

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-305; NRC-2024-0023]

Kewaunee Solutions, Inc.;

Kewaunee Power Station;

Environmental Assessment and Finding of No Significant Impact

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption in response to the March 29, 2023, request from Kewaunee Solutions, Inc., (KS) Kewaunee Power Station (KPS), located in Kewaunee County, Wisconsin. The exemption would permit KS to use funds from the KPS nuclear decommissioning trust (NDT) for the management of site restoration activities and allow trust disbursements for site restoration activities to be made without prior notice to the NRC. The NRC staff is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) associated with the proposed exemption.

DATES: The EA and FONSI referenced in this document are available on January 25, 2024.

ADDRESSES: Please refer to Docket ID **NRC-2024-0023** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov>. and search for Docket ID **NRC-2024-0023**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email:

Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **NRC’s Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to PDR.Resource@nrc.gov. For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the “Availability of Documents” section.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time, Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Karl Sturzebecher, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-8534, email: Karl.Sturzebecher@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is considering issuance of an exemption from the requirements of paragraph (a)(8)(i)(A) of section 50.82 “Termination of license,” of part 50, “Domestic Licensing of Production and Utilization Facilities,” of title 10 of the *Code of Federal Regulations* (10 CFR) and paragraph (h)(1)(iv) of 10 CFR 50.75, “Reporting and recordkeeping for decommissioning planning,” to KS for Renewed Facility Operating

License (RFOL) No. DPR-43 for KPS, located in Kewaunee County, Wisconsin. The exemption was submitted on March 29, 2023, and supplemented on October 5, 2023, in response to a request for additional information from the NRC staff dated August 29, 2023, pertaining to the decommissioning trust fund (DTF) cash flows provided in the initial exemption request submittal.

The exemption would permit KS to use funds from the KPS NDT for site restoration activities for KPS in the same manner that funds from the NDT are used under 10 CFR 50.82(a)(8) for decommissioning activities. The exemption request submitted by KPS was based on its analysis of the expected KPS decommissioning and site restoration costs, as provided in the KPS Post-Shutdown Decommissioning Activities Report (PSDAR), as supplemented, which was submitted by KS to the NRC on May 13, 2021.

The exemption would also allow trust disbursements for site restoration activities to be made without prior notice to the NRC, which is consistent with a previous exemption allowing KS to use the KPS NDT for the management of spent fuel, and to allow trust disbursements for spent fuel management to be made without prior NRC notice, which was approved on May 21, 2014. The NRC staff's analysis will include evaluation of the KPS NDT in view of the prior exemption.

Consistent with 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments," the NRC has determined that an EA is the appropriate form of environmental review for the requested action and prepared the following EA that analyzes the environmental impacts of the proposed action. Based on the results of the EA, which is provided in Section II of this document, and in accordance with paragraph (a) of 10 CFR 51.31, "Determinations based on

environmental assessment,” the NRC has determined not to prepare an environmental impact statement for the proposed action and is issuing a FONSI.

II. Environmental Assessment

Description of the Proposed Action

The proposed action would partially exempt KS from the requirements set forth in 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv). Specifically, the proposed action would allow KS to use funds from the KPS NDT for site restoration activities not associated with radiological decommissioning activities and would exempt KS from the requirement for prior notification to the NRC for these withdrawals.

The proposed action is in accordance with KS’s application dated March 29, 2023, as supplemented by letter dated October 5, 2023.

Need for the Proposed Action

By letter dated February 25, 2013, the previous holder of the KPS RFOL, Dominion Energy Kewaunee (DEK), submitted a certification to the NRC indicating it would permanently cease power operations at 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.

By letter dated March 29, 2023, as supplemented by letter dated October 5, 2023, KS requested an exemption to allow KPS NDT withdrawals, without prior written notification to the NRC, for site restoration activities for KPS.

As required by 10 CFR 50.82(a)(8)(i)(A), decommissioning trust funds may be used by the licensee if the withdrawals are for legitimate decommissioning activity expenses, consistent with the definition of decommissioning in 10 CFR 50.2, “Definitions.” This definition addresses radiological decommissioning and does not include activities associated with site restoration. Similarly, the requirements of

10 CFR 50.75(h)(1)(iv) restrict the use of decommissioning trust fund disbursements (other than for ordinary and incidental expenses) to decommissioning expenses until final decommissioning has been completed. Therefore, exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) is needed to allow KS to use funds from the KPS NDT for site restoration activities for KPS.

In the October 5, 2023, supplement to the exemption, KS stated that the KPS DTF Status Report demonstrates that the KPS NDT contains the funds needed to cover the estimated costs of KPS radiological decommissioning and license termination, as well as spent fuel management and site restoration activities. The supplemental information also provided additional details on license termination, spent fuel management, site restoration costs, and total forecasted expenditure data, based on the DECON decommissioning method and the current schedule of decommissioning activities for KPS.

The adequacy of funds in the KPS NDT to cover the costs of activities associated with site restoration and radiological decommissioning through license termination is supported by the KS KPS PSDAR. To support site restoration activities not associated with radiological decommissioning, KS stated that it needs access to the funds in the KPS NDT in excess of those needed for radiological decommissioning.

The requirements of 10 CFR 50.75(h)(1)(iv) further provide that, except for withdrawals being made under 10 CFR 50.82(a)(8) or for payments of ordinary administrative costs and other incidental expenses of the NDT in connection with the operation of the NDT, no disbursement may be made from the NDT 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 requested by KS to allow KS to use funds from the KPS

NDT for spent fuel management and site restoration activities without prior NRC notification.

Environmental Impacts of the Proposed Action

The proposed action involves an exemption from regulatory requirements that are of a financial or administrative nature and that do not have an impact on the environment. Before the NRC could approve the proposed action, it would have to conclude that there is reasonable assurance that adequate funds are available in the NDT to complete all activities associated with radiological decommissioning as well as spent fuel management and site restoration. Therefore, there would be no decrease in safety associated with the use of the NDT to also fund activities associated with site restoration.

Section 50.82(a)(8)(v) of 10 CFR requires a licensee to submit a financial assurance status report annually between the time of submitting its site-specific decommissioning cost estimate and submitting its final radiation survey to demonstrate that residual radioactivity has been reduced to a level that permits termination of its license. Section 50.82(a)(8)(vi) of 10 CFR requires that if the sum of the balance of any remaining decommissioning funds, plus expected rate of return, plus any other financial surety mechanism, does not cover the estimated cost to complete radiological decommissioning, additional financial assurance must be provided to cover the cost of completion. These annual reports provide a means for the NRC to continually monitor the adequacy of available funding. Since the exemption would allow KS to use funds from the KPS NDT that are in excess of those required for radiological decommissioning, the adequacy of the funds dedicated for radiological decommissioning would not be affected by the proposed exemption. Therefore, there is reasonable assurance that there

would be no environmental impact due to lack of adequate funding for radiological decommissioning.

The proposed action would not significantly increase the probability or consequences of radiological accidents. The proposed action has no direct radiological impacts. There would be no change to the types or amounts of radiological effluents that may be released; therefore, there would be no change in occupational or public radiation exposure from the proposed action. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of effluents released offsite. In addition, the method of operation of waste processing systems would not be affected by the exemption. The proposed action would not result in changes to the design basis requirements of structures, systems, and components (SSCs) that function to limit or monitor the release of effluents. All the SSCs associated with limiting the release of effluents would continue to be able to perform their functions. Moreover, no changes would be made to plant buildings or the site property from the proposed action. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action would have no direct impacts on land use or water resources, including terrestrial and aquatic biota, as it involves no new construction or modification of plant operational systems. There would be no changes to the quality or quantity of nonradiological effluents and no changes to the plant's National Pollutant Discharge Elimination System permits would be needed. In addition, there would be no noticeable effect on socioeconomic conditions in the region, no environment justice impacts, no air quality impacts, and no impacts to historic and cultural resources from the proposed action. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Environmental Impacts of the Alternatives to the Proposed Action

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

Alternative Use of Resources

There are no unresolved conflicts concerning alternative uses of available resources under the proposed action.

Agencies or Persons Consulted

No additional agencies or persons were consulted regarding the environmental impact of the proposed action. On January 17, 2024, the State of Wisconsin representative was notified of this EA and FONSI.

III. Finding of No Significant Impact

The requested exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would allow KS to use funds from the KPS NDT for site restoration activities for KPS, without prior written notification to the NRC. The proposed action would not significantly affect plant safety, would not have a significant adverse effect on the probability of an accident occurring, and would not have any significant radiological or nonradiological impacts. The proposed action involves an exemption from requirements that are of a financial or administrative nature and that would not have an impact on the human environment. Consistent with 10 CFR 51.21, the NRC conducted the EA for the proposed action, and this FONSI incorporates by reference the EA included in Section II of this document. Therefore, the NRC concludes that the proposed action will not have

significant effects on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

Other than KS's letter dated March 29, 2023, as supplemented by letter dated October 5, 2023, there are no other environmental documents associated with this review.

Previous considerations regarding the environmental impacts of operating KPS are described in NUREG-1437, Supplement 40, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Kewaunee Power Station, Final Report," which provides the latest environmental review of current operations and description of environmental conditions at KPS.

IV. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document Description	ADAMS Accession No./Federal Register notice
Kewaunee Solutions, Inc., Request for Exemptions from 10 CFR 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) for Site Restoration Activities, dated March 29, 2023	ML23093A031
Kewaunee Solutions, Inc., Response to Request for Additional Information (RAI) Application for Kewaunee Solutions (KS) Site Restoration Activities (EPID NO. L-2023-LLE-0008), dated October 5, 2023	ML23278A100
NRC, Letter RAI KPS Exemption Site Restoration Final Repaired, dated August 29, 2023	ML23222A152
Energy Solutions LLC., Notification of Amended Post-Shutdown Decommissioning Activities Report (Revision 2) for Kewaunee Power Station, dated May 13, 2021	ML21145A083
Kewaunee Power Station, FRN, Exemption from the Requirements of 10 CFR part 50, section 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) (TAC MF1438), dated May 21, 2014	ML13225A224 / 79 FR 30900

Dominion Energy Kewaunee, Inc., Kewaunee Power Station, Certification of Permanent Cessation of Power Operations, dated February 25, 2013	ML13058A065
Dominion Energy Kewaunee, Inc., Kewaunee Power Station, Certification of Permanent Removal of Fuel from the Reactor Vessel, dated May 14, 2013	ML13135A209
Kewaunee Solutions, Inc., Kewaunee Power Station, Decommissioning Fund Status Report, dated March 30, 2023	ML23089A304
NUREG-1437 Supplement 40, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 40 Regarding Kewaunee Power Station," Final Report, dated August 2010.	ML102280229

Dated: January 23, 2024.

For the Nuclear Regulatory Commission.

/RA/

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FRN - EA FONSI for Kewaunee Site Restoration Exemption DATE January 23, 2024

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