



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

February 20, 2019

Donald W. Gregoire, Manager
Regulatory Affairs
Energy Northwest
Columbia Generating Station
P.O. Box 968, PE20
Richland, WA 99352-0968

SUBJECT: NUCLEAR REGULATORY COMMISSION'S ANALYSIS OF ENERGY
NORTHWEST'S INITIAL AND UPDATED DECOMMISSIONING FUNDING
PLANS FOR COLUMBIA GENERATING STATION'S INDEPENDENT SPENT
FUEL STORAGE INSTALLATION

Dear Mr. Gregoire:

By letter dated December 17, 2012, Energy Northwest submitted, for U.S. Nuclear Regulatory Commission (NRC) staff review and approval, an initial decommissioning funding plan (initial DFP) for the independent spent fuel storage installation (ISFSI) at Columbia Generating Station (CGS) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML123550043). By letter dated December 15, 2015, Energy Northwest submitted, also for the NRC staff review and approval, an updated decommissioning funding plan (updated DFP) for the ISFSI at CGS (ADAMS Accession No. ML15351A459). In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Sections 72.30(b) and (c), and using NUREG-1757, Vol. 3, Rev. 1, "Consolidated Decommissioning Guidance," the NRC staff reviewed the initial and updated DFPs submitted by Energy Northwest, including the initial and updated decommissioning cost estimates (DCEs) and the method of assuring funds for decommissioning.

Pursuant to 10 CFR 72.30(b), each holder of, or applicant for, a license under Part 72 must submit for the NRC review and approval a DFP containing information on how reasonable assurance will be provided that funds will be available to decommission its ISFSI[s]. The DFP must contain a detailed DCE, in an amount reflecting: (1) the cost of an independent contractor to perform all decommissioning activities, (2) an adequate contingency factor, and (3) the cost of meeting the 10 CFR 20.1402 unrestricted use criteria (or the cost of meeting the 10 CFR 20.1403 restricted use criteria, provided the licensee can demonstrate its ability to meet these criteria). The licensee's DFP must also identify and justify using the key assumptions contained in the DCE. Further, the DFP must describe the method of assuring funds for ISFSI decommissioning, including means for adjusting cost estimates and associated funding levels periodically over the life of the ISFSI. Additionally, the DFP must specify the volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination, and contain a certification that financial assurance for ISFSI decommissioning has been provided in the amount of the DCE.

The NRC staff reviewed and analyzed the information submitted by Energy Northwest in its initial DFP on how reasonable assurance will be provided that funds will be available to

decommission the ISFSI, including the amount of the DCE and the method of assuring funds for decommissioning.

In the initial DFP, Energy Northwest estimated that the total cost to decommission the ISFSI at CGS for unrestricted use is \$4,600,000, in 2012 dollars. Based on its analysis of Energy Northwest's initial DFP, the NRC staff finds that the submitted DCE: is based on reasonable costs of a third party contractor; includes an adequate contingency factor; reflects the cost of meeting the 10 CFR 20.1402 criteria for unrestricted use; and is based on reasonable and documented assumptions. Therefore, the NRC staff finds that the DCE adequately estimated the cost to carry out required ISFSI decommissioning activities prior to license termination, and that the DCE is acceptable.

Energy Northwest relied on an external sinking fund as financial assurance for ISFSI decommissioning, a method authorized by 10 CFR 72.30(e). Energy Northwest, through the Bonneville Power Administration (BPA), an agency of the Department of Energy, has established a sinking fund for decommissioning CGS. Energy Northwest made an initial payment to the Trust and developed a schedule of annual payments through the end of decommissioning in Fiscal Year 2029. The schedule of annual payments includes assumptions for inflation and the estimated earnings of the Trust that would be reinvested. The NRC staff finds that the aggregate dollar amount of the licensee's financial instrument provides adequate financial assurance to cover its cost estimate, and therefore, that this financial instrument is acceptable.

Pursuant to 10 CFR 72.30(c), at the time of license renewal and at intervals not to exceed 3 years, the initial DFP required to be submitted by 10 CFR 72.30(b) must be resubmitted with adjustments as necessary to account for changes in costs and the extent of contamination (updated DFP). The updated DFP must update the information submitted with the original or prior approved plan. In addition, the updated DFP must specifically consider the effect of the following events on decommissioning costs, as required by 10 CFR 72.30(c)(1)-(4): (1) spills of radioactive material producing additional residual radioactivity in onsite subsurface material, (2) facility modifications, (3) changes in authorized possession limits, and (4) actual remediation costs that exceed the previous cost estimate.

In the updated DFP, Energy Northwest estimates that the total cost to decommission the ISFSI at CGS for unrestricted use is \$6,100,000, in 2015 dollars. The updated decommissioning cost estimate (updated DCE) considered the requirements of 10 CFR 72.30(c)(1)-(4) and the licensee provided a discussion of each requirement. The licensee's submittal states, in part:

1. There have been no reported spills of radioactive material;
2. There have been no modifications with the exception of site preparation and initiation of construction of a new ISFSI pad to be used for the next reactor core offload;
3. There have been no changes in authorized possession limits; and
4. There have been no actual remediation costs that exceed the previous cost estimate.

Based on its review of Energy Northwest's submittal, the NRC staff finds that the updated DCE: is based on reasonable costs of a third party contractor; includes an adequate contingency factor; reflects the cost of meeting the 10 CFR 20.1402 criteria for unrestricted use; and is based on reasonable and documented assumptions. Therefore, the NRC staff finds that the

updated DCE adequately estimates the cost, at this time, to carry out required ISFSI decommissioning activities prior to license termination, and that the updated DCE is acceptable.

Energy Northwest currently relies on a contract with the BPA as financial assurance for ISFSI decommissioning, a method authorized by 10 CFR 72.30(e). The NRC staff reviewed the licensee's updated DFP, and finds that the aggregate dollar amount of the licensee's financial instrument provides adequate financial assurance to cover its updated DCE.

Therefore, based on its review, the NRC staff finds that the initial and updated DFPs contain the information required by 10 CFR 72.30(b) and (c) and that Energy Northwest has provided reasonable assurance that funds will be available to decommission the CGS ISFSI. In addition to the NRC staff's review of Energy Northwest's initial and updated DFPs, the NRC staff completed an environmental review. On March 6, 2019, the NRC staff published the results of that review in an environmental assessment and finding of no significant impact in the *Federal Register* (84 FR 8124). The NRC staff determined there were no environmental impacts from the NRC staff's review and approval of Energy Northwest's initial and updated DFPs.

If you have any questions regarding this matter, please contact me at (301) 415-5722 or Pamela Longmire, Ph.D. of my staff, at (301) 415-7465.

Sincerely,

/RA/

Ilka Berrios, Acting Chief
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No.: 72-35
CAC No: 001028
EPID No.: L-2017-FPR-0016

Enclosure:
Environmental Assessment

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NORTHWEST'S INITIAL AND UPDATED DECOMMISSIONING FUNDING PLAN
FOR COLUMBIA GENERATING STATION'S INDEPENDENT SPENT FUEL
STORAGE INSTALLATION, DOCUMENT DATE: February 20, 2019

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