## POLICY ISSUE NOTATION VOTE

### **RESPONSE SHEET**

TO:	Annette Vietti-Cook, Secretary		
FROM:	Commissioner Wright		
SUBJECT:	SECY-20-0095: Denial of Petition for Rulemaking to Access the Decommissioning Trust Fund for the Disposal of Large Components (PRM-50-119; NRC-2019-0083)		
Approved X	Disapproved	Abstain	Not Participating
COMMENTS:	Below X Atta	ched X None	e
	nber 16, 2021. Vote is be h were inadvertently not i		
Entered in STA Yes X No	<u>RS</u>	Signature  December 20, 2021  Date	

# Commissioner Wright's Comments on SECY-20-0095: Denial of Petition for Rulemaking to Access the Decommissioning Trust Fund for the Disposal of Large Components (PRM-50-119; NRC-2019-0083)

I appreciate the staff's consideration of this petition for rulemaking, which is based on a concern affecting a large number of power reactor licensees. Currently, approximately 15 reactor pressure vessel heads and 130 steam generators have been removed from reactors and are being stored in specially constructed structures at reactor sites around the country. Most licensees choose to incur the lower operating cost of storing these major radioactive components (MRC) and defer their disposal until decommissioning even though this results in a higher total cost to licensees and their customers and rate payers. Licensees choose this option primarily because the NRC has considered the cost of MRC disposal before decommissioning as an operational expense that should be accomplished using operating funds, even though licensees are required to save for the disposal of MRCs as part of their decommissioning planning. If a licensee has not established "sub-accounts" in its decommissioning trust fund (DTF) and has instead comingled funds for radiological and nonradiological decommissioning, its options for accessing the money saved in the DTF prior to decommissioning is limited. A licensee may request reimbursement from the trustee once decommissioning begins, potentially decades after the cost was incurred. Alternatively, a licensee may request an exemption to withdraw funds prior to decommissioning.

The staff recommends denying the petition because the petitioner's request is addressed by existing regulations, including the use of exemptions; however, the criteria for evaluating these exemption requests are not transparent and submitted exemption requests are often withdrawn. According to the petitioner, this lack of regulatory certainty has discouraged licensees from seeking exemptions and is a main driver for its petition for rulemaking. The staff believes it would be difficult to develop generally applicable criteria in rulemaking that are both site and time specific and do not require a case-by-case review because approval of each request for an early withdrawal from the DTF would be based on site-specific considerations, the current financial strength of the licensee, and overall economic conditions and outlook. Given the difficulties in creating generally applicable requirements, I approve the staff's recommendation to deny this petition for rulemaking. I also approve publication of the *Federal Register* notice denying the petition, subject to the attached edits.

While I support denial of this petition, I believe more can be done to address this issue and improve transparency and regulatory certainty for requesting exemptions. The staff's primary concern with allowing the use of the DTF for the disposal of MRCs during operations is the uncertainty associated with changes in economic conditions combined with the opportunity loss from withdrawals from the DTF. However, any funds withdrawn for MRC disposal would have been saved in the DTF for this specific purpose; it is only a matter of when the activity will occur. Further, the petitioner asserts that MRC disposal costs typically are less than 1% of the DTF and can easily be made-up, especially if the licensee has sought license renewal or subsequent license renewal. In response to my questions on this paper, the staff acknowledged that decommissioning trust fund earnings are typically 7-13 percent between reporting cycles (every two years during operations), which exceeds the two percent annual rate of return assumed by NRC regulations. Operational experience has also shown that licensees are able to promptly address shortfalls. For example, even during the economic downturn in 2008, licensees recovered from shortfalls within a few reporting cycles. The staff also indicated during a briefing on this paper that high-level criteria similar to those proposed by the petitioner could form the basis for requesting an exemption and provide the necessary information for the staff to

any shortfall could be made up before decommissioning.

-

<sup>&</sup>lt;sup>1</sup> As the petitioner notes, this can be demonstrated using a site-specific cost estimate that shows that the DTF would continue to meet the decommissioning funding assurance requirements, the DTF would have sufficient funds to account for unforeseen events after the withdrawal, and that

consider when determining whether funds can be withdrawn from the DTF for MRC disposal during operations. The staff should develop guidance<sup>2</sup> to notify licensees of the NRC's position on the use of the DTF during operations for MRC disposal, including what information would assist the staff in assessing an exemption request. The staff should determine the most appropriate and timely way to provide this clarifying guidance.

-

<sup>&</sup>lt;sup>2</sup> The NRC has previously issued similar guidance, including NUREG-1791, "Guidance for Assessing Exemption Requests from the Nuclear Power Plant Licensed Operator Staffing Requirements Specified in 10 CFR 50.54(m)," (Agencywide Document Access and Management System (ADAMS) Accession No. ML052080125); Interim Staff Guidance NSIR/DRP-ISG-02, "Emergency Planning Exemption Requests for Decommissioning Nuclear Power Plants" (ML14106A057); and guidance on exemptions from respirator fit-testing and medical evaluation requirements during the COVID-19 public health emergency (ML20099G757).

**DAW Edits** [7590-01-P]

**NUCLEAR REGULATORY COMMISSION** 

10 CFR Part 50

[Docket No. PRM-50-119; NRC-2019-0083]

Access to the Decommissioning Trust Fund for the Disposal of Large

Components

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking; denial.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking, dated February 22, 2019, submitted by Gerard P. Van Noordennen on behalf of EnergySolutions, LLC (the petitioner). The petition was docketed by the NRC on March 20, 2019, and was assigned Docket No. PRM-50-119. The petition requested that the NRC revise its regulations to allow access to the decommissioning trust fund for the removal of major radioactive components before the permanent cessation of operations and revise the definition of *Decommissioning*. The NRC is denying the petition because the petitioner does not raise a significant safety or security concern, and this subject area is adequately covered by existing regulations. The NRC's current regulations and oversight activities continue to provide for the reasonable assurance of adequate protection of public health and safety.

**DATES:** The docket for PRM-50-119 is closed on **[INSERT DATE OF PUBLICATION**IN THE FEDERAL REGISTER].

**ADDRESSES:** Please refer to Docket ID NRC-2019-0083 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- Federal Rulemaking Web Site: Go to <a href="https://www.regulations.gov">https://www.regulations.gov</a> and search for Docket ID NRC-2019-0083. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; email: <a href="mailto:Carol.Gallagher@nrc.gov">Carol.Gallagher@nrc.gov</a>. For technical questions, contact the individuals 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 <a href="https://www.nrc.gov/reading-rm/adams.html">https://www.nrc.gov/reading-rm/adams.html</a>. 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, 301-415-4737, or by email to <a href="pdf.resource@nrc.gov">pdf.resource@nrc.gov</a>. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that it is mentioned in the SUPPLEMENTARY INFORMATION section.
- Attention: The PDR, where you may examine and order copies of public documents is currently closed. You may submit your request to the PDR via email at <a href="mailto:PDR.Resource@nrc.gov">PDR.Resource@nrc.gov</a> or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Solomon Sahle, telephone:

301-415-3781; email: Solomon.Sahle@nrc.gov, or Shawn Harwell, telephone: 301-415-1309; email: Shawn.Harwell@nrc.gov. Both are staff of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

#### SUPPLEMENTARY INFORMATION:

#### I. The Petition

Section 2.802 of title 10 of the *Code of Federal Regulations* (10 CFR), "Petition for rulemaking—requirements for filing," provides an opportunity for any interested person to petition the NRC to issue, amend, or rescind any regulation. On February 22, 2019, the NRC received a petition for rulemaking (PRM) from Gerard P. Van Noordennen on behalf of EnergySolutions, LLC (ADAMS Accession No. ML19079A293). The petition requested the NRC revise the definition of *Decommissioning* in § 50.2, "Definitions," and amend § 50.82, "Termination of license," to allow access to the decommissioning trust fund to pay for the disposal of "major radioactive components" before the permanent cessation of operations at nuclear power plants. That term is currently defined in § 50.2: "*Major radioactive components* means, for a nuclear power reactor facility, the reactor vessel and internals, steam generators, pressurizers, large bore reactor coolant system piping, and other large components that are radioactive to a comparable degree."

The petition suggested that granting the petition would remove unnecessary burden from licensees who store major radioactive components on their sites during

plant operations because they have limited operating funds and cannot use decommissioning funds for the disposal of these components.

The NRC published a notice of docketing and request for comment in the *Federal Register* on June 12, 2019 (84 FR 27209).

#### II. Public Comments on the Petition

#### A. Overview of Public Comments

The public comment period closed on August 26, 2019. The NRC received a total of six public comment submissions, with six unique comments from the general public and industry. Five commenters supported the petition and one commenter opposed the petition.

#### B. NRC Response to Public Comments

<u>Comment</u>: One commenter suggested an approach to allow the use of excess decommissioning trust funds for disposal of major radioactive components. In this approach, the NRC could allow operators to reallocate excess decommissioning trust funds for operational expenses through a two-step process: (1) excess funds are identified and returned from holder; and (2) operator uses returned funds to manage operational expenses, including disposal of large components.

<u>NRC Response</u>: The process described in the comment is available now, upon request by a licensee through the exemption process (§ 50.12, "Specific exemptions"), which requires a site-specific review and approval by the NRC. A projected excess in the decommissioning trust fund is one factor that the NRC would consider in reviewing

an exemption request. Other potential factors include: the size of the excess compared to the site-specific cost estimate (SSCE), whether the expense is included in a SSCE, evidence that funds have been collected or set aside for the activity in a comingled decommissioning trust fund, and availability of rate collection as a means to resolve a shortfall in radiological decommissioning funding. Any decision on an exemption request to use decommissioning funds to dispose of major radioactive components during operation would be based on a totality of the information in the request and any other information of which the NRC is aware. It should be noted that cost estimates for decommissioning are less accurate the further out in time the plant is from decommissioning. Thus, a release of funds without NRC approval whenever an excess is identified by the licensee would diminish decommissioning funding assurance, even if the excess is identified by comparison to a SSCE. The NRC has previously addressed this issue in the denial of PRM-50-88 (73 FR 62220; October 20, 2008).

<u>Comment</u>: One commenter stated that operators are making a business decision to store large components during a plant's operational period and dispose of the major radioactive components with decommissioning trust funds once the decommissioning period begins, despite storage and monitoring costs. The commenter states that this results in a potential for loss of control of radiological material, if improperly stored/monitored.

**NRC Response**: Existing NRC regulations ensure adequate control of radiological material, including major radioactive components that have been removed from service. Proper storage and monitoring of radiological material is addressed through the NRC's onsite inspection procedures.

<u>Comment</u>: One commenter stated that the NRC should consider early use of decommissioning trust funds by licensees if the disposal costs are specifically included in the cost estimate. The commenter stated that this could be achieved either by the licensee preparing a SSCE that included the items for which excess funds are to be used, or by the NRC revising the generic formula for trust fund calculation to require additional funds to account for these waste volumes, effectively increasing the estimated waste volume factor of the formula. The commenter noted that a change to the generic formula in this manner is problematic because some basis would be required to account for later reducing the waste volume based on operational disposal activities, which may be an ongoing or repeated activity during the operational life of a facility.

NRC Response: The NRC agrees with the commenter that a revision to the § 50.75 Table of Minimum Amounts would be problematic. The formulas provided in this table are generic and designed to provide a reasonable estimate of radiological decommissioning costs for the facility. Revising the table to account for the disposal of major radioactive components prior to decommissioning would be difficult due to several factors, including site-specific variations in the generation and disposal of these components. Nonetheless, licensees can use the existing formula, or an SSCE, as part of a demonstration that excess funds exist in the decommissioning trust fund to support either an exemption request or for other purposes, such as the reallocation of other funds. Projected excess funds would be one factor the NRC would consider when reviewing an exemption request. The staff notes the determination of excess funds relies on long-term projections that may prove inaccurate because unpredictable changes in economic conditions could result in future shortfalls in the decommissioning trust fund. Therefore, in reviewing an exemption request, the NRC would consider the

Commented [A1]: Please update this response to match the Commission direction on the table of minimum amounts in the SRM for SECY-18-0085.

totality of information provided in the request and any other information of which the NRC is aware.

<u>Comment</u>: One commenter stated that an "innovative financial approach" that could provide for early removal of large parts would be the establishment by the NRC of a process whereby a licensee can have access to excess decommissioning trust funds (where "excess" should consider spent fuel management funds, whether comingled or not) that can only be used for specific purposes by the licensee, such as management of large component/operational wastes or other items that will contribute to the ultimate decommissioning of the facility.

**NRC Response**: Under the NRC's existing regulatory framework, licensees can request access to excess decommissioning funds on such a basis through the exemption process.

<u>Comment</u>: Three commenters stated that nuclear utilities should have the flexibility to use decommissioning trust funds during operations to facilitate the timely disposal of these components in a cost-effective manner to maximize the reduction in disposal cost and therefore aid in ensuring that ample decommissioning trust funds remain available when full decommissioning takes place.

**NRC Response**: If excess decommissioning trust funds are available (e.g., as determined by comparing decommissioning fund growth against an SSCE), then licensees may use existing procedures to access the available funds. If excess funds are not available, then licensees may use operating revenues or continue to store the

components on site until such time as either excess funds are available (and then request an exemption to use those funds) or until decommissioning begins.

<u>Comment</u>: Two commenters stated that the industry and NRC have experience with the decommissioning of nuclear power plants and the time has come to modernize the decommissioning regulatory process.

<u>NRC Response</u>: The NRC is currently pursuing decommissioning improvements in a separate rulemaking, "Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning" (82 FR 13778).

#### III. Reasons for Denial

The NRC is denying the petition because a licensee may access the decommissioning trust fund to pay for the disposal of major radioactive components (1) by requesting reimbursement when submitting their decommissioning cost estimate per § 50.82 or (2) by requesting an exemption under § 50.12 to permit withdrawal from the decommissioning trust fund prior to decommissioning. Although the Commission has stated that trust fund withdrawals for disposal of major radioactive components would be granted only "in extraordinary circumstances" (73 FR 62222; October 20, 2008), the NRC reviews each exemption request based on the merit of the facts provided in the request.

While the petitioner noted that only "excess" funds would be used from the decommissioning trust fund to pay for the disposal of major radioactive components, the NRC notes that whether there is an excess would be based on economic projections. Economic projections are less accurate the further out in time they attempt to project,

Commented [A2]: This reference is to the FRN for the regulatory basis. If the FRN for the proposed rule is issued before this FRN, please include the reference for that FRN

and, therefore, changes in economic conditions combined with withdrawals from the decommissioning trust fund could potentially result in future shortfalls in the fund.

Nevertheless, a projected excess is one factor that the NRC would consider in reviewing an exemption request. Other potential factors include: the size of the excess compared to the SSCE, whether the expense is included in a SSCE, evidence that funds have been collected or set aside for the activity in a comingled decommissioning trust fund, and availability of rate collection as a means to resolve a shortfall in radiological decommissioning funding. Any decision on an exemption request to use decommissioning funds to dispose of major radioactive components during operation would be based on a totality of the information in the request and any other information of which the NRC is aware. These circumstances are site-specific and dependent on the unique financial status of each licensee.

The staff believes it would be difficult to develop generally applicable requirements to address the use of decommissioning trust funds for this purpose and therefore, more efficient to review such requests on a case-by-case basis. Therefore, the staff considers an exemption to be an adequate means for licensees to request a withdrawal from their decommissioning trust fund for the disposal of major radioactive components. If the staff sees an increase in exemption requests to withdraw decommissioning funds prior to decommissioning, then the NRC could reconsider whether addressing the issue through rulemaking would reduce the need for exemptions and be more efficient for the agency. Such reconsideration will include any experience and insights the staff has gained in evaluating exemption requests at that time.

Additionally, some licensees successfully pursued reallocating funding streams that would otherwise have been added to their decommissioning trust fund by establishing "sub-accounts" in their decommissioning trust funds. Such sub-accounts are not regulated by the NRC and, therefore, can be used at the discretion of the

10

licensee at any time during operations or decommissioning. For rate-regulated

licensees, these sub-accounts are typically funded with Public Utility

Commission-authorized rate collections once it is established that the trust dedicated to

radiologically decommissioning is sufficiently funded in accordance with NRC

regulations. While non-rate-regulated (i.e., merchant) licensees do not have access to

rate collection, they may still fund such sub-accounts through alternate means or request

a reallocation of funds across their decommissioning trust fund accounts using the

10 CFR 50.12 exemption process. The NRC is denying the petition because it does not

raise a significant safety or security concern and the requested amendments are not

necessary to enable licensees to access excess decommissioning funding prior to

decommissioning for the purpose of disposal of major radioactive components under

existing regulations in 10 CFR part 50.

IV. Conclusion

For the reasons cited in this document, the NRC is denying PRM-50-119. The

NRC reaffirms that its existing regulations continue to provide reasonable assurance of

adequate protection of public health and safety.

Dated Month XX, 20202022.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook, Secretary of the Commission.