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December 9, 2015

ATTN: Document Control Desk
Director, Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Serial No. 15-124
NLOS/TJS Rev. 0
Docket No. 72-64

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI)
10 CFR 72.30 DECOMMISSIONING FUNDING PLAN

Pursuant to 10 CFR 72.30(b) and (c), Dominion Energy Kewaunee, Inc. submits the attached decommissioning funding plan for the Kewaunee Power Station ISFSI.

Please contact Mr. David A. Sommers at (804) 273-2823 if you have any questions or require additional information.

Sincerely,

David A. Heacock
President and Chief Nuclear Officer
Dominion Energy Kewaunee, Inc.

Attachment

Commitments made in this letter: None

cc:

Dr. Pamela Longmire
NRC Project Manager
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Attachment 1

Kewaunee Power Station

Decommissioning Funding Plan for ISFSI

Kewaunee Power Station - ISFSI

Dominion Energy Kewaunee, Inc. (DEK)

Attachment 1

Decommissioning Funding Plan for KPS ISFSI
General License under 10 CFR 72.210, Docket No. 72-64

Pursuant to 10 CFR 72.30(b), Dominion Energy Kewaunee, Inc. (DEK) submitted a decommissioning funding plan for the Kewaunee Power Station (KPS) Independent Spent Fuel Storage Installation (ISFSI) on December 17, 2012 (Serial No. 12-736, ADAMS Accession No. 13002A036). DEK responded to an NRC Request for Additional Information related to this submittal on September 30, 2013 (Serial No. 13-434, ADAMS Accession No. ML13283A085).

10 CFR 72.30(c) requires each holder of a license under Part 72 to resubmit the decommissioning funding plan at intervals not to exceed three (3) years with adjustments as necessary to account for changes in costs and the extent of contamination. In accordance with 10 CFR 72.30(c), the information below provides DEK's periodic update to the KPS ISFSI decommissioning funding plan.

Pursuant to 10 CFR 72.30(b), a decommissioning funding plan must contain:

1) **Information on how reasonable assurance will be provided that funds will be available to decommission the ISFSI or MRS.**

   DEK provides financial assurance for decommissioning through the prepayment method. The NRC issued an exemption on May 21, 2014 (ADAMS Accession No. ML13337A287), allowing DEK to use funds in the KPS decommissioning trust for irradiated fuel management based on a cash flow analysis demonstrating that the trust contains sufficient funds to complete the site-specific cost of radiological decommissioning and spent fuel management. The ISFSI decommissioning costs are included as part of spent fuel management in this analysis and the site-specific cost estimate on which it was based. The cash flow analysis submitted with DEK's most recent Decommissioning Funding Status Report, submitted on March 27, 2015 (Serial No. 15-098, ADAMS Accession No. ML15093A101), demonstrates that the KPS Trust continues to contain sufficient funds to complete radiological decommissioning and spent fuel management, including ISFSI decommissioning, as well as the subsequent funding of site restoration, with a projected residual amount of $248 million (discounted to 2015 dollars).

2) **A detailed cost estimate for decommissioning, in an amount reflecting:**

   (i) The cost of an independent contractor to perform all decommissioning activities;

(ii) An adequate contingency factor; and

(iii) The cost of meeting the §20.1402 of this chapter criteria for unrestricted use, provided that, if the applicant or licensee can demonstrate its ability to meet the provisions of §20.1403 of this chapter, the cost estimate may be based on meeting the §20.1403 criteria.

General Methodology Used to Develop ISFSI Decommissioning Cost Estimates

The ISFSI decommissioning cost estimate (DCE) for KPS is derived from the most recent, site-specific decommissioning cost study for KPS, which was prepared in 2013 and on which the cash flow analysis in the most recent Decommissioning Funding Status Report is based. The site-specific estimate for KPS used to prepare the ISFSI DCE assumed that a third party would perform decommissioning. To determine the cost of using a third party contractor, fully burdened labor rates (labor costs plus employee benefits and taxes) were used as a basis and a premium was added to represent a third party contractor's profit margin. Costs associated with line items in the site-specific cost estimate not applicable to ISFSI decommissioning (based on 10 CFR 72.30 requirements) were either adjusted or excluded.

The site-specific decommissioning cost study also included undistributed costs (for support activities and costs such as staff, security, insurance, energy, materials and services) allocated to the entire ISFSI decommissioning period. Because the ISFSI decommissioning period accounted for non-radiological decommissioning activities, it was necessary to adjust the undistributed costs for this period to assign only an appropriate portion for radiological decommissioning. Most of the undistributed costs were adjusted in proportion to the ratio of the duration of radiological ISFSI decommissioning activities to the duration of the ISFSI decommissioning period, but some were adjusted on the basis of judgment. The undistributed costs for the dry storage period preceding the ISFSI decommissioning period were also considered (because certain ISFSI decommissioning activities were included in this preceding period), but were discounted as applying predominantly to the storage activities.

The site specific ISFSI DCE includes 25% contingency in accordance with NUREG-1757, Volume 3, Revision 1. Table 1 below shows the contingency as one line item.

As shown in Table 1 below, the estimated cost to decommission the ISFSI at KPS is $1.769 million in 2012 dollars. Applying a CPI[1] based annual escalation rate to the 2012 dollars shown in Table 1, the total cost to decommission the KPS ISFSI is $1.847 million in 2015 dollars[2].

[1] The mnemonic for CPI-U is shown under Item 4.

[2] NOTE: Totals may not add due to rounding.

Table 1

Kewaunee Power Station *Site Specific Cost Estimates Applicable to ISFSI Decommissioning Costs - 10 CFR 72.30* (in thousands of dollars)							
ISFSI Decommissioning Activity Description	Labor	Equipment	Disposal	Other	25% Contingency	Total 2012 $	Total 2015 $
Distributed (Direct) Cost							
Preparation and NRC Review of License Termination Plan	$ 87	$ -	$ -	$ 141	$ -	$ 228	$ 238
Verification Survey of Horizontal Storage Modules	$ 25	$ 18	$ -	$ -	$ -	$ 43	$ 45
Preparation of Final Report on Decommissioning and NRC Review	$ 87	$ -	$ -	$ 141	$ -	$ 228	$ 238
Total Distributed (Direct) Cost	$ 199	$ 18	$ -	$ 282	$ -	$ 499	$ 521
Total Undistributed (Allocated) Cost	$ 606	$ 17	$ -	$ 293	$ -	$ 916	$ 957
Total Kewaunee ISFSI Decommissioning Cost	$ 805	$ 35	$ -	$ 575	$ -	$ 1,415	$ 1,477
25% Contingency Applied to Total Kewaunee ISFSI Decommissioning Cost Estimate					$ 354	$ 354	$ 369
Total Kewaunee ISFSI Decommissioning Cost Estimate with Contingency						$ 1,769	$ 1,847
Annual Escalation Rate (2012$ to 2015$)	1.44%	Escalation Rate based on average of CPI-U indices for period shown					
Decommissioning Cost shown at	*100.00%*	*DEK Decommissioning Responsibility Percentage*					

Information Required by 10 CFR 72.30(c)

10 CFR 72.30(c) requires the updated decommissioning funding plan to specifically consider the effect of the following events on decommissioning costs:

(1) Spills of radioactive material producing additional residual radioactivity in onsite subsurface material.

There have been no reported spills affecting the ISFSI.

(2) Facility modifications.

There have been no facility modifications affecting the ISFSI DCE.

(3) Changes in authorized possession limits.

As stated below, the ISFSI DCE is based on an ISFSI that is sized to accommodate the spent fuel generated through permanent cessation of operations, which occurred in May 2013.

(4) Actual remediation costs that exceed the previous cost estimate.

No actual remediation costs related to ISFSI decommissioning have been incurred.

3) Identification of and justification for using the key assumptions contained in the DCE.

The ISFSI DCE assumes:

i. An ISFSI sized to accommodate the spent fuel generated through permanent cessation of operations, which occurred in May 2013.

ii. Decommissioning will be performed by an independent contractor as required.

iii. Storage canisters will be used to ship the contained spent fuel to the Department of Energy.

iv. A dry transfer facility will not be necessary.

v. The ISFSI pad and support modules are assumed to be free of contamination and left in place.

4) A description of the method of assuring funds for decommissioning from paragraph (e) of this section, including means for adjusting cost estimates and associated funding levels periodically over the life of the facility.

KPS is providing financial assurance for decommissioning the site and ISFSI through the prepayment method. Cash flow analysis demonstrates that the prepaid funds in the trust are sufficient to cover the costs of radiological decommissioning and spent fuel management, which includes ISFSI decommissioning costs. The KPS decommissioning cost study, from which the ISFSI DCE is derived, is updated approximately every five years. The ISFSI decommissioning funding plan, periodically submitted pursuant to 10 CFR 72.30(c), will further adjust the most recent site-specific ISFSI DCE using a CPI indice based annual escalation rate and will consider the need for any further adjustment based on the factors in 10 CFR 72.30(c)(1)-(4). In connection with the exemption allowing use of the KPS decommissioning fund for spent fuel management, DEK provided to the NRC on January 28, 2015 (Serial No. 15-001, ADAMS Accession No. ML15034A312) parental commitments providing further means of adjusting funding levels, if needed.

The CPI indice annual escalation rate mnemonic is as follows:

CPI - U: Urban Consumer - All Items, (Index 1982-84=100, SA), U.S. Bureau of Labor Statistics (BLS); Moody's Analytics (ECCA) Forecast, Quarterly, United States.

5) The volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination.

Onsite subsurface material is assumed to have no residual radioactivity that will require remediation to meet the criteria for license termination. The spent fuel storage casks are sealed and contain no liquid.

6) A certification that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning.

DEK certifies that financial assurance for the estimated cost of decommissioning the KPS ISFSI has been provided as discussed above.