of funds from the KPS Trust for any other purpose that is not currently authorized in the regulations without prior notification to the NRC. Therefore, the granting of this exemption to 10 CFR 50.75(h)(1)(iv) to allow the licensee to make withdrawals from the Trust to cover authorized expenses for irradiated fuel management without prior written notification to the NRC will still meet the underlying purpose of the regulation.



Special circumstances, in accordance with 10 CFR 50.12(a)(2)(iii) are present whenever compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

The licensee states that the Trust contains funds in excess of the estimated costs of radiological decommissioning and that these excess funds are needed for irradiated fuel management. The NRC does not preclude use of funds from the decommissioning trust in excess of those needed for radiological decommissioning for other purposes, such as irradiated fuel management or site restoration. The NRC has stated that funding for irradiated fuel management may be commingled in the decommissioning trust provided the licensee is able to identify and account the radiological decommissioning funds separately from the funds set aside for irradiated fuel management (see NRC Regulatory Issue Summary 2001-07, Rev 1, "10 CFR 50.75 Reporting and Recordkeeping for Decommissioning Planning" dated January 8, 2009 [ADAMS Accession No. ML083440158], and Regulatory Guide 1.184, Rev 1, "Decommissioning of Nuclear Power Reactors," [ADAMS Accession No. ML13144A840]). To prevent access to those excess funds in the Trust because irradiated fuel management is not associated with radiological decommissioning would create an unnecessary financial burden without any corresponding safety benefit. The adequacy of the Trust to cover the cost of activities associated with irradiated fuel management in addition to radiological decommissioning is supported by the staff's site-specific decommissioning cost analysis. If DEK cannot use its Trust for irradiated fuel management activities, it would need to obtain additional funding that would not be recoverable from the Trust, or DEK would have to modify its decommissioning approach and methods. The NRC staff concludes that either outcome would impose an unnecessary and undue burden significantly in excess of that contemplated when the regulation was adopted.

Therefore, since the underlying purposes of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would be achieved by allowing DEK to use a portion of the Trust for irradiated fuel management without prior NRC notification, and compliance with the rules would result in an undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, the special circumstances required by 10 CFR 50.12(a)(2)(ii) and 10 CFR 50.12(a)(2)(iii) exist.

**B. Authorized by Law**

The exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would allow DEK to use a portion of the funds from the Trust for irradiated fuel management, consistent with the KPS updated Irradiated Fuel Management Plan and PSDAR, and would allow DEK to withdraw funds from the trust for irradiated fuel management activities without prior notice to the NRC. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50. The NRC staff has determined that granting of the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

**C. No Undue Risk to Public Health and Safety**

The underlying purposes of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) are to provide reasonable assurance that adequate funds will be available for decommissioning of power reactors. Based on the site-specific cost estimate and the cash flow analysis, use of a portion of the Trust for irradiated fuel management will not adversely impact the DEK's ability to terminate the KPS license (i.e., complete radiological decontamination) within 60 years, consistent with the schedule and costs contained in the KPS updated Irradiated Fuel Management Plan and PSDAR. Furthermore, exemption from 10 CFR 50.75(h)(1)(iv) to allow the licensee to make authorized withdrawals from the Trust to cover expenses for irradiated fuel

management without prior written notification to the NRC should not affect the sufficiency of funds in the Trust to accomplish radiological decontamination of the site.

Based on the above, no new accident precursors are created by using the Trust in the proposed manner. Thus, the probability of postulated accidents is not increased. Also, based on the above, the consequences of postulated accidents are not increased. No changes are being made in the types or amounts of effluents that may be released offsite. There is no significant increase in occupational or public radiation exposure. Therefore, there is no undue risk to public health and safety.

**D. Consistent with the Common Defense and Security**

The proposed exemption would allow DEK to use a portion of the funds from the Trust for irradiated fuel management, consistent with the KPS updated Irradiated Fuel Management Plan and PSDAR. Irradiated fuel management is an integral part of the planned KPS decommissioning process as discussed in the KPS PSDAR and should not adversely affect DEK's ability to physically secure the site or protect special nuclear material. This change to enable use of a portion of the funds from the Trust for irradiated fuel management will not alter the scope of, or availability of funding for the licensee's security program. Therefore, the common defense and security is not impacted by this exemption.

**E. Environmental Considerations**

In accordance with 10 CFR 51.31(a), the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (see Environmental Assessment and Finding of No Significant Impact published on May 2, 2014; 79 FR 25156).

#### IV. Conclusions.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants DEK exemptions from the requirements of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) to allow withdrawals from the KPS Trust for irradiated fuel management in accordance with the KPS updated Irradiated Fuel Management Plan and PSDAR, without prior notice to the NRC. The granting of this exemption does not allow withdrawal of funds from the KPS Trust for any other purpose that is not currently authorized in the regulations without prior notification to the NRC.

The exemptions are effective upon issuance.

Dated at Rockville, Maryland, this 21<sup>st</sup> day of May, 2014.

For the Nuclear Regulatory Commission.



Michele G. Evans, Director  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

May 21, 2014

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

SUBJECT: KEWAUNEE POWER STATION - EXEMPTIONS FROM THE REQUIREMENTS  
OF 10 CFR PART 50, SECTION 50.82(a)(8)(i)(A) AND SECTION 50.75(h)(1)(iv)  
(TAC NO. MF1438)

Dear Mr. Heacock:

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A copy of the exemptions is enclosed. The exemptions have been forwarded to the Office of the *Federal Register* for publication.

Sincerely,  
*/RA/*

Christopher Gratton, Senior Project Manager  
Plant Licensing IV-2 and  
Decommissioning Transition Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-305

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