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

SECRETARY

October 31, 2011

COMMISSION VOTING RECORD

DECISION ITEM: SECY-11-0088

TITLE: DENIAL OF PETITION FOR RULEMAKING REQUESTING AMMENDMENTS TO 10 CFR PART 50 REGARDING DECOMMISSIONING AND DECOMMISSIONING FUNDING (PRM-50-94)

The Commission (with Commissioners Svinicki, Apostolakis, and Ostendorff approving and Chairman Jaczko and Commissioner Magwood approving in part and disapproving in part) acted on the subject paper as recorded in the Staff Requirements Memorandum (SRM) of October 31, 2011.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:
1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
EDO
PDR

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VOTING SUMMARY - SECY-11-0088

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACZKO	X	X			X	8/23/11
COMR. SVINICKI	X				X	10/18/11
COMR. APOSTOLAKIS	X				X	10/17/11
COMR. MAGWOOD	X	X			X	10/6/11
COMR. OSTENDORFF	X				X	8/8/11

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Chairman Gregory B. Jaczko

SUBJECT: SECY-11-0088 – DENIAL OF PETITION FOR RULEMAKING REQUESTING AMENDMENTS TO 10 CFR PART 50 REGARDING DECOMMISSIONING AND DECOMMISSIONING FUNDING (PRM-50-94)

Approved in Part __X__ Disapproved in Part __X__ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached _X__ None ___

SIGNATURE

4/13/11

DATE

Entered on "STARS" Yes _X__ No ___

Chairman Jaczko's Comments on
SECY-11-0088, "Denial Of Petition For Rulemaking Requesting Amendments To 10 CFR Part 50 Regarding Decommissioning And Decommissioning Funding (PRM-50-94)"

I approve in part and disapprove in part the staff's recommendation to deny PRM-50-44. The intent of the petitioner appears to be to obtain changes to the regulations that would improve the accumulation and adequacy of decommissioning funding and encourage quicker remediation of decommissioned sites.

Two of the changes requested by the petitioner would increase the frequency of licensees reporting of the status of decommissioning funding for plants that are more than 5 years from their license expiration and within 5 years of their license expiration. Additional reporting would increase the number and frequency of reviews by the NRC staff. As discussed in SECY-10-0084 and its enclosures, many licensees are more reliant on equity markets and market forces to ensure the adequate accumulation of decommissioning funding. Also, given the large number of shortfalls that were reported in SECY-09-0146, changing circumstances indicate that now is a reasonable time to reconsider the frequency that licensees report the status of decommissioning funding on a routine basis. More frequent reviews by the NRC staff will provide more opportunities to identify shortfalls and likely result in more timely corrections of funding shortfalls. The request to seek rulemaking to revise the reporting requirement should be granted, and the draft *Federal Register* Notice and draft letter to the petitioner revised accordingly.

The petitioner requested a change to the rules that would only allow States to control and mange decommissioning funds. I agree with the staff, as discussed in the SECY-11-0088, that the NRC does not have the authority to require a State to control and manage decommissioning funds. The response to the petitioner and the *Federal Register* Notice should be expanded concerning the petitioner's request to restrict funding mechanism to a trust fund controlled by the State to describe how the current regulations would permit such an arrangement. Although the regulations do not limit licensees to this option, I believe such an arrangement is available to licensees for States that are deemed a reliable, qualified trustee. The request to seek rulemaking to require States to control and manage decommissioning funds should be denied.

The petitioner requested that the regulations be changed so that licensees would have to correct any shortfalls in their decommissioning funds within 90 days. Currently, the timeframe that licensees need to correct shortfalls in decommissioning funding is not in regulation, but can be found in regulatory guidance (i.e., Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors"). I believe it is important and necessary for clarity and effective NRC oversight that the timeframe be included in the regulations–not merely in regulatory guidance. The timeframe that is most appropriate for shortfalls to be corrected should be explored with stakeholders during the rulemaking process. The request to seek rulemaking to include the timeframe that licensees must make up any identified short fall should be granted in part, and the draft *Federal Register* Notice and draft letter to the petitioner revised accordingly.

Lastly, the petitioner has requested that the NRC revise its regulations to impose an absolute 60-year time limit on SAFSTOR. I agree with the staff that the regulations should continue to contain the flexibility that allows for a reconsideration of the decommissioning timeframe when necessary to protect public health and safety. Reviewing this petition for rulemaking has led me to step back and consider our current regulations in 10 CFR Part 50.82 in a larger sense. I do not believe that allowing a licensee to have the extremely long period of 60 years to clean up and remove a shut-down facility is based on strong technical arguments, nor is it good policy.

These facilities should be cleaned up and their footprints reduced as much as possible so that these areas can be returned to other productive uses within the community.

The technical bases normally cited for allowing 60 years to decommission are: 1) the reduction in occupational dose, and 2) the current lack of low-level radioactive waste (LLW) disposal facilities. As discussed below, I do not believe that either of these provides adequate justification for a time period as lengthy as 60 years. Instead, I would propose that 30 years is a more appropriate timeframe.

The 1996 Generic Environmental Impact Statement for license renewal (NUREG-1437, Vol. 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants") estimates occupational doses of 931 person-rem for DECON and about 320 person-rem for SAFSTOR for a PWR (Table 7.5). The difference in doses between the two decommissioning options is a factor of three. The 1988 version of the GEIS for decommissioning (NUREG-0586, "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities") estimates that extending the SAFSTOR period from 30 years to 100 years was estimated to result in very little further reduction in worker dose (308 person-rem compared to 333 person-rem for a PWR, or approximately 8%) (Table 4.3-2).

Interestingly, the 2002 Supplement to NUREG-0586 ("Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities") cites actual occupational doses from decommissioning reactors. When comparing DECON with SAFSTOR, Table 4-1 indicates almost no dose reduction in occupational doses for PWRs that undergo SAFSTOR and a reduction of a factor of two to four for BWRs that undergo SAFSTOR.

I do not believe that the very small reduction of occupational dose that would range between zero and approximately 8% outweighs the burden on a community of having an unused, radioactively-contaminated, industrial-type facility remaining in place for 60 years rather than a shorter period. In addition, NUREG-0586, Supplement 1, states that "Occupational doses to individual workers during decommissioning activities are estimated to average approximately 5 percent of the regulatory dose limits in 10 CFR Part 20, and to be similar to, or lower than, the doses experienced by workers in operating facilities" (page 4-36). If such doses are acceptable during the operational phase of the facility, then they are also acceptable during the decommissioning phase. This is especially true when considering the fact that being allowed to operate a nuclear plant is not required to protect public health and safety, but decommissioning is.

NUREG-0586, Supplement 1, makes a similar statement regarding doses to the public; "To date, effluents and doses during periods of major decommissioning have not differed substantially from those experienced during normal operations" (page 4-37). The 1988 version of NUREG-0586 estimates a public dose of 21 person-rem for DECON and 3 person-rem after a SAFSTOR period of 30 years for a PWR (Table 4.3-2). These same dose estimates are repeated in the 1998 GEIS for license renewal. Both of these doses are very small and hardly justify a waiting period of 60 years.

As for LLW disposal, the GEIS for license renewal (NUREG-1437, Vol. 1) estimates that an operating reactor generates about 2,000,000 ft^3 of LLW over the course of a 40-yr operating life. DECON would result in approximately 250,000 ft^3 of LLW for a PWR and 530,000 ft^3 of LLW for a BWR; hence, it would result in approximately 12%-25% of the waste that was generated during operations. If the reactor operates for 60 years instead of 40, the percentage would be even lower because of the waste that would be generated during the additional 20 years of operations. These waste volumes would be reduced after 30 years of decay.

Approximately 96% of the waste volume from a decommissioned reactor is expected to be Class A waste (NUREG/CR-5884, "Revised Analyses of Decommissioning for the Reference Pressurized Waste Reactor Power Station," page xxi), and there is an operating waste disposal facility capable of taking Class A waste from across the country. Therefore, this does not seem to be a distinguisher. Given all this information, I see no reason why disposal space should become a major factor for allowing a plant to sit for 60 years.

Although not part of the safety basis in the first place, I note that the cost of decommissioning also does not appear to be a factor. The present value cost of DECON is estimated to be $102 million and the present value cost of SAFSTOR is estimated to be $93-$102 million (NUREG-1437, Table 7.8). This extremely small difference (if any) in cost is certainly outweighed by the variables and uncertainties that come with estimating costs 60 years in the future. As this NUREG states, "Because total decommissioning costs are uncertain, the amount of financial savings that results from delaying decommissioning is also uncertain." Some may argue that those 60 years are needed for the growth of decommissioning funds; however, economics is not something that we consider when evaluating whether an option adequately protects the public health and safety. As stated in response to a public comment on the proposed decommissioning rule (NUREG-1221, "Summary, Analysis, and Response to Public Comments on Proposed Amendments to 10 CFR parts 30, 40, 50, 51, 70, and 72"), "Choice of a [decommissioning] alternative can also depend on factors such as the economics of one alternative versus another and the expected ultimate use of the site. These factors are not safety-related and hence are not part of NRC's decision-making responsibility."

Some may also argue that, given that both SAFSTOR and DECON are estimated to have small environmental impacts and both adequately protect public health and safety, then there is no compelling reason not to allow 60 years of SAFSTOR. I think that the opposite is true. As a parallel, even though storage of LLW can be protective of public health and safety, the agency has stated that it prefers disposal of LLW rather than storage because disposal is the safest and most secure long-term management approach. The same holds true for the decommissioning of a reactor; that is, unnecessary delay in a permanent solution is not the safest or most secure approach.

These facts lead me to conclude that the SAFSTOR period should be long enough to benefit from the sharp drop-off in occupational dose resulting from the first years of decay, but that additional delay is not proportionately beneficial. Therefore, I propose that staff undertake a rulemaking to shorten the decommissioning time in 10 CFR 50.82 to 30 years. The request to seek rulemaking concerning SAFSTOR and ENTOMB decommissioning options should be granted in part, and the draft *Federal Register* Notice and draft letter to the petitioner revised accordingly.

Gregory B. Jaczko 4/23/11
Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER SVINICKI

SUBJECT: SECY-11-0088 – DENIAL OF PETITION FOR RULEMAKING REQUESTING AMENDMENTS TO 10 CFR PART 50 REGARDING DECOMMISSIONING AND DECOMMISSIONING FUNDING (PRM-50-94)

Approved __XX__ Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _XX_ Attached _XX_ None ___

I approve publication of the *Federal Register* notice (Enclosure 1) denying PRM-50-94, subject to the edits of Commissioner Apostolakis and the additional edits attached. I approve the letter to the petitioner subject to the edits of Commissioner Ostendorff.

SIGNATURE

10/18/11

DATE

Entered on "STARS" Yes ✓ No ___

option would not be returned to unrestricted use within a period of 60 years from the time reactor operation ceases. The petitioner requests that the NRC amend its regulations to clarify that a licensee's choice of alternative decommissioning strategy must result in the return of the site to unrestricted use within 60 years and that the NRC eliminate the ENTOMB strategy as an option.

IV. Public Comments on the Petition

The NRC received one set of 6 comment on PRM-50-94 from the Nuclear Energy Institute (NEI or the commenter), dated May 12, 2010 (ADAMS Accession No. ML101340042). The NEI's comments and the NRC responses are provided in this section.

Comment 1: **Frequency of Reporting Decommissioning Funding Status**

The NEI stated that requiring more frequent reporting on the status of decommissioning funds will not necessarily yield useful or actionable information when dealing with long-term investments, such as nuclear power plant decommissioning trust funds. The basis of the comment was that more frequent reporting during financially turbulent times will necessarily produce information reflecting short-term market fluctuations. The NEI stated that precipitous modifications to long-term investment strategies could result in tax consequences, negatively affect corporate credit ratings, and divert capital from the operation of existing plants. The NEI described how NRC regulations require more detailed cost estimates as a licensee approaches the cessation of operations and license termination. The NEI stated that NRC regulations allow the NRC to request information to confirm a licensee's compliance with financial assurance requirements. The NEI stated that it disagreed with the suggested revision because the petitioner did not provide an adequate basis for increasing the frequency of the decommissioning fund status reports required by 10 CFR 50.75(f)(1) and (2).

NRC Response

Each licensee's report provides the funding target, the amount accumulated for decommissioning, the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings and rates of other factors used in funding projections, an estimate of assured future collections, contracts that are relied upon to provide decommissioning funding, modifications to the methods the licensee uses to provide financial assurance, and material changes to trust agreements. The NRC uses the information to conduct a compliance check and to assess the ability of the licensee to continue to provide financial assurance in the future. Depending on the result of the NRC's assessment, the information may indeed be actionable and may indicate that additional oversight is appropriate for a particular licensee. For example, during the financially turbulent times of 2009, the NRC increased the frequency of reporting on decommissioning funding, and the information obtained was used as the basis for taking action at numerous reactor facilities that reported shortfalls in financial assurance.

The commenter's statement regarding the potential adverse effects of making precipitous changes in the investment strategy is a separate issue from the frequency of submitting a decommissioning fund status report. Submitting a fund status report does not require changes in the investment strategy. The commenter provides no basis for the conclusion that a more frequent reporting requirement would cause any of the adverse effects listed. Similarly, the commenter's description of the decommissioning cost estimates required as a power reactor approaches the cessation of operations and license termination are issues separate from the frequency of the fund status report. The cost estimates are required to determine the amount of funds the licensee will need; the report provides the information needed to assure the licensee's ability to provide the funds.

The commenter's statement, that the NRC can require more frequent reporting under its existing rules, is correct. ~~For this reason, as described in Section V of this document, the NRC is denying the petitioner's request to increase the reporting frequency of the decommissioning fund status report.~~

Deleted: The NRC disagrees that increasing the frequency of reporting during financially turbulent times would merely produce only short-term market information and fail to yield any useful or actionable information. Market conditions affect the licensee's trust fund balance; however, the reports provide much more information that is useful to the NRC.

overall approach to decommissioning funding in view of the fact that most licensees maintained adequate funds during the economic downturn in 2008 and 2009. The NEI stated that over 70 percent of operating reactor units did not experience shortfalls in decommissioning funding in 2008. The NEI stated that the NRC should maintain the flexibility to work with a licensee in a reasonably expeditious manner, informed by the amount of the shortfall, current market conditions, and the date the funds will likely be needed.

NRC Response

The provisions of 10 CFR 50.75(e) allow several methods for a licensee to provide financial assurance in addition to making deposits into a trust fund. The NRC determined that each of the methods provides adequate financial assurance. The NRC agrees that the flexibility provided by its existing rules would be reduced if all funding shortfalls were required to be corrected by making deposits into the decommissioning trust fund within 90 days. The NRC also agrees that the agency's current requirements for the timeline to address funding shortfalls has continued to provide assurance of adequate funding.

Comment 4: **Alternative Decommissioning Strategies**

The commenter stated that, to the extent that the petition implicates enforcement action, the appropriate response should be through the request for enforcement process of 10 CFR 2.206, rather than the petition for rulemaking process of 10 CFR 2.802.

The commenter provided several reasons for its conclusion that the NRC should not amend its regulations or guidance to limit the SAFSTOR option or eliminate the ENTOMB option for decommissioning power reactors. The commenter stated that the information presented in the petition regarding SAFSTOR and ENTOMB does not appear in the NRC's regulations. Rather, it is found in an NRC fact sheet dated January 2008, and in several NRC guidance documents. The commenter concluded that the petition appears to request modification of the fact sheet and possibly the guidance documents, rather than the NRC's regulations. The commenter stated that the NRC's radiological criteria for license termination, Subpart E to 10 CFR

Part 20, were developed through a notice-and-comment rulemaking process. The rules of Subpart E permit license termination under restricted conditions. The commenter emphasized two provisions of 10 CFR 50.82(a)(3) that should be considered in developing a response to the petitioner's request: 1) the regulation permits the extension of the decommissioning period beyond 60 years only when necessary to protect public health and safety, and 2) the Commission will consider the unavailability of waste disposal capacity in its evaluation of the licensee's ability to carry out decommissioning. The commenter disagreed that the existing regulations jeopardize public health and safety. The commenter stated that the NRC does not have the authority to require the Department of Energy or the Department of Defense to store used nuclear fuel or other high-level radioactive wastes at sites under the jurisdiction of those agencies.

NRC Response

The NRC agrees with the commenter that requests for enforcement should not be addressed using the petition for rulemaking process.

In the context of a petition for rulemaking, the NRC concluded that the petitioner requests a change in the regulations to limit the use of SAFSTOR and eliminate the use of ENTOMB. The NRC agrees that its existing regulations and guidance allow for license termination under restricted use conditions; consider the availability of waste disposal capacity on a licensee's ability to carry out decommissioning; and do not jeopardize public health and safety. The bases for these determinations are described in a number of NRC rulemaking FRNs, for example, in its 1988 rulemaking (53 FR 24018; June 27, 1988). The NRC agrees that it does not have the authority to require the Department of Energy or the Department of Defense to store spent nuclear fuel or high-level waste at sites under the jurisdiction of those agencies, on grounds that Congress has not delegated such authority to the NRC.

Deleted: The NRC disagrees that the petitioner did not request the NRC to amend its regulations to limit the use SAFSTOR and eliminate the use of ENTOMB as options for decommissioning a nuclear reactor. The petitioner stated that the SAFSTOR option is written into the rules, and that the ENTOMB option should be stricken from the rules. In fact, the financial assurance provisions of 10 CFR 50.75(e)(1)(i) and (ii) refer to a safe storage period. The regulations are silent on the ENTOMB option.

reconsider the conclusions reached in the 1997 rulemaking process. On that basis, the NRC denies the request to re-impose a requirement for a reactor facility to decontaminate its facility to meet unrestricted use criteria in all cases.

The petitioner requests the NRC to amend its regulations to prohibit a licensee from using a SAFSTOR facility for any activities related to other reactors onsite. Similar to the petitioner's other requests, the bases for this request are the petitioner's beliefs that the NRC promised the host community that a site would be decommissioned and returned to unrestricted use within 60 years to avoid legacy sites with high-level waste disposal and long-term storage facilities. The Commission notes that it is possible that the completion of decommissioning a facility in SAFSTOR could be delayed past the 60 year mark if the facility is used for activities related to an operating unit on the site. The need to use equipment shared by a shutdown unit and an operating unit could prevent completing the decommissioning of the shutdown unit until the operating unit was permanently shut down. However, the discussion of SAFSTOR in the Statement of Considerations demonstrated that the NRC's regulations allow the licensee to exceed the 60-year limit in cases where a shutdown unit is located on the same site as an operating unit, subject to NRC approval. In a case where the SAFSTOR facility shares equipment with an operating unit, the NRC would consider the risk of conducting decommissioning activities near an operating unit. That type of evaluation would necessarily depend on site-specific factors that are not well suited to codification in a rule.

The Commission shares the petitioner's concerns regarding legacy sites. To prevent the occurrence of legacy sites at reactor facilities, 10 CFR 50.75(f)(3) requires the licensee to submit a preliminary decommissioning cost estimate that includes an up-to-date assessment of the major factors that could affect the cost of decommissioning. The provisions of 10 CFR 50.54(bb) require the licensee to provide a plan for the management of spent fuel. These requirements work together before the end of operations to assure that the licensee has the financial ability to safely decommission the site and to manage the spent fuel. These requirements assure that a

In addition, the Commission recently issued a rule which requires licensees to minimize contamination, requires that licensees survey onsite for radiological hazards, including the subsurface soil and groundwater, and revises the financial assurance regulations.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER APOSTOLAKIS

SUBJECT: SECY-11-0088 – DENIAL OF PETITION FOR RULEMAKING REQUESTING AMENDMENTS TO 10 CFR PART 50 REGARDING DECOMMISSIONING AND DECOMMISSIONING FUNDING (PRM-50-94)

Approved __X__ **Disapproved** _____ **Abstain** _____

Not Participating _____

COMMENTS: **Below** ___ **Attached** _X_ **None** ___

I approve the staff's recommendation to deny the petition for rulemaking, subject to the attached edits.

SIGNATURE

10/17/11

DATE

Entered on "STARS" **Yes** _x_ **No** ___

Commissioner Apostolakis' edits to SECY-11-0088

[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Docket No. PRM-50-94

[NRC-2010-0004]

Petition for Rulemaking Submitted by Sherwood Martinelli

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking; denial.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC or the Commission) is denying a petition for rulemaking (PRM) submitted by Mr. Sherwood Martinelli (PRM-50-94). The petitioner requests that the NRC amend its regulations as they relate to decommissioning and decommissioning funding. Specifically, the petitioner requests that the NRC revise its reporting requirements, restrict funding mechanisms, require deposits within 90 days to cover shortfalls regardless of cause, amend the definition of the SAFSTOR decommissioning option, and eliminate the ENTOMB decommissioning option.

DATES: The docket for the petition for rulemaking, PRM-50-94, is closed on **[insert date of publication in the Federal Register]**.

ADDRESSES: You can access publicly available documents related to this petition for rulemaking using the following methods:

- **NRC's Public Document Room (PDR):** The public may examine and have copied, for a fee, publicly available documents at the NRC's PDR, O-1 F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.
- **NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly available documents created or received at the NRC are available online at the NRC Library at **http://www.nrc.gov/reading-rm/adams.html**. From this page, the public can gain entry into ADAMS, which provides text and image files of NRC's public documents. If you do not have access to ADAMS, or if there are problems in accessing the documents located in ADAMS, contact the NRC PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to **pdr.resource@nrc.gov**.
- **Federal rulemaking Web site:** Public comments and supporting materials related to this petition for rulemaking can be found at **http://www.regulations.gov** by searching on Docket ID: **NRC-2010-0004**. Address questions about NRC dockets to Carol Gallagher, telephone 301-492-3668; e-mail **Carol.Gallagher@nrc.gov**.

FOR FURTHER INFORMATION CONTACT: Aaron L. Szabo, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone: 301-415-1985 or e-mail: **Aaron.Szabo@nrc.gov**.

SUPPLEMENTARY INFORMATION:

I. Background

II. Avoiding Legacy Sites

a. Revise Reporting Requirements

b. Restrict Funding Mechanisms and Increase Financial Assurance

III. Changes to SAFSTOR and ENTOMB Decommissioning Options

IV. Public Comments on the Petition

V. Reason for Denial

I. Background

On December 23, 2009, the NRC received a petition for rulemaking filed by Mr. Sherwood Martinelli (the petitioner) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML093620175). The petitioner requests that the NRC amend its regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," to require yearly reporting by licensees on the status of the financial mechanisms used to ensure funding for the decommissioning of nuclear power plants, and biannual reporting if the license is within 5 years of expiration. The petitioner further requests that the NRC require additional deposits to the funding accounts within 90 days from the time a shortage is noted in the annual reports. The petitioner requests that the regulations be revised to require that licensees create a financial mechanism, such as a trust fund with a host State, controlled and managed by that State, to ensure that there is sufficient funding to pay for the ultimate decommissioning of the facility. The petitioner also requests that the NRC amend its regulations to clarify that a licensee's choice of alternative decommissioning strategy must result in the return of the site to unrestricted use within 60 years, and that the NRC eliminate the ENTOMB strategy as an option. On February 26, 2010, the NRC published a *Federal Register* Notice (FRN) (75 FR 8843) announcing the receipt and docketing of the petition for rulemaking as PRM 50-94 and requesting public comment from interested parties. The comment period closed on May 12, 2010.

The petitioner also makes two claims in PRM-50-94 that are not being addressed in the PRM process under 10 CFR 2.802, "Petition for rulemaking:" 1) Entergy Nuclear Operations, Inc. (Entergy) is violating NRC rules and regulations by allowing Indian Point Nuclear Generating Unit No. 1 (IP1) to remain in SAFSTOR, is wrongfully and illegally depending on parts of IP1 to help run Indian Point Nuclear Generating Units No. 2 and 3 (IP2 and IP3), and is using the reactor of IP1 as an illegal storage/dumping ground for radiological waste streams from the continued operations of IP2 and IP3; and 2) the NRC has negligently allowed certain licensees to violate the current regulations on funding and the filing of reports.

Regarding the first claim, the current NRC regulations do not disallow a unit from remaining in SAFSTOR and IP2 and IP3 are allowed to utilize structures, systems and components of IP1 in accordance with their 10 CFR Part 50 licenses. The NRC's recognition of this situation is evidenced by the Staff's statement in NUREG-1437, Supplement 38, "General Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3," (ADAMS Accession No. ML103350405) that "radioactive waste storage and process facilities located in IP1 provide additional waste processing services for IP2." The NRC has no regulations forbidding the storage of radioactive waste at a 10 CFR Part 50 licensee's facility, although these licensees must obtain NRC approval for onsite storage of radioactive waste. The NRC's regulations at 10 CFR Part 20, "Standards for Protection against Radiation," state the general requirements for ensuring that radioactive waste is stored safely and securely. Also, the NRC routinely inspects licensees to ensure radioactive waste is maintained safely and securely under the Reactor Oversight Process. To address the petitioner's second claim, this petition has been forwarded to the NRC's Office of the Inspector General for a determination of whether the claim qualifies as an allegation of wrongdoing.

Moved down [1]: To address the petitioner's second claim, this petition has been forwarded to the NRC's Office of the Inspector General for a determination of whether the claim qualifies as an allegation of wrongdoing.

Moved (insertion) [1]

Deleted: The Commission notes that while the petitioner does not specifically request enforcement action against any NRC licensee, any request of this type must be formally submitted as a request for enforcement action under 10 CFR Part 2, Subpart B, "Procedure for Imposing Requirements by Order or for Modification, Suspension, or Revocation of a License, or for Imposing Civil Penalties," Section 2.206. This petitioner previously filed such a request on August 22, 2009, and a notice of receipt of the request was published in the *Federal Register* on December 29, 2009 (74 FR 68873). That submission requested that the NRC suspend the operating license of any Entergy nuclear power plant with a decommissioning trust fund shortfall, take action to ensure that any shortfalls in the decommissioning trust funds be rectified, and take certain other actions to ensure that the integrity of the decommissioning trust funds is being evaluated under 10 CFR 2.206. Consideration of the merits of PRM-50-94 will not address issues related to the NRC's disposition of the petitioner's request for enforcement action under 10 CFR 2.206.¶
¶

II. Avoiding Legacy Sites

a. Revise Reporting Requirements

The petitioner requests that the NRC amend its requirements pertaining to the frequency

of reporting the status of decommissioning funding from once every 2 years to once every year, and from annual to biannual reporting if the license is within 5 years of expiration. Although no specific NRC requirement is cited, the Commission believes that the petitioner is referring to 10 CFR 50.75(f)(1), which requires each power reactor licensee to report to the NRC, on a calendar year basis, at least once every 2 years, on the status of its decommissioning funding for each reactor or part of a reactor that it owns.

The petitioner's basis and rationale for requesting these amendments is that he believes that with the current state of the economy, a 2-year reporting requirement is not adequate to ensure the safety and adequacy of funds set aside for the decommissioning of a nuclear power plant. The petitioner also believes that without this additional assurance, host communities and taxpayers would be left with legacy sites,[1] for which communities and taxpayers would be responsible for funding the decommissioning activities.

b. Restrict Funding Mechanisms and Increase Financial Assurance

The petitioner requests that the financial assurance section of the NRC's decommissioning funding requirements be replaced to require that, before nuclear power plant operations commence, licensees deposit or create a financial mechanism (such as a trust fund) with the host State to be controlled and managed by that State to ensure that there will be sufficient funding for the ultimate decommissioning of the facility. Also, the NRC should require that licensees make additional deposits into the fund within 90 days of the identification of any shortfalls in funding. The petitioner believes that these measures would provide the public reasonable assurance that sufficient funds for cleanup will be available at the time of decommissioning. The petitioner does not provide a specific citation for the regulatory text to be revised; however, decommissioning trust fund options are included in 10 CFR 50.75(e)(1).

[1] A legacy site is a facility that is in decommissioning status with complex issues and an owner who cannot complete the decommissioning work for technical or financial reasons. (73 FR 3812, 3813; January 22, 2008)

III. Changes to SAFSTOR and ENTOMB Decommissioning Options

The petitioner further requests that the "rules" governing alternative decommissioning strategies be modified. The first option for decommissioning is ENTOMB, which involves removing all fuel and radioactive fluids and wastes and possibly removing selected nuclear components. The remaining radioactive components are sealed into the containment structure. The second option is DECON, which involves the removal of radioactive components, total dismantlement of the facility, and decontamination of remaining structures to a level that permits release for unrestricted use and termination of the license. The last type is SAFSTOR, which is often considered "delayed DECON," and involves initially removing all fuel and radioactive wastes and liquids, maintaining the facility in a condition that allows the decay of radioactivity to reduce radiation levels at the facility, and then decontaminating and dismantling the facility. The alternative decommissioning options, DECON, SAFSTOR, and ENTOMB, are not defined in NRC regulations but are described in a number of NRC documents. For example, NUREG-1713, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Plants," (ADAMS Accession No. ML043510113) contains a description of the options, as does the NRC Fact Sheet, Decommissioning Nuclear Power Plants. Therefore, the NRC is treating this portion of the petition for rulemaking as a request to codify the options in 10 CFR 50.75, "Reporting and Recordkeeping for Decommissioning Planning," as modified by the petitioner.

The petitioner believes that the SAFSTOR decommissioning option allows licensees to turn the reactor sites into long-term high-level waste storage facilities. The petitioner cites the NRC Fact Sheet, Decommissioning Nuclear Power Plants (although the petitioner refers to it as "the current rule"), which states that a decision by a licensee to adopt a combination of DECON and SAFSTOR may be based on factors such as the availability of waste disposal sites. The petitioner believes that this wording creates a loophole whereby a site choosing the SAFSTOR

option would not be returned to unrestricted use within a period of 60 years from the time reactor operation ceases. The petitioner requests that the NRC amend its regulations to clarify that a licensee's choice of alternative decommissioning strategy must result in the return of the site to unrestricted use within 60 years and that the NRC eliminate the ENTOMB strategy as an option.

IV. Public Comments on the Petition

The NRC received one comment on PRM-50-94 from the Nuclear Energy Institute (NEI or the commenter), dated May 12, 2010 (ADAMS Accession No. ML101340042). The NEI's comments and the NRC responses are provided in this section.

Comment 1: **Frequency of Reporting Decommissioning Funding Status**

The NEI stated that requiring more frequent reporting on the status of decommissioning funds will not necessarily yield useful or actionable information when dealing with long-term investments, such as nuclear power plant decommissioning trust funds. The basis of the comment was that more frequent reporting during financially turbulent times will necessarily produce information reflecting short-term market fluctuations. The NEI stated that precipitous modifications to long-term investment strategies could result in tax consequences, negatively affect corporate credit ratings, and divert capital from the operation of existing plants. The NEI described how NRC regulations require more detailed cost estimates as a licensee approaches the cessation of operations and license termination. The NEI stated that NRC regulations allow the NRC to request information to confirm a licensee's compliance with financial assurance requirements. The NEI stated that it disagreed with the suggested revision because the petitioner did not provide an adequate basis for increasing the frequency of the decommissioning fund status reports required by 10 CFR 50.75(f)(1) and (2).

NRC Response

Each licensee's report provides the funding target, the amount accumulated for decommissioning, the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings and rates of other factors used in funding projections, an estimate of assured future collections, contracts that are relied upon to provide decommissioning funding, modifications to the methods the licensee uses to provide financial assurance, and material changes to trust agreements. The NRC uses the information to conduct a compliance check and to assess the ability of the licensee to continue to provide financial assurance in the future. Depending on the result of the NRC's assessment, the information may indeed be actionable and may indicate that additional oversight is appropriate for a particular licensee. For example, during the financially turbulent times of 2009, the NRC increased the frequency of reporting on decommissioning funding, and the information obtained was used as the basis for taking action at numerous reactor facilities that reported shortfalls in financial assurance.

Deleted: The NRC disagrees that increasing the frequency of reporting during financially turbulent times would merely produce only short-term market information and fail to yield any useful or actionable information. Market conditions affect the licensee's trust fund balance; however, the reports provide much more information that is useful to the NRC.

The commenter's statement regarding the potential adverse effects of making precipitous changes in the investment strategy is a separate issue from the frequency of submitting a decommissioning fund status report. Submitting a fund status report does not require changes in the investment strategy. The commenter provides no basis for the conclusion that a more frequent reporting requirement would cause any of the adverse effects listed. Similarly, the commenter's description of the decommissioning cost estimates required as a power reactor approaches the cessation of operations and license termination are issues separate from the frequency of the fund status report. The cost estimates are required to determine the amount of funds the licensee will need; the report provides the information needed to assure the licensee's ability to provide the funds.

The commenter's statement, that the NRC can require more frequent reporting under its existing rules, is correct. For this reason, as described in Section V of this document, the NRC is denying the petitioner's request to increase the reporting frequency of the decommissioning fund status report.

***Comment 2:* Require Trust Fund Management by the Host State**

The NEI stated that requiring the licensee's host State to manage the decommissioning trust funds and to periodically report on the status of such funds may not be constitutional. The NEI stated that management of funds by a State government does not immunize the funds from the effects of fluctuating market conditions, as demonstrated by the challenges associated with management of State pension funds. The NEI stated that the formation of subsidiaries and the buying and selling of property are legitimate means of doing business which do not clearly require an amendment to the NRC's regulations. The NEI stated that decommissioning funding, and continued compliance with the Commission's funding requirements, is already considered in the context of Commission reviews of license amendment requests related to changes in ownership and corporate structure.

NRC Response

The NRC does not need to reach the issue of constitutionality with respect to its authority to require a State government to manage a licensee's decommissioning trust funds. The NRC has no authority under the Atomic Energy Act of 1954, as amended, to require a State to act as a trustee.

Deleted: The commenter's other points do not address the petitioner's request, which was to prevent the licensee from holding the decommissioning trust funds. Whether or not a State government could immunize the decommissioning trust funds from the effects of fluctuating market conditions, funds held by a State would not be held by a licensee. Likewise, the statements discussing the legality of buying and selling property and the consideration of decommissioning funding adequacy in license transfer cases do not address the petitioner's request to prevent the licensee from holding the decommissioning funds. ¶

***Comment 3:* Require Deposits into Trust Fund Within 90 Days of a Shortfall**

The NEI stated that requiring that all funding shortfalls be corrected within 90 days of discovery, if enacted, could have two adverse effects on a licensee. First, the NEI states that depositing funds into a trust account within 90 days of reporting a shortfall would force a utility to pay an unnecessary premium for decommissioning funds that might not be used for decades. Second, the premium would likely have an immediate impact on the company's financial health and operations. The NEI stated that the NRC's Chairman expressed confidence in the NRC's

overall approach to decommissioning funding in view of the fact that most licensees maintained adequate funds during the economic downturn in 2008 and 2009. The NEI stated that over 70 percent of operating reactor units did not experience shortfalls in decommissioning funding in 2008. The NEI stated that the NRC should maintain the flexibility to work with a licensee in a reasonably expeditious manner, informed by the amount of the shortfall, current market conditions, and the date the funds will likely be needed.

NRC Response

The provisions of 10 CFR 50.75(e) allow several methods for a licensee to provide financial assurance in addition to making deposits into a trust fund. The NRC determined that each of the methods provides adequate financial assurance. The NRC agrees that the flexibility provided by its existing rules would be reduced if all funding shortfalls were required to be corrected by making deposits into the decommissioning trust fund within 90 days.

Comment 4: **Alternative Decommissioning Strategies**

The commenter stated that, to the extent that the petition implicates enforcement action, the appropriate response should be through the request for enforcement process of 10 CFR 2.206, rather than the petition for rulemaking process of 10 CFR 2.802.

The commenter provided several reasons for its conclusion that the NRC should not amend its regulations or guidance to limit the SAFSTOR option or eliminate the ENTOMB option for decommissioning power reactors. The commenter stated that the information presented in the petition regarding SAFSTOR and ENTOMB does not appear in the NRC's regulations. Rather, it is found in an NRC fact sheet dated January 2008, and in several NRC guidance documents. The commenter concluded that the petition appears to request modification of the fact sheet and possibly the guidance documents, rather than the NRC's regulations. The commenter stated that the NRC's radiological criteria for license termination, Subpart E to 10 CFR

Part 20, were developed through a notice-and-comment rulemaking process. The rules of Subpart E permit license termination under restricted conditions. The commenter emphasized two provisions of 10 CFR 50.82(a)(3) that should be considered in developing a response to the petitioner's request: 1) the regulation permits the extension of the decommissioning period beyond 60 years only when necessary to protect public health and safety, and 2) the Commission will consider the unavailability of waste disposal capacity in its evaluation of the licensee's ability to carry out decommissioning. The commenter disagreed that the existing regulations jeopardize public health and safety. The commenter stated that the NRC does not have the authority to require the Department of Energy or the Department of Defense to store used nuclear fuel or other high-level radioactive wastes at sites under the jurisdiction of those agencies.

NRC Response

The NRC agrees that requests for enforcement should not be addressed using the petition for rulemaking process.

In the context of a petition for rulemaking, the NRC concluded that the petitioner requests a change in the regulations to limit the use of SAFSTOR and eliminate the use of ENTOMB. The NRC agrees that its existing regulations and guidance allow for license termination under restricted use conditions; consider the availability of waste disposal capacity on a licensee's ability to carry out decommissioning; and do not jeopardize public health and safety. The bases for these determinations are described in a number of NRC rulemaking FRNs, for example, in its 1988 rulemaking (53 FR 24018; June 27, 1988). The NRC agrees that it does not have the authority to require the Department of Energy or the Department of Defense to store spent nuclear fuel or high-level waste at sites under the jurisdiction of those agencies, on grounds that Congress has not delegated such authority to the NRC.

Deleted: The NRC disagrees that the petitioner did not request the NRC to amend its regulations to limit the use SAFSTOR and eliminate the use of ENTOMB as options for decommissioning a nuclear reactor. The petitioner stated that the SAFSTOR option is written into the rules, and that the ENTOMB option should be stricken from the rules. In fact, the financial assurance provisions of 10 CFR 50.75(e)(1)(i) and (ii) refer to a safe storage period. The regulations are silent on the ENTOMB option.

V. Reason for Denial

The NRC has determined that the petitioner has not provided an adequate basis upon which the NRC could act to amend its regulations as requested by the petitioner.

With respect to the petitioner's request for annual instead of biennial reporting of the decommissioning trust fund status, the Commission published a final rule in September 1998, "Financial Assurance Requirements for Decommissioning Nuclear Power Reactors" (63 FR 50465; September 22, 1998). In its 1998 rulemaking, the NRC established the 2-year frequency for the decommissioning fund status report after considering a range of frequencies from 1 to 5 years. The 2-year frequency was based on the following:

> Given NRC's information needs, and the multi-million-dollar size of the contributions that utilities make annually to their decommissioning funds, the potential pay-off per hour of staff labor that NRC invests in monitoring funds is likely to be significant (63 FR 50465, 50476).

Since the issuance of the 1998 rule, the 2-year reporting frequency has continued to be adequate for routine monitoring of the status of decommissioning financial assurance. In cases where a licensee reports a shortfall, the NRC can exercise increased oversight to monitor the licensee's progress in resolving the shortfall under the provisions of 10 CFR 50.75(e)(2). The oversight may require fund status information more frequently than annually, and the NRC adjusts its monitoring accordingly. For example, due to the market decline in 2008, the NRC issued numerous requests for additional information to monitor reactor facilities with shortfalls. The 1998 rule also addressed the request to increase the frequency of reporting from 1 year to every six months for reactors within 5 years of the expected end of operations. The 1-year frequency for reactors nearing the end of operations was endorsed by a majority of the commenter's on the 1998 rule. However, as with the 2-year reports, the NRC can increase the frequency of monitoring as needed to assure that the reactor facility has adequate financial assurance. The NRC's ability to adjust the frequency of monitoring enables the agency to obtain adequate information for cases where the licensee has a shortfall, but avoids imposing an unnecessary

reporting burden on licensees that meet the funding assurance requirements. The NRC denies the petition to increase the reporting frequency for all reactors in response to the fact that some reactors have reported shortfalls because the existing regulatory framework already provides the NRC adequate flexibility to address oversight and reporting frequency for facilities with shortfalls.

The petitioner requests the NRC amend its rules to require the host State of a reactor facility to control, manage, and report the status of the licensee's decommissioning trust fund. However, the NRC does not have authority to require a State to become a trustee nor does NRC view it as appropriate to impose trustee status on a non-licensee. The NRC denies the request to require the host State to become a trustee of licensee's decommissioning funds.

With respect to the request that the decommissioning funds should not be held by the licensee, the NRC agrees with the petitioner. However, current NRC regulations already specify that the licensee cannot hold decommissioning trust funds. The provisions in § 50.75(e)(1)(i) and (ii) for the prepayment and the external sinking fund methods require the funds to be held in an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates. Therefore, no amendment is necessary to achieve the goal of prohibiting the licensee from holding the funds itself.

The petitioner requests the NRC to amend its regulations to require a licensee to deposit funds into the licensee's decommissioning trust fund within 90 days of reporting a shortfall as the exclusive remedy for a shortfall. The petitioner states the amendment is needed to provide reasonable assurance that funds will be available when needed and to avoid legacy sites that must be cleaned up at taxpayer expense. The NRC denies the request. In its Staff Requirements Memorandum on SECY-10-0084, "Explanation of Changes to Revision 2 to Regulatory Guide 1.159, 'Assuring the Availability of Funds for Decommissioning Nuclear Reactors'", dated October 25, 2010 (ADAMS Accession No. ML102980565), the Commission disapproved a proposed change that would have directed merchant licensees to adjust decommissioning funds annually and within 3 months of the annual recalculation of the regulatory

minimum required by 10 CFR 50.75(b). The Commission stated that the guidance should retain the current directive that merchant licensees adjust their funding amounts at least once every two years, in conjunction with the biennial report, and interpreted that to mean that shortfalls reported in a biennial report must be corrected by the time the next biennial report is due two years later. The Commission also approved affording rate-regulated licensees five years to adjust the funding amounts.

Furthermore, the NRC has determined that several methods of providing financial assurance exist that can afford an adequate level of assurance that funds for decommissioning will be available when needed. The reason for providing several methods was to provide flexibility to permit licensees to select the method best suited to their needs. Specifically, the NRC has concluded that eliminating the flexibility of using all the currently existing methods of financial assurance would impose a burden on licensees without providing an increase in safety.

The petitioner requests that the NRC amend its regulations to require the SAFSTOR option to be limited such that decommissioning is completed within 60 years. The basis of the request is that the NRC promised the host community that the site would be decommissioned and returned to unrestricted use within 60 years and to avoid legacy sites with high level waste disposal and long-term storage facilities. However, the 60-year period was never intended to be an absolute limit, and the rule language has never stated it as an absolute limit. When the NRC issued its final rule, "General Requirements for Decommissioning Nuclear Facilities" (53 FR 24018; June 27, 1988), the NRC stated:

> The rule does not contain a specific limitation on the length of time for SAFSTOR beyond the time period indicated in the modified rule. The case-by-case considerations, such as shortage of radioactive waste disposal space offsite or presence of an adjacent reactor whose safety might be affected by dismantlement procedures, or other similar site specific considerations, mean that the appropriate delay for a specific facility must be based on factors unique to that facility and could result in extension of completion of decommissioning beyond 60 years. Based on this, the NRC considers the setting of an absolute time limit on SAFSTOR to be impractical and unnecessary. ... [T]he rule contains requirements that a licensee must submit an alternative for decommissioning to the NRC

> for approval and that consideration will be given to an alternative which provides for completion of decommissioning beyond 60 years only when necessary to protect health and safety. (53 FR 24018, 24023).

In view of the NRC's conclusion that the setting of an absolute time limit on SAFSTOR would be impractical and unnecessary, the NRC disagrees that a formal commitment was made that a reactor facility would be required to complete decommissioning within 60 years. The NRC denies the request to impose an absolute 60-year time limit for decommissioning.

The petitioner requests the NRC to amend its regulations to require that the SAFSTOR option may be used only if the license will be terminated based on meeting unrestricted use criteria. The bases of the request are the petitioner's beliefs that the NRC promised the host community that a site would be decommissioned and returned to unrestricted use within 60 years and to avoid legacy sites with high-level waste disposal and long-term storage facilities. When the 1988 Decommissioning Rule was issued, the definition of decommissioning was to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of the license. (53 FR 24049; June 27, 1988). However, in July 1997 the NRC amended the definition of decommissioning to allow license termination under restricted conditions. (62 FR 39058; July 21, 1997). The NRC explained its reasoning with this statement:

> Restricted use has been retained in the final rule. Based on its analyses in the Final GEIS and its experiences with actual decommissioned sites, the Commission recognizes that, although unrestricted use is generally preferred, restricted use (when properly designed in accordance with the rule's provisions discussed in Section IV.B.3) can provide a cost-effective alternative to unrestricted use for some facilities and maintain the dose to the average member of the pertinent critical group at the same level. Thus, the Commission has replaced the prohibitively expensive provision for justifying restricted use with a reasonable cost provision. (62 FR 39058, 39072).

The amended definition of decommissioning in 10 CFR 50.2 was subject to a notice-and-comment rulemaking, and the Commission considered stakeholder comments before issuing the final rule. The petitioner did not raise any new issues that would cause the NRC to

reconsider the conclusions reached in the 1997 rulemaking process. On that basis, the NRC denies the request to re-impose a requirement for a reactor facility to decontaminate its facility to meet unrestricted use criteria in all cases.

The petitioner requests the NRC to amend its regulations to prohibit a licensee from using a SAFSTOR facility for any activities related to other reactors onsite. Similar to the petitioner's other requests, the bases for this request are the petitioner's beliefs that the NRC promised the host community that a site would be decommissioned and returned to unrestricted use within 60 years to avoid legacy sites with high-level waste disposal and long-term storage facilities. The Commission notes that it is possible that the completion of decommissioning a facility in SAFSTOR could be delayed past the 60 year mark if the facility is used for activities related to an operating unit on the site. The need to use equipment shared by a shutdown unit and an operating unit could prevent completing the decommissioning of the shutdown unit until the operating unit was permanently shut down. However, the discussion of SAFSTOR in the Statement of Considerations demonstrated that the NRC's regulations allow the licensee to exceed the 60-year limit in cases where a shutdown unit is located on the same site as an operating unit, subject to NRC approval. In a case where the SAFSTOR facility shares equipment with an operating unit, the NRC would consider the risk of conducting decommissioning activities near an operating unit. That type of evaluation would necessarily depend on site-specific factors that are not well suited to codification in a rule.

The Commission shares the petitioner's concerns regarding legacy sites. To prevent the occurrence of legacy sites at reactor facilities, 10 CFR 50.75(f)(3) requires the licensee to submit a preliminary decommissioning cost estimate that includes an up-to-date assessment of the major factors that could affect the cost of decommissioning. The provisions of 10 CFR 50.54(bb) require the licensee to provide a plan for the management of spent fuel. These requirements work together before the end of operations to assure that the licensee has the financial ability to safely decommission the site and to manage the spent fuel. These requirements assure that a

facility will not become a legacy site, even if a facility in SAFSTOR continues to share equipment with an operating unit onsite. The NRC denies the request to forbid the use of a facility in SAFSTOR for any activities related to another unit onsite.

The petitioner requests the NRC to forbid the licensee from placing additional waste streams on the SAFSTOR site that belong to other licensees, even if one company owns multiple licenses for multiple reactors on a singular piece of land. As noted, the 60-year timeline for decommissioning is not an absolute limit, and, considered alone, would not provide the basis for forbidding placement of waste streams from other onsite reactors in the SAFSTOR facility. Also, as noted, the legacy site issue depends on whether the licensee has the financial resources to complete decommissioning. The NRC addresses this issue through its financial assurance requirements. A licensee is required in 10 CFR 50.75 to provide assurance that at any time during the life of the facility, through termination of the license, adequate funds will be available to complete decommissioning. (61 FR 39278; July 29, 1996). As noted in the Statement of Considerations, when a licensee has a shortfall in financial assurance, the NRC increases its oversight activities until the matter is resolved. With respect to high level waste and spent fuel, the Commission recently updated its Waste Confidence Decision with the following statement: "The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary." (75 FR 81037, 81067; December 23, 2010). The requirements of 10 CFR 50.54(bb) require the licensee to provide a plan for managing spent fuel until it is transferred to the Secretary of Energy for final disposal. The Waste Confidence Decision combined with the ongoing requirement to provide adequate financial assurance for decommissioning, and to maintain a spent fuel management plan, indicate that a facility in SAFSTOR will not become a legacy site in the event some waste from another reactor on the site is placed in the SAFSTOR facility. The NRC denies this request.

The petitioner requests the NRC to amend its regulations to eliminate the use of ENTOMB as a decommissioning option. However, in its 1988 Decommissioning Rule, the NRC provided the following explanation for retaining the ENTOMB option for decommissioning:

> It is the Commission's belief that the ENTOMB alternative for decommissioning should not be specifically precluded in the rule because there may be instances in which it would be an allowable alternative in protecting public health and safety and common defense and security. By not prohibiting ENTOMB, the rule is more flexible in enabling NRC to deal with these instances. These instances might include smaller reactor facilities, reactors which do not run to the end of their lifetimes, or other situations where long-lived isotopes do not build up to significant levels or where there are other site specific factors affecting the safe decommissioning of the facility, as for example, presence of other nuclear facilities at the site for extended periods. In addition there is potential for variations on the ENTOMB option where, for example, some decontamination has already been performed, thereby making the ENTOMB option more viable. ... [C]oncerns were expressed by the commenter's that the ENTOMB option would cause environmental damage due to the presence of long-lived radionuclides which would be radioactive beyond the life of any concrete structure, that it is inconsistent with the definition of decommissioning requiring unrestricted release, and that some reactors are located in highly populous areas. In addition, the Supplementary Information to the proposed rule indicated, in general, that there may be difficulties with the use of ENTOMB, in particular in demonstrating that the radioactivity in the entombed structure had decayed to levels permitting unrestricted release of the property in a period on the order of 100 years. In response, the rule contains requirements that a licensee must submit an alternative for decommissioning to the NRC for approval and that consideration will be given to an alternative which provides for completion of decommissioning beyond 60 years only when necessary to protect health and safety. This provides the Commission with both sufficient leverage and flexibility to ensure that if the ENTOMB option is chosen by the licensee it will only be used in situations where it is reasonable and consistent with the definition of decommissioning which requires that decommissioning lead to unrestricted release. As indicated above, analysis of ENTOMB indicates that it can be carried out safely and with minimal environmental effect for the time periods presented in this Supplementary Information and in the guidance under preparation. However, based on the difficulties with ENTOMB described in the Supplementary Information to the proposed rule and by the commenter's, use of ENTOMB by a licensee would be carefully evaluated by NRC according to the requirements of the rule before its use is permitted. (53 FR 24018, 24023–24; June 27, 1988).

The decision to retain the ENTOMB option was subject to a notice-and-comment rulemaking. The petitioner has not raised any new or significant points that would cause the

Commission to reconsider the conclusions reached in the 1988 rulemaking. On the bases noted, the NRC denies the request to eliminate the use of ENTOMB as an option for decommissioning a nuclear facility.

For these reasons, the NRC denies the petitioner's requests for the NRC to modify its requirements for reporting the status of licensee's decommissioning trust funds, to have host States manage these trust funds, to require a deposit into the trust fund within 90 days as the exclusive remedy for a shortfall, to amend the definition of the SAFSTOR decommissioning option in its regulations, and to eliminate the ENTOMB option.

Dated at Rockville, Maryland, this _____ day of _____, 2011.

For the Nuclear Regulatory Commission.

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

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMISSIONER MAGWOOD

SUBJECT: SECY-11-0088 – DENIAL OF PETITION FOR RULEMAKING REQUESTING AMENDMENTS TO 10 CFR PART 50 REGARDING DECOMMISSIONING AND DECOMMISSIONING FUNDING (PRM-50-94)

Approved X Disapproved X Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached X None ___

SIGNATURE

6 October 2011
DATE

Entered on "STARS" Yes X No ___

Commissioner Magwood's Comments on
SECY-11-0088, "Denial of Petition for rulemaking request Amendments 10 CFR Part 50
Regarding Decommissioning and Decommissioning Funding (PRM-50-94)"

I approve in part and disapprove in part the recommendation in SECY-11-0088 to deny petition PRM-50-44, which requests the agency to undertake rulemakings to make various changes to nuclear plant decommissioning. I do not believe the petitioner has presented a compelling case for the sweeping changes proposed in PRM-50-44.

I, therefore, support the staff's recommendation that the Commission not approve the petitioner's request to change the reporting frequency for reactor decommissioning funds; to restrict funding mechanisms; to require deposits to decommissioning trust funds within 90 days of the identification of a shortfall; and to implement other measures intended to increase financial assurance. While, given the issues various decommissioning funds have experienced during the recent global financial crisis, I understand the petitioner's concerns, I concur with staff's assessment that sufficient avenues are already in place to deal with shortfalls in decommissioning funds.

I also approve staff's recommendation to deny the petitioner's request to change the definition of SAFESTORE and eliminating the ENTOMB decommissioning option. However, I find that some aspects of the petitioner's request have merit and deserve further review by the staff. In particular, the petitioner highlights the fact that the definitions of alternative decommissioning options are provided not in regulation but in various NRC technical documents. It is a fair observation that definitions of such broad import might be best codified in rule as opposed to guidance.

Therefore, I approve the petitioner's request to codify the alternative decommissioning strategies into the regulation because it would provide all stakeholders with a clear understanding of the requirements and options available for decommissioning. It is my view that the best place to make such a revision would be in 10 CFR Part 20 Subpart E, "Radiological Criteria for License Termination." While changes are certainly possible as a result of the rulemaking process, the existing definitions have stood the test of time. I therefore encourage staff to adopt initially, to the extent practical, the definitions and criteria currently in guidance when developing the rule language.

10/6/11

William D. Magwood, IV **Date**

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Commissioner Ostendorff

SUBJECT: SECY-11-0088 – DENIAL OF PETITION FOR RULEMAKING REQUESTING AMENDMENTS TO 10 CFR PART 50 REGARDING DECOMMISSIONING AND DECOMMISSIONING FUNDING (PRM-50-94)

Approved __X___ Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _X__ Attached ___ None ___

I approve of the denial of the petition for rulemaking which requested amendments to 10 CFR 50 decommissioning and decommissioning funding requirements, subject to the attached edits to the federal register notice and letter to the petitioner.

_____
SIGNATURE

8/8/11
_____
DATE

Entered on "STARS" Yes ___ No ___

The petitioner also makes two claims in PRM-50-94 that are not being addressed in the PRM process under 10 CFR 2.802, "Petition for rulemaking:" 1) Entergy Nuclear Operations, Inc. (Entergy) is violating NRC rules and regulations by allowing Indian Point Nuclear Generating Unit No. 1 (IP1) to remain in SAFSTOR, is wrongfully and illegally depending on parts of IP1 to help run Indian Point Nuclear Generating Units No. 2 and 3 (IP2 and IP3), and is using the reactor of IP1 as an illegal storage/dumping ground for radiological waste streams from the continued operations of IP2 and IP3; and 2) the NRC has negligently allowed certain licensees to violate the current regulations on funding and the filing of reports.

. ~~To address the petitioner's second claim, this petition has been forwarded to the NRC's Office of the Inspector General for a determination of whether the claim qualifies as an allegation of wrongdoing.~~

The petitioner's first claim contains general assertions of violations but does not ask for enforcement-related action; therefore, the NRC did not consider this under the 10 CFR 2.206 process. Further, the petitioner's claim was not considered within the allegation process because ~~Regarding the first claim, the current~~ NRC regulations do not disallow a unit from remaining in SAFSTOR and IP2 and IP3 are allowed to utilize structures, systems and components of IP1 in accordance with their 10 CFR Part 50 licenses. The NRC's recognition of this situation is evidenced by the Staff's statement in NUREG-1437, Supplement 38, "General Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3," (ADAMS Accession No. ML103350405) that "radioactive waste storage and process facilities located in IP1 provide additional waste processing services for IP2." The NRC has no regulations forbidding the storage of radioactive waste at a 10 CFR Part 50 licensee's facility, although these licensees must obtain NRC approval for onsite storage of radioactive waste. The NRC's regulations at 10 CFR Part 20, "Standards for Protection

against Radiation," state the general requirements for ensuring that radioactive waste is stored safely and securely. Also, the NRC routinely inspects licensees to ensure radioactive waste is maintained safely and securely under the Reactor Oversight Process. To address the petitioner's second claim, this petition has been forwarded to the NRC's Office of the Inspector General for a determination of whether the claim qualifies as an allegation of wrongdoing.

~~The Commission notes that while the petitioner does not specifically request enforcement action against any NRC licensee, any request of this type must be formally submitted as a request for enforcement action under 10 CFR Part 2, Subpart B, "Procedure for Imposing Requirements by Order or for Modification, Suspension, or Revocation of a License, or for Imposing Civil Penalties," Section 2.206. This petitioner previously filed such a request on August 22, 2009, and a notice of receipt of the request was published in the *Federal Register* on December 29, 2009 (74 FR 68873). That submission requested that the NRC suspend the operating license of any Entergy nuclear power plant with a decommissioning trust fund shortfall, take action to ensure that any shortfalls in the decommissioning trust funds be rectified, and take certain other actions to ensure that the integrity of the decommissioning trust funds is being evaluated under 10 CFR 2.206. Consideration of the merits of PRM-50-94 will not address issues related to the NRC's disposition of the petitioner's request for enforcement action under 10 CFR 2.206.~~

II. Avoiding Legacy Sites

a. Revise Reporting Requirements

The petitioner requests that the NRC amend its requirements pertaining to the frequency of reporting the status of decommissioning funding from once every 2 years to once every year, and from annual to biannual reporting if the license is within 5 years of expiration. Although no specific NRC requirement is cited, the Commission believes that the petitioner is referring to

licensee's choice of alternative decommissioning strategy must result in the return of the site to unrestricted use within 60 years and that the NRC eliminate the ENTOMB strategy as an option.

IV. Public Comments on the Petition

The NRC received one comment on PRM-50-94 from the Nuclear Energy Institute (NEI or the commenter), dated May 12, 2010 (ADAMS Accession No. ML101340042). The NEI's comments and the NRC responses are provided in this section.

Comment 1: **Frequency of Reporting Decommissioning Funding Status**

The NEI stated that requiring more frequent reporting on the status of decommissioning funds will not necessarily yield useful or actionable information when dealing with long-term investments, such as nuclear power plant decommissioning trust funds. The basis of the comment was that more frequent reporting during financially turbulent times will necessarily produce information reflecting short-term market fluctuations. The NEI stated that precipitous modifications to long-term investment strategies could result in tax consequences, negatively affect corporate credit ratings, and divert capital from the operation of existing plants. The NEI described how NRC regulations require more detailed cost estimates as a licensee approaches the cessation of operations and license termination. The NEI stated that NRC regulations allow the NRC to request information to confirm a licensee's compliance with financial assurance requirements. The NEI stated that it disagreed with the suggested revision because the petitioner did not provide an adequate basis for increasing the frequency of the decommissioning fund status reports required by 10 CFR 50.75(f)(1) and (2).

NRC Response

~~The NRC disagrees that increasing the frequency of reporting during financially turbulent times would merely produce only short-term market information and fail to yield any useful or~~

~~actionable information. Market conditions affect the licensee's trust fund balance; however, the reports provide much more information that is useful to the NRC. Each licensee's report provides the funding target, the amount accumulated for decommissioning, the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings and rates of other factors used in funding projections, an estimate of assured future collections, contracts that are relied upon to provide decommissioning funding, modifications to the methods the licensee uses to provide financial assurance, and material changes to trust agreements. The NRC uses the information to conduct a compliance check and to assess the ability of the licensee to continue to provide financial assurance in the future. Depending on the result of the NRC's assessment, the information may indeed be actionable and may indicate that additional oversight is appropriate for a particular licensee. For example, during the financially turbulent times of 2009, the NRC increased the frequency of reporting on decommissioning funding, and the information obtained was used as the basis for taking action at numerous reactor facilities that reported shortfalls in financial assurance.~~

The commenter's statement regarding the potential adverse effects of making precipitous changes in the investment strategy is a separate issue from the frequency of submitting a decommissioning fund status report. Submitting a fund status report does not require changes in the investment strategy. ~~The commenter provides no basis for the conclusion that a more frequent reporting requirement would cause any of the adverse effects listed. Similarly, the commenter's description of the decommissioning cost estimates required as a power reactor approaches the cessation of operations and license termination are issues separate from the frequency of the fund status report. The cost estimates are required to determine the amount of funds the licensee will need; the report provides the information needed to assure the licensee's ability to provide the funds.~~

While the NRC staff finds analysis of the market impacts on available funding to be useful and actionable, the commenter's statement, that the NRC can require more frequent reporting under its existing rules, is correct. For example, during the financially turbulent times of 2009, the NRC increased the frequency of reporting on decommissioning funding, and the information obtained was used as the basis for taking action at numerous reactor facilities that reported shortfalls in financial assurance.

For this reason, as well as additional reasons as described in Section V of this document, the NRC is denying the petitioner's request to increase the reporting frequency of the decommissioning fund status report.

***Comment 2:* Require Trust Fund Management by the Host State**

The NEI stated that requiring the licensee's host State to manage the decommissioning trust funds and to periodically report on the status of such funds may not be constitutional. The NEI stated that management of funds by a State government does not immunize the funds from the effects of fluctuating market conditions, as demonstrated by the challenges associated with management of State pension funds. The NEI stated that the formation of subsidiaries and the buying and selling of property are legitimate means of doing business which do not clearly require an amendment to the NRC's regulations. The NEI stated that decommissioning funding, and continued compliance with the Commission's funding requirements, is already considered in the context of Commission reviews of license amendment requests related to changes in ownership and corporate structure.

NRC Response

The NRC does not need to reach the issue of constitutionality with respect to its authority to require a State government to manage a licensee's decommissioning trust funds. The NRC

has no authority under the Atomic Energy Act of 1954, as amended, to require a State to act as a trustee.

The commenter's other points do not address the petitioner's request, which was to prevent the licensee from holding the decommissioning trust funds. Whether or not a State government could immunize the decommissioning trust funds from the effects of fluctuating market conditions, funds held by a State would not be held by a licensee. Likewise, the statements discussing the legality of buying and selling property and the consideration of decommissioning funding adequacy in license transfer cases do not address the petitioner's request to prevent the licensee from holding the decommissioning funds.

Comment 3: **Require Deposits into Trust Fund Within 90 Days of a Shortfall**

The NEI stated that requiring that all funding shortfalls be corrected within 90 days of discovery, if enacted, could have two adverse effects on a licensee. First, the NEI states that depositing funds into a trust account within 90 days of reporting a shortfall would force a utility to pay an unnecessary premium for decommissioning funds that might not be used for decades. Second, the premium would likely have an immediate impact on the company's financial health and operations. The NEI stated that the NRC's Chairman expressed confidence in the NRC's overall approach to decommissioning funding in view of the fact that most licensees maintained adequate funds during the economic downturn in 2008 and 2009. The NEI stated that over 70 percent of operating reactor units did not experience shortfalls in decommissioning funding in 2008. The NEI stated that the NRC should maintain the flexibility to work with a licensee in a reasonably expeditious manner, informed by the amount of the shortfall, current market conditions, and the date the funds will likely be needed.

NRC Response

The provisions of 10 CFR 50.75(e) allow several methods for a licensee to provide financial assurance in addition to making deposits into a trust fund. The NRC determined that each of the methods provides adequate financial assurance. The NRC agrees that the flexibility provided by its existing rules would be reduced if all funding shortfalls were required to be corrected by making deposits into the decommissioning trust fund within 90 days. The NRC also agrees that the agency's current requirements for the timeline to address funding shortfalls has continued to provide assurance of adequate funding.

Comment 4: **Alternative Decommissioning Strategies**

The commenter stated that, to the extent that the petition implicates enforcement action, the appropriate response should be through the request for enforcement process of 10 CFR 2.206, rather than the petition for rulemaking process of 10 CFR 2.802.

The commenter provided several reasons for its conclusion that the NRC should not amend its regulations or guidance to limit the SAFSTOR option or eliminate the ENTOMB option for decommissioning power reactors. The commenter stated that the information presented in the petition regarding SAFSTOR and ENTOMB does not appear in the NRC's regulations. Rather, it is found in an NRC fact sheet dated January 2008, and in several NRC guidance documents. The commenter concluded that the petition appears to request modification of the fact sheet and possibly the guidance documents, rather than the NRC's regulations. The commenter stated that the NRC's radiological criteria for license termination, Subpart E to 10 CFR Part 20, were developed through a notice-and-comment rulemaking process. The rules of Subpart E permit license termination under restricted conditions. The commenter emphasized two provisions of 10 CFR 50.82(a)(3) that should be considered in developing a response to the petitioner's request: 1) the regulation permits the extension of the decommissioning period beyond 60 years only when necessary to protect public health and safety, and 2) the Commission

will consider the unavailability of waste disposal capacity in its evaluation of the licensee's ability to carry out decommissioning. The commenter disagreed that the existing regulations jeopardize public health and safety. The commenter stated that the NRC does not have the authority to require the Department of Energy or the Department of Defense to store used nuclear fuel or other high-level radioactive wastes at sites under the jurisdiction of those agencies.

NRC Response

The NRC agrees that requests for enforcement should not be addressed using the petition for rulemaking process.

~~The NRC disagrees that the petitioner did not request the NRC to amend its regulations to limit the use SAFSTOR and eliminate the use of ENTOMB as options for decommissioning a nuclear reactor. The petitioner stated that the SAFSTOR option is written into the rules, and that the ENTOMB option should be stricken from the rules. In fact, the financial assurance provisions of 10 CFR 50.75(e)(1)(i) and (ii) refer to a safe storage period. The regulations are silent on the ENTOMB option~~. In the context of a petition for rulemaking, the NRC concluded that the petitioner requests a change in the regulations to limit the use of SAFSTOR and eliminate the use of ENTOMB. The NRC agrees that its existing regulations and guidance allow for license termination under restricted use conditions; allow decommissioning time periods beyond 60 years; consider the availability of waste disposal capacity on a licensee's ability to carry out decommissioning; and do not jeopardize public health and safety. The bases for these determinations are described in a number of NRC rulemaking FRNs, for example, in its 1988 rulemaking (53 FR 24018; June 27, 1988). The NRC agrees that it does not have the authority to require the Department of Energy or the Department of Defense to store spent nuclear fuel or high-level waste at sites under the jurisdiction of those agencies, on grounds that Congress has not delegated such authority to the NRC.

NRC's ability to adjust the frequency of monitoring enables the agency to obtain adequate information for cases where the licensee has a shortfall, but avoids imposing an unnecessary reporting burden on licensees that meet the funding assurance requirements. The NRC denies the petition to increase the reporting frequency for all reactors in response to the fact that some reactors have reported shortfalls because the existing regulatory framework already provides the NRC adequate flexibility to address oversight and reporting frequency for facilities with shortfalls.

The petitioner requests the NRC amend its rules to require the host State of a reactor facility to control, manage, and report the status of the licensee's decommissioning trust fund. However, the NRC does not have authority to require a State to become a trustee nor does NRC view it as appropriate to impose trustee status on a non-licensee. However, the NRC's regulations at 10 CFR 50.75(e) do not preclude such an arrangement. The NRC denies the request to require the host State to become a trustee of licensee's decommissioning funds.

With respect to the request that the decommissioning funds should not be held by the licensee, the NRC agrees with the petitioner. However, current NRC regulations already specify that the licensee cannot hold decommissioning trust funds. The provisions in § 50.75(e)(1)(i) and (ii) for the prepayment and the external sinking fund methods require the funds to be held in an account segregated from licensee assets and outside the administrative control of the licensee and its subsidiaries or affiliates. Therefore, no amendment is necessary to achieve the goal of prohibiting the licensee from holding the funds itself.

The petitioner requests the NRC to amend its regulations to require a licensee to deposit funds into the licensee's decommissioning trust fund within 90 days of reporting a shortfall as the exclusive remedy for a shortfall. The petitioner states the amendment is needed to provide reasonable assurance that funds will be available when needed and to avoid legacy sites that must be cleaned up at taxpayer expense. ~~The NRC denies the request.~~ In its Staff Requirements Memorandum on SECY-10-0084, "Explanation of Changes to Revision 2 to

Regulatory Guide 1.159, 'Assuring the Availability of Funds for Decommissioning Nuclear Reactors'", dated October 25, 2010 (ADAMS Accession No. ML102980565), the Commission disapproved a proposed change that would have directed merchant licensees to adjust decommissioning funds annually and within 3 months of the annual recalculation of the regulatory minimum required by 10 CFR 50.75(b). The Commission stated that the guidance should retain the current directive that merchant licensees adjust their funding amounts at least once every two years, in conjunction with the biennial report, and interpreted that to mean that shortfalls reported in a biennial report must be corrected by the time the next biennial report is due two years later. The Commission also approved affording rate-regulated licensees five years to adjust the funding amounts.

Furthermore, the NRC has determined that several methods of providing financial assurance exist that can afford an adequate level of assurance that funds for decommissioning will be available when needed. The reason for providing several methods was to provide flexibility to permit licensees to select the method best suited to their needs. Specifically, the NRC has concluded that eliminating the flexibility of using all the currently existing methods of financial assurance would impose a burden on licensees without providing an increase in safety.

Based on the rationale provided above, the NRC denies the request.

The petitioner requests that the NRC amend its regulations to require the SAFSTOR option to be limited such that decommissioning is completed within 60 years. The basis of the request is that the NRC promised the host community that the site would be decommissioned and returned to unrestricted use within 60 years and to avoid legacy sites with high level waste disposal and long-term storage facilities. However, the 60-year period was never intended to be an absolute limit, and the rule language has never stated it as an absolute limit. When the NRC issued its final rule, "General Requirements for Decommissioning Nuclear Facilities" (53 FR 24018; June 27, 1988), the NRC stated:

The Commission shares the petitioner's concerns regarding legacy sites. To prevent the occurrence of legacy sites at reactor facilities, 10 CFR 50.75(f)(3) requires the licensee to submit a preliminary decommissioning cost estimate that includes an up-to-date assessment of the major factors that could affect the cost of decommissioning. The provisions of 10 CFR 50.54(bb) require the licensee to provide a plan for the management of spent fuel. In addition, the Commission recently issued a rule which requires licensees to minimize contamination; requires that licensees survey on site for radiological hazards, including the subsurface, soil and groundwater; and revises the financial assurance regulations. These requirements work together before the end of operations to assure that the licensee has the financial ability to safely decommission the site and to manage the spent fuel. These requirements assure that a facility will not become a legacy site, even if a facility in SAFSTOR continues to share equipment with an operating unit onsite. The NRC denies the request to forbid the use of a facility in SAFSTOR for any activities related to another unit onsite.

The petitioner requests the NRC to forbid the licensee from placing additional waste streams on the SAFSTOR site that belong to other licensees, even if one company owns multiple licenses for multiple reactors on a singular piece of land. As noted, the 60-year timeline for decommissioning is not an absolute limit, and, considered alone, would not provide the basis for forbidding placement of waste streams from other onsite reactors in the SAFSTOR facility. Also, as noted, the legacy site issue depends on whether the licensee has the financial resources to complete decommissioning. The NRC addresses this issue through its financial assurance requirements. A licensee is required in 10 CFR 50.75 to provide assurance that at any time during the life of the facility, through termination of the license, adequate funds will be available to complete decommissioning. (61 FR 39278; July 29, 1996). As noted in the Statement of Considerations, when a licensee has a shortfall in financial assurance, the NRC increases its oversight activities until the matter is resolved. The NRC's regulations in 10 CFR 20, "Standards

for the Protection Against Radiation", provide general requirements for ensuring that radioactive waste is stored safely. With respect to high level waste and spent fuel, the Commission recently updated its Waste Confidence Decision with the following statement: "The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary." (75 FR 81037, 81067; December 23, 2010). The requirements of 10 CFR 50.54(bb) require the licensee to provide a plan for managing spent fuel until it is transferred to the Secretary of Energy for final disposal. The Waste Confidence Decision combined with the ongoing requirement to provide adequate financial assurance for decommissioning, and to maintain a spent fuel management plan, indicate that a facility in SAFSTOR will not become a legacy site in the event some waste from another reactor on the site is placed in the SAFSTOR facility. The NRC denies this request.

The petitioner requests the NRC to amend its regulations to eliminate the use of ENTOMB as a decommissioning option. However, in its 1988 Decommissioning Rule, the NRC provided the following explanation for retaining the ENTOMB option for decommissioning:

> It is the Commission's belief that the ENTOMB alternative for decommissioning should not be specifically precluded in the rule because there may be instances in which it would be an allowable alternative in protecting public health and safety and common defense and security. By not prohibiting ENTOMB, the rule is more flexible in enabling NRC to deal with these instances. These instances might include smaller reactor facilities, reactors which do not run to the end of their lifetimes, or other situations where long-lived isotopes do not build up to significant levels or where there are other site specific factors affecting the safe decommissioning of the facility, as for example, presence of other nuclear facilities at the site for extended periods. In addition there is potential for variations on the ENTOMB option where, for example, some decontamination has already been performed, thereby making the ENTOMB option more viable. ... [C]oncerns were expressed by the commenter's that the ENTOMB option would cause environmental damage due to the presence of long-lived radionuclides which would be radioactive beyond the life of any concrete structure, that it is inconsistent with the definition of decommissioning requiring unrestricted release, and that some reactors are located in highly populous areas. In addition, the Supplementary Information to the proposed rule indicated, in general, that

With respect to your request to amend the definition of the SAFSTOR decommissioning option, the 60-year period was never intended to be an absolute limit for SAFSTOR. The rule language developed in 1988 (53 FR 24018) never stated it as an absolute limit. The NRC amended the unrestricted criteria for termination of a license in July 1997 when it amended the definition of decommissioning to allow license termination under restricted conditions (62 FR 39058, 39090-91). You did not raise any new issues to cause the NRC to reconsider the conclusions reached in the 1997 rulemaking process. Finally, your requests to forbid the licensee from using SAFSTOR for any activities related to other reactors onsite, or from receiving additional waste streams that belong to other licensees, are resolved under current NRC regulations. To prevent the occurrence of legacy sites at reactor facilities, 10 CFR 50.75(f)(3) requires the licensee to submit a preliminary decommissioning cost estimate which includes an up-to-date assessment of the major factors that could affect the cost of decommissioning, and 10 CFR 50.54(bb) requires the licensee to provide a plan for the management of spent fuel. The Commission also recently issued a rule which requires that licensees minimize contamination, survey for on-site contamination, and which revises the decommissioning funding requirements. These requirements ensure that a facility will not become a legacy site, even if a facility in SAFSTOR continues to share equipment with an operating unit on site or in the event that some waste from another reactor on the site is placed in the SAFSTOR facility.

With respect to your request to eliminate the ENTOMB decommissioning option, the NRC's 1988 Decommissioning Rule included a decision to retain the ENTOMB option. Your petition did not raise any new or significant points that would cause the NRC to reconsider the conclusions reached in the 1988 rulemaking.

Finally, your petition also includes two claims that are outside of the petition for rulemaking process under 10 CFR 2.802. First, you claim that Entergy Nuclear Operations, Inc. is violating NRC rules and regulations by allowing Indian Point Nuclear Generating Unit No. 1 (IP1) to remain in SAFSTOR, is wrongfully and illegally depending on parts of IP1 to help run Indian Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3), and is using the reactor of IP1 as an illegal storage/dumping ground for radiological waste streams from the continued operations of IP2 and IP3. Because t~~T~~hese actions are not disallowed under the current NRC regulations and you did not request a specific enforcement action, this claim was not considered under the agency's 10 CFR 2.206 or allegation processes. ~~and are discussed further in the enclosed *Federal Register* notice.~~ Second, your petition further claims that the NRC has negligently allowed certain licensees to violate the current regulations as they relate to funding and the filing of reports. This claim has been forwarded to the Office of the Inspector General for a determination of whether it qualifies as an allegation of wrongdoing.

Please note that while you do not specifically request enforcement action against any NRC licensee, any request of this type must be formally submitted as a request for enforcement action under 10 CFR 2.206.