

**From:** [MONTGOMERY, Bruce](#)  
**To:** [Clark, Brooke](#)  
**Cc:** [Lubinski, John](#); [Marshall, Jane](#); [Regan, Christopher](#)  
**Subject:** [External\_Sender] Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (Docket ID NRC-2015-0070)  
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**Attachments:** [08-30-22\\_NRC\\_NEI\\_Comments-Decommissioning\\_Rule+\\_Attachments.pdf](#)

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**THE ATTACHMENT CONTAINS THE COMPLETE CONTENTS OF THE LETTER**

August 30, 2022

Ms. Brooke Clark  
Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
Attn: Rulemakings and Adjudications Staff

**Subject:** Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (Docket ID NRC-2015-0070)

**Project Number: 689**

*Submitted via Regulations.gov*

Dear Ms. Clark:

On March 3, 2022, the U.S. Nuclear Regulatory Commission (NRC) issued a notice in the *Federal Register* soliciting comments on proposed modifications to the agency's decommissioning regulations.<sup>[1]</sup> The Nuclear Energy Institute (NEI)<sup>[2]</sup> is pleased to provide comments on this rulemaking on behalf of the nuclear energy industry.

Thank you for the opportunity to provide industry's views in response to the proposed rule. We look forward to discussing our comments in the public dialogue on this rulemaking. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Bruce S. Montgomery  
Director,  
Decommissioning & Used Fuel

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[\[1\]](#) 87 Fed. Reg. 42,12254 (March 3, 2022)

[\[2\]](#) The Nuclear Energy Institute (NEI) is responsible for establishing unified policy on behalf of its members relating to matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect and engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations involved in the nuclear energy industry.

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Secretary  
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Dear Ms. Clark:

On March 3, 2022, the U.S. Nuclear Regulatory Commission (NRC) issued a notice in the *Federal Register* soliciting comments on proposed modifications to the agency's decommissioning regulations.<sup>1</sup> The Nuclear Energy Institute (NEI)<sup>2</sup> is pleased to provide comments on this rulemaking on behalf of the nuclear energy industry.

NEI strongly supports this proposed rule, as it is critical to continued improvement in the regulatory framework for decommissioning. The existing framework has proven more than adequate to assure safety based on industry's experience decommissioning 13 NRC licensed power reactors. However, it does so in a highly inefficient manner by failing to recognize the inherent risk reductions that occur as a plant transitions from the cessation of commercial nuclear operation through the various stages of decommissioning. This has resulted in a process where NRC and industry resources are wastefully expended on numerous requests for exemptions, license amendments, and other forms of regulatory relief to modify the facility license so that it matches the physical status of the facility at each stage of decommissioning. This practice has been viewed as regulation by exemption and is contrary to the NRC's principles of good regulation.

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<sup>1</sup> 87 *Fed. Reg.* 42,12254 (March 3, 2022)

<sup>2</sup> The Nuclear Energy Institute (NEI) is responsible for establishing unified policy on behalf of its members relating to matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect and engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations involved in the nuclear energy industry.

The proposed rule represents a significant body of work that will greatly improve the regulatory framework so that NRC and industry can better focus resources on safely and efficiently completing the decommissioning process. NRC is to be commended for addressing the broad scope of regulations and regulatory guidance documents that need to be revised to achieve this goal. As proposed, this rule will lead to improvements in regulatory effectiveness and in the efficiency of the decommissioning process. These efficiencies will enhance the industry's ability to complete decommissioning projects promptly while assuring public health and safety, protecting the environment, and returning nuclear power plant sites to the community for unrestricted use.

The majority of the comments attached to this letter are intended to enhance implementation by providing corrections and clarification where warranted. However, there is one proposed change which NEI strongly objects to – the addition of a new requirement for irradiated fuel management plans (IFMP) to be submitted to NRC for approval as requests for license amendments. Our concerns with this proposed change are detailed in the attachments to this letter.

In addition to our comments, NEI supports a comment made by the Decommissioning Plant Coalition (DPC)<sup>3</sup> that recommends consideration of an additional "Level" in the rule. This additional level would recognize the difference between a site where all fuel has been placed in dry storage but decommissioning of the reactor site has not been completed (proposed Level 3), and a site where decommissioning has been completed and has become a "Stand-Alone ISFSI." The creation of a "new" proposed Level 4 would define the requirements applicable to a Stand-Alone ISFSI in a way that maintains consistency with the manner in which these sites have been safely maintained for – in many cases – over two decades.

Thank you for the opportunity to provide industry's views in response to the proposed rule. We look forward to discussing our comments in the public dialogue on this rulemaking. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



Bruce S. Montgomery

C: John Lubinski, NMSS, NRC  
Jane Marshall, DUWP, NMSS, NRC  
Chris Regan, REFS, NMSS, NRC

Attachment(s):

1. Features of the Proposed Rule that Will Improve Regulatory Stability and Effectiveness in the Oversight of Decommissioning

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<sup>3</sup> Letter from Wayne Norton, Decommissioning Plant Coalition, to Secretary, U.S. NRC, August 30, 2022.

Ms. Clark

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2. Specific NEI comments on NRC's proposed addition of new requirements governing Irradiated Fuel Management Plans
3. Specific NEI Comments on NRC Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning
4. Response to Section V: Specific Requests for Comments (87 Fed. Reg. 12,303): Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning
5. Response to Section X: Specific Requests for Comments (87 Fed. Reg. 12,316) Cumulative Effects of Regulation

## Features of the Proposed Rule that Will Improve Regulatory Stability and Effectiveness in the Oversight of Decommissioning During Transition

The nuclear industry supports many elements of the proposed decommissioning transition rule and believes that overall, the rulemaking will lead to significant improvements in the efficiency of the regulatory oversight of decommissioning activities while continuing to protect the safety and security of the public. The changes proposed in this rulemaking are particularly helpful to licensees and local communities as they seek to complete prompt decommissioning after the cessation of reactor operations, by recognizing the inherent reduction in risk levels that occur following shutdown and by minimizing the need for regulatory approvals in advance of each phase of the transition.

In particular, the industry would like to highlight the following changes as examples of a sound regulatory framework for transitioning into decommissioning with improved efficiency:

- A structured, stepwise approach that systematically orients regulatory requirements for security, emergency preparedness, staffing, training, etc., to the risk profile that exists as a decommissioning project progresses from cessation of operations to the point where all fuel has been removed from the site.
- Elimination of the need for routine exemptions and licensing actions to remove requirements that no longer apply during the transition through decommissioning, and are no longer needed to protect public health, safety and security. An example of this is the proposed change to the definition of a Certified Fuel Handler (CFH) in § 50.2 to provide an alternative that would eliminate the need for licensees to seek NRC approval for fuel handler training programs.
- The proposed change to the frequency in 10 CFR 50.75(f)(1) for submittal of decommissioning trust fund reports from every two years to every three years to align with the ISFSI reporting requirements in 10 CFR 72.30. This will enable one report to be generated for both requirements, reducing both the time required to create the reports and the resources required by the NRC to review them.
- The proposed change in 10 CFR 50.75(f)(1) to add the requirement that any required additional funding assurance identified in a report to address a shortfall be remedied by the time of the next report is a positive step for clarity and certainty. This requirement is already described in the current version of Regulatory Guide 1.159, so adding to this the regulations would ensure consistency and certainty for the licensees.
- In the physical security area, the proposed change to § 72.212(b)(9) that would allow an ISFSI general licensee to provide for physical protection of the spent fuel under the same regulations that apply to ISFSI specific licensees (subpart H and § 73.51) standardizes the security regulations across all ISFSIs and should produce a consistent approach to ISFSI physical security among future licensees.
- The proposed changes clarifying that 10 CFR Part 26 does not apply to licensees for facilities with permanently shut down and defueled reactors, and the proposed changes to 10 CFR 73.55(b)(9) clarifying drug and alcohol testing requirements for specific categories of individuals subject to an insider mitigation program after the transition to decommissioning, would significantly improve clarity in the regulations and promote consistency in the industry.

## Specific NEI comments on NRC's proposed addition of new requirements governing Irradiated Fuel Management Plans

The NRC is proposing to modify the requirements of 10 CFR 50.54(bb) to: (1) require that licensees submit irradiated fuel management plans (IFMP) as license amendment applications, (2) prohibit licensees from “start[ing] to decommission structures, systems, and components needed for moving, unloading, and shipping the irradiated fuel until after the NRC approves the IFMP;” and (3) require licensees to submit any changes to the IFMP as license amendment applications.<sup>1</sup>

NEI strongly objects to these proposed changes regarding review and approval of the IFMP (and changes to the IFMP) via the license amendment process. Specifically, these proposed changes: (1) are inconsistent with the well-established regulatory frameworks for general licensing of Independent Spent Fuel Storage Installations (ISFSI) pursuant to the Nuclear Waste Policy Act of 1982 (NWPA), and the decommissioning of power reactors that have been in place since 1990 and 1996, respectively; (2) lack coherence, are contrary to the Commission's long-held position on the nature of the IFMP, and are unnecessary from a legal standpoint; and (3) would impose an unanalyzed backfit on commercial power reactor licensees.

This proposed revision is also inconsistent with one of the fundamental goals of this rulemaking “to reduce the need for license amendment requests and exemptions from existing regulations.”<sup>2</sup> To the contrary, the proposed revisions to section 50.54(bb) would unnecessarily add the need for a licensing action early in the decommissioning process. If finalized, this requirement would make the decommissioning process more burdensome for both the NRC and licensees, with no commensurate safety benefit.

NEI agrees with the position taken by the NRC staff in SECY-18-0055.<sup>3</sup> In that paper, the NRC staff proposed “to remove § 50.54(bb)'s requirement for preliminary approval and final NRC review . . . of the IFMP.”<sup>4</sup> This change would appropriately align the level of review for the PSDAR and IFMP, which the NRC staff accurately described as planning documents for decommissioning and spent fuel management, respectively.<sup>5</sup> That said, we understand that the Commission “disapproved the recommendation to remove § 50.54(bb)'s preliminary approval and final NRC review of Irradiated Fuel Management Programs.”<sup>6</sup> We respectfully request that the Commission reconsider its position on this issue.

But if the NRC decides to retain the requirements for “preliminary approval” and “final review” of the IFMPs, then those preliminary approvals should continue to be issued via letter (and accompanying

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<sup>1</sup> “Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning: Proposed Rule,” 87 Fed. Reg. 12,254, 12,324 (March 2, 2022).

<sup>2</sup> 87 Fed. Reg. 12,254.

<sup>3</sup> “Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (RIN 3150-AJ59),” SECY-18-0055 (May 7, 2018)(“SECY-18-0055”).

<sup>4</sup> *Id.* at pg. 163 (internal quotation marks omitted).

<sup>5</sup> *Id.* at pg. 161, 163.

<sup>6</sup> “Staff Requirements – SECY-18-055 – Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (RIN 3150-AJ59),” Nov. 3, 2021 (“SRM-SECY-18-0055”).

safety evaluations) and “final review” should be conducted as part of the license amendment process associated with license termination.<sup>7</sup> To decide otherwise and manufacture a new license amendment proceeding when it is unnecessary to change either a licensee’s authority or the terms of its license would be contrary to the NRC’s longstanding approach to the regulation of spent fuel storage, decommissioning, and IFMPs.

Our position on the proposal to require approval of the IFMP and any changes to that document via the license amendment process is described in detail below.<sup>8</sup>

**I. The Proposed Changes to 10 CFR 50.54(bb) are Inconsistent with the ISFSI General Licensing and Decommissioning Processes That Have Been Successfully Implemented for Over Thirty (30) Years.**

a. Background

The current iteration of 10 CFR 50.54(bb) states:

For nuclear power reactors licensed by the NRC, the licensee shall, within 2 years following permanent cessation of operation of the reactor or 5 years before expiration of the reactor operating license, whichever occurs first, submit written notification to the Commission for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor following permanent cessation of operation of the reactor until title to the irradiated fuel and possession of the fuel is transferred to the Secretary of Energy for its ultimate disposal in a repository. . . Final Commission review will be undertaken as part of any proceeding for continued licensing under part 50 or part 72 of this chapter. The licensee must demonstrate to NRC that the elected actions will be consistent with NRC requirements for licensed possession of irradiated nuclear fuel and that the actions will be implemented on a timely basis. Where implementation of such actions requires NRC authorizations, the licensee shall verify in the notification that submittals for such actions have been or will be made to NRC and shall identify them. A copy of the notification shall be retained by the licensee as a record until expiration of the reactor operating license. The licensee shall notify the NRC of any significant changes in the proposed waste management program as described in the initial notification. (emphasis added).

Section K, “Spent Fuel Management Planning,” included in the March 3 Federal Register notice soliciting comment on the proposed rule explains that “[t]he NRC proposes to clarify the current IFMP approval

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<sup>7</sup> We also note that there may be other, “interim” opportunities for “final review” of aspects of the IFMP prior to the license amendment proceeding associated with license termination (e.g., defueled technical specifications license amendment requests (for Levels 1 and 2), and technical specification license amendment requests for permanent removal of spent fuel from the SFP, or ISFSI-only (for Level 3). Use of these milestones to review the IFMP would also avoid the need to create a standalone amendment associated with review and “approval” of the IFMP.

<sup>8</sup> Although not specifically addressed in these comments, if the NRC were to retain the requirement for approval of the IFMP via the license amendment process, we believe the proposed requirement to submit any changes to the IFMP as license amendment requests is clearly overbroad and unnecessarily burdensome. A change control process would be necessary in that case.

process and the § 50.54(bb) provisions regarding preliminary approval and final NRC review of the IFMP as part of any proceeding for continued licensing under 10 CFR part 50 or 10 CFR part 72.”<sup>9</sup> Section K goes on to explain that the “proceeding[s] for continued licensing under part 50 or part 72 of this chapter” during which final Commission review of the IFMP would occur under the current version of section 50.54(bb) “no longer exist as they did when 50.54(bb) was first promulgated in 1984.”<sup>10</sup>

Therefore, the proposed rule would modify section 50.54(bb) to require submittal of the IFMP to the NRC as a license amendment request. The NRC also proposes to require that a licensee “submit to the NRC any changes to the IFMP as an application for an amendment to its license.”<sup>11</sup> Specifically, the proposed amendment to section 50.54(bb) would require:

(bb) Irradiated Fuel Management Plan (1) Prior to or within 2 years following permanent cessation of operations, the licensee must submit an irradiated fuel management plan (IFMP) to the NRC as an application for an amendment to its license. Licensees may not start to decommission structures, systems, and components needed for moving, unloading, and shipping the irradiated fuel until after the NRC approves the IFMP.

.....

(5) Licensees shall submit to the NRC any changes to the IFMP as an application for an amendment to its license.<sup>12</sup>

As explained in the proposed rule,<sup>13</sup> when the requirements in section 50.54(bb) were originally promulgated in 1984 the NRC’s decommissioning process was different than it is today. Specifically, at that time, the Commission explained that:

[E]xtended storage of spent fuel at a reactor beyond the expiration dates of the operating license will require an amendment to the Part 50 license to cover possession only of the reactor and spent fuel under the requisite provisions of Parts 30, 50 and 70, or an authorization pursuant to Part 72. . . .<sup>14</sup>

The 1984 final rule then tied the “final review” of the IFMP to these possession-only licensing proceedings, stating “[t]he [IFMP] would then, at license expiration and termination of reactor operation, become part of an amended Part 50 license for a shut down reactor facility, or a Part 72 license for storage of spent nuclear fuel following termination of reactor operation.”<sup>15</sup> This approach made sense in 1984, but the regulatory framework surrounding both on-site storage of spent fuel and decommissioning would change significantly in the twelve years following the 1984 final rule.

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<sup>9</sup> 87 Fed. Reg. 12,295.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 12,325 (emphasis added).

<sup>12</sup> *Id.* at 12,324-12,325 (emphasis added).

<sup>13</sup> *Id.* at 12,295.

<sup>14</sup> “Requirements for Licensee Actions Regarding the Disposition of Spent Fuel Upon Expiration of Reactor Operating Licenses: Final Rule,” 49 Fed. Reg. 34,688, 34,689 (Aug. 31, 1984).

<sup>15</sup> 49 Fed. Reg. 34,692.

b. The Proposed Changes to 10 CFR 50.54(bb) are Inconsistent with Management of Spent Fuel Pursuant to General Licenses Under 10 CFR Part 72.

First, in 1990, the Commission amended the regulations in 10 CFR Part 72 to allow for the storage of spent fuel in dry casks at commercial power reactor sites under a general license.<sup>16</sup> The Commission explained the rulemaking as follows:

The Commission published the proposed rule on this subject in the Federal Register on May 5, 1989 (54 FR 19379). The rule proposed to amend 10 CFR part 72 to provide for storage of spent fuel on the sites of nuclear power reactors without the need for additional site-specific Commission approvals, as directed by the Nuclear Waste Policy Act of 1982 (NWPA). Section 218(a) of the NWPA directed the Department of Energy to establish a spent fuel storage development program with the objective of establishing one or more technologies that the NRC might approve for use at civilian nuclear power reactor sites without, to the maximum extent practicable, the need for additional site-specific approvals, by the Commission. Section 133 of the NWPA directs the Commission to establish, by rule, procedures for licensing any technology approved under Section 218(a). The approved technology is storage of spent fuel in dry casks. The final rule is not significantly different from the proposed rule.<sup>17</sup> (emphasis added)

So, a primary purpose of the 1990 final rule creating the general licensing scheme for at-reactor dry cask storage was to implement the direction provided by Congress in the NWPA to establish technologies that would allow spent fuel storage at commercial reactor sites “without, to the maximum extent practicable, the need for additional site-specific approvals, by the Commission.”<sup>18</sup> The 1990 final rule did just that – and, as noted in the current proposed rule, consistent with the requirements of the NWPA: “storage of spent fuel in a general license ISFSI is authorized by operation of law via § 72.210, so there is no licensing proceeding or approval needed for the 10 CFR part 72 general license.”<sup>19</sup> Since 1990, the NRC has continued to implement changes to its regulatory framework to eliminate repetitive reviews and leverage efficiencies associated with the generic approval of cask designs associated with the general licensing process.<sup>20</sup> Further, as recognized in the proposed rule, most reactor licensees are storing used fuel at on-site ISFSIs pursuant to the general licensing provisions of Part 72.<sup>21</sup>

The current proposal to require approval of the IFMP via a license amendment is inconsistent with the direction provided by Congress in the NWPA, as well as the NRC’s action to implement that direction in the 1990 final rule. Specifically, the draft guidance published with the proposed rule indicates that the NRC intends to request substantial amounts of information as part of its review of the license

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<sup>16</sup> “Storage of Spent Fuel in NRC-Approved Storage Casks at Power Reactor Sites: Final Rule,” 55 Fed. Reg. 29,181 (July 18, 1990).

<sup>17</sup> 55 Fed. Reg. 29,182.

<sup>18</sup> *Id.*

<sup>19</sup> 87 Fed. Reg. 12,295.

<sup>20</sup> See, e.g., “Clarification and Additional Flexibility: Final Rule,” 65 Fed. Reg. 50,606 (Aug. 21, 2000) (“The final rule eliminates the necessity for repetitive reviews of cask design issues in a licensing proceeding on applications for specific licenses, where previously approved cask designs, or designs under Commission review, have been incorporated by reference into the application.”); “License and Certificate of Compliance Terms: Final Rule,” 76 Fed. Reg. 8,872 (Feb. 16, 2011) (“allow[ing] general licensees . . . to implement changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC. . . .”).

<sup>21</sup> 87 Fed. Reg. 12,295. Specifically, spent fuel is currently being stored under the general licensing provisions of Part 72 at 61 reactor sites in the United States.

amendment request, including information related to storage of fuel in NRC-approved spent fuel dry cask storage systems that are being operated pursuant to a Part 72 general license.<sup>22</sup> Under the framework proposed in this rulemaking, this information would be subject to review and approval by the NRC staff as part of a license amendment request, as well as being subject to adjudication through the hearing process – all on a site-specific basis, contradicting the framework established by the NWPA and Commission’s 1990 rulemaking.

We also note that under the current regulations, NRC’s preliminary approval of IFMPs has focused almost exclusively on the cost and funding of spent fuel storage.<sup>23</sup> The NRC routinely reviews decommissioning funding reports submitted by reactor licensee throughout both the operating and decommissioning phases of a facilities lifecycle, without the need for license amendments.<sup>24</sup> As explained below in Section II, there is simply no basis for requiring an amendment to a facility license for the NRC to review and “approve” similar information submitted in an IFMP.

c. The Proposed Revisions to 10 CFR 50.54(bb) are Inconsistent with the Major Changes to the Decommissioning Process Promulgated in 1996.

While the 1990 final rule implemented a foundational change to the NRC’s licensing framework for at-reactor storage of spent fuel, it did not change the need for licensees to amend their Part 50 licenses to begin the decommissioning process. On this score, the 1990 final rule explained:

Spent fuel can be stored on a site only as long as there is a power reactor with a valid license or the possession of spent fuel is authorized under some other regulation or form of license. This could be an amended license issued under 10 CFR 50.82, under which any reactor licensee may apply for termination of the operating license and to decommission the facility. When the reactor is put into a condition in which it cannot operate, the operating license would be amended to permit the licensee to possess the byproduct, source, and special nuclear material remaining on the site. Storage of spent fuel in dry casks under the general license could continue under the amended license, which is often called a “possession-only” license.<sup>25</sup>

But the need for licensees to obtain an amendment to transition to a possession-only license was eliminated six years later, in the Commission’s 1996 decommissioning rulemaking.<sup>26</sup> In that rulemaking, the Commission fundamentally changed the decommissioning process, eliminating the need for NRC approval of a decommissioning plan and the possession-only license amendment. Specifically, the need for a possession-only license amendment, which would have included “final review” of the IFMP, was removed because the NRC determined that major decommissioning activities could be undertaken

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<sup>22</sup> “Decommissioning of Nuclear Power Reactors,” Draft Regulatory Guide DG-1347, Rev. 1 (Proposed Revision 2 to Regulatory Guide RG 1.184)(Feb. 2022), at pgs. 12-13.

<sup>23</sup> See reviews cited in FN 56. See also, “Decommissioning Planning: Final Rule,” 76 Fed. Reg. 35,512, 35,551 (June 17, 2011)(describing the IFMP as “the functional equivalent to a [Decommissioning Funding Plan] provision in requiring a one-time report setting for the licensee’s program to provide funding for management of spent fuel during the time between when the reactor shuts down and when DOE accepts title to and takes possession of the spent fuel.”

<sup>24</sup> See 10 CFR 50.75, 50.82.

<sup>25</sup> 55 Fed. Reg. 29,186.

<sup>26</sup> “Decommissioning of Nuclear Power Reactors: Final Rule,” 61 Fed. Reg. 39,278 (July 29, 1996).

without the need for a license amendment, pursuant to section 50.59, as well as requirements in section 50.82(a)(6) and (7).<sup>27</sup>

The Commission thoroughly explained the basis for eliminating the need for NRC approval of both a decommissioning plan and a possession-only license amendment request, contrasting the safety concerns presented by an operating commercial power reactor with the risks posed by a permanently shut down and defueled facility.<sup>28</sup> Section 50.54(bb) is only mentioned twice in the 1996 final rule and both references are focused on the requirement for licensee to provide information regarding the cost of spent fuel storage in the IFMP.<sup>29</sup>

In the 1996 rulemaking the Commission also made changes to 10 CFR 50.51 to emphasize that, although a commercial power reactor license expires at the end of its term, the license is not terminated until the Commission terminates it.<sup>30</sup> Specifically, section 50.51(b) currently states:

(b) Each license for a facility that has permanently ceased operations, continues in effect beyond the expiration date to authorize ownership and possession of the production or utilization facility, until the Commission notifies the licensee in writing that the license is terminated. During such period of continued effectiveness the licensee shall—

- (1) Take actions necessary to decommission and decontaminate the facility and continue to maintain the facility, including, where applicable, the storage, control and maintenance of the spent fuel, in a safe condition, and
- (2) Conduct activities in accordance with all other restrictions applicable to the facility in accordance with the NRC regulations and the provisions of the specific 10 CFR part 50 license for the facility.

A review of this rulemaking reveals several salient points. First, the Commission's intent in the 1996 rulemaking was clearly to eliminate the need for unnecessary licensing actions as a prerequisite to initiating the decommissioning of commercial power reactors. This is evident through the Commission's promulgation of the Post-Shutdown Decommissioning Activities Report (PSDAR) process to replace approval of decommissioning plans through issuance of Commission orders, as well as the modification of 10 CFR 50.82 and enhanced use of the section 50.59 process to eliminate the need for possession-only license amendments prior to undertaking decommissioning activities. The 1996 rulemaking also clarified the idea that the license for a permanently shut down reactor continues in effect until the Commission terminates the license. Further, the Commission explained that NRC regulations, and the terms and conditions of the Part 50 facility license and technical specifications, continue to apply until they are modified by the NRC by amendment to the Part 50 license.<sup>31</sup> Thus, there is no longer a need for

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<sup>27</sup> See 61 Fed. Reg. 39,282-39,283, 39,295.

<sup>28</sup> See *Id.* at 39,278-39,279.

<sup>29</sup> 61 Fed. Reg. 39,285, 39,293. We also note that a word search of the 1995 proposed rule did not shed any light on this issue, as section 50.54(bb) does not appear to be referenced at all in the associated Federal Register notice. "Decommissioning of Nuclear Power Reactors: Proposed Rule," 60 Fed. Reg. 37,374 (July 20, 1995).

<sup>30</sup> 61 Fed. Reg. 39,288.

<sup>31</sup> 61 Fed. Reg. 39,287 (pointing out that, despite the elimination of the need for amendments to transition to a possession-only license, "numerous changes to technical specifications" were anticipated).

individual licensing actions to authorize the storage of spent fuel after expiration of the reactor operating license because the license continues in effect until terminated by the Commission.

The proper response to these changes to the decommissioning process would be to align the “preliminary approval” and “final review” of the IFMP with the process that has been in place since 1996 – not to unnecessarily insert an additional licensing action prior to initiation of certain decommissioning activities. Requiring that the IFMP be reviewed and approved via the license amendment process is inconsistent with the foundational changes made to the decommissioning process in the 1996 rulemaking, which sought to minimize the need for such licensing actions as a prerequisite to initiating the decommissioning of commercial power reactors.

As an alternative to the approach provided in the proposed rule, if the NRC staff believes that the directive for final Commission review of the IFMP should take place “as part of any proceeding for continued licensing under part 50 or part 72 of this chapter,” then the most natural interpretation of that directive under the current regulatory framework is for final review of the IFMP to take place as part of the license termination process.<sup>32</sup> As 10 CFR 50.51(b) makes clear, a Part 50 licensee must continue to comply with the terms of its license until the Commission terminates that license. In all cases, spent nuclear fuel at reactor sites will be managed pursuant to either a Part 72 general license associated with a Part 50 license, or a Part 72 specific license. There is no regulatory “gap” that interrupts NRC oversight from the time a facility is constructed to the time the facility is fully decommissioned and all spent fuel is removed from the site. Thus, if spent fuel will remain at the reactor site after the completion of decommissioning the power reactor facility, then final review of the IFMP would be most appropriate at that time.

## **II. The Proposed Changes to 10 CFR 50.54(bb) Requiring a License Amendment Lack Coherence, are Inconsistent with the Commission’s Long-Held Position on the nature of the IFMP, and are Unnecessary from a Legal Standpoint.**

### **a. Background and Procedural History of the Proposed Rule**

The NRC staff provided the draft proposed decommissioning rulemaking for Commission review and approval under SECY-18-0055.<sup>33</sup> In that paper, the NRC staff proposed changes to “clarify and align” the regulations in 10 CFR 50.54(bb), 50.82, and 52.110 with the regulations provided in section 72.218.<sup>34</sup> As part of that clarification and alignment, the NRC staff initially proposed “to remove § 50.54(bb)’s

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<sup>32</sup> We also note that there are other license amendments related to the management of spent fuel prior to license termination (e.g., defueled technical specifications license amendment requests (for Levels 1 and 2), and technical specification license amendment requests for permanent removal of spent fuel from the SFP, or ISFSI-only (for Level 3). These could also be “interim” opportunities for NRC final review of these major milestones associated with the IFMP, prior to the license termination plan amendment.

<sup>33</sup> “Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (RIN 3150-AJ59),” SECY-18-0055 (May 7, 2018)(“SECY-18-0055”).

<sup>34</sup> SECY-18-0055, Encl. 1, at pg. 160-161. The requirement at section 72.218 applies to Part 50 licensees managing spent fuel at an on-site independent spent fuel storage installation pursuant to the general license granted in section 72.210 and states:

The notification regarding the program for the management of spent fuel at the reactor required by § 50.54(bb) of this chapter must include a plan for removal of the spent fuel stored under this general license from the reactor site. The plan must show how the spent fuel will be managed before starting to decommission systems and components needed for moving, unloading, and shipping this spent fuel.

requirement for preliminary approval and final NRC review . . . of the IFMP.”<sup>35</sup> This change was intended to align the level of review for the PSDAR and IFMP, which the NRC staff appropriately described as planning documents for decommissioning and spent fuel management, respectively.<sup>36</sup>

To that end, the NRC staff initially proposed changes to section 50.54(bb) that would require submittal of the IFMP “to the NRC no later than the date of submission of the [PSDAR] required by § 50.82(a)(4)(i) of this part or § 52.110(d)(1) of this chapter and before starting to decommission structures, systems, and components needed for moving, unloading, and shipping the irradiated fuel.”<sup>37</sup> The draft proposed rule provided to the Commission under SECY-18-0055 also required that the IFMP “identify any actions for managing irradiated fuel that will require NRC authorization,” and that licensees “notify the NRC in writing before performing any activities involving decommissioning of structures, systems, and components needed for moving, unloading, and shipping of the irradiated fuel that are inconsistent with the discussion in the IFMP.”<sup>38</sup> Importantly, the requirements for “preliminary approval” and “final review” of IFMPs were removed from section 50.54(bb). NEI and its members support the approach to described by the NRC staff in SECY-18-0055.

But, in its staff requirements memorandum providing direction to the NRC staff on SECY-18-0055, the Commission “disapproved the recommendation to remove § 50.54(bb)’s preliminary approval and final NRC review of Irradiated Fuel Management Programs.”<sup>39</sup> The Enclosure to SRM-SECY-18-0055 provided a redline/strikeout directing specific changes to the Federal Register notice prior to publication, which were designed to implement the Commission’s direction.<sup>40</sup> Although the Commission did not provide specific direction to the staff regarding how to modify the proposed section 50.54(bb) to conform with its direction and proposed redline/strikeout of the Federal Register notice, it appears that the Commission was directing the staff to maintain the status quo with respect to preliminary approval and final review of the IFMP.

We note that the discussion under Section K, “Spent Fuel Management Planning,” included in the March 3 Federal Register notice soliciting comment on the proposed rule is significantly different from the redline provided in SRM-SECY-18-0055.<sup>41</sup> Specifically, as discussed above, the proposed rule correctly points out that when section 50.54(bb) was added to the regulations in 1984, licensees were required to submit license amendment requests at the initial stages of decommissioning for both approval of decommissioning plans and to convert the Part 50 operating license to a possession-only license. The proposed rule also discusses the fact that when promulgating section 50.54(bb) in 1984, the Commission “noted . . . that the IFMP would become part of the conditions of an amended . . . part 50 license for a

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<sup>35</sup> *Id.* at pg. 163 (internal quotation marks omitted).

<sup>36</sup> *Id.* at pg. 161, 163.

<sup>37</sup> *Id.* at pg. 248.

<sup>38</sup> *Id.* at pg. 248-249.

<sup>39</sup> “Staff Requirements – SECY-18-055 – Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (RIN 3150-AJ59),” Nov. 3, 2021 (“SRM-SECY-18-0055”).

<sup>40</sup> SRM-SECY-18-0055, Encl. at pg. 167-168. That redline/strikeout left most of the discussion under subheading K, “Spent Fuel Management Planning,” undisturbed, but deleted the two paragraphs in Enclosure 1 to SECY-18-0055 discussing the alignment of the level of review for the PSDAR and IFMP and suggesting removal of the preliminary approval and final review of the IFMP. The Commission did not provide specific edits to the staff’s proposed revisions to section 50.54(bb), but simply included a comment directing the staff to “[u]pdate to reflect that IFMP approval is required.” *Id.* at pg. 264.

<sup>41</sup> Compare the discussion provided in SRM-SECY-18-0055, Encl. at pg. 164-169 with the discussion provided in 87 Fed. Reg. 12,295-12,296.

shutdown reactor facility.”<sup>42</sup> Although different from the discussion approved by the Commission in SRM-SECY-18-0055, this description of the history of 10 CFR 50.54(bb) is accurate.

But then the proposed rule draws a conclusion that does not follow from this history or the Commission’s direction in SRM-SECY-18-0055. Specifically, the discussion of this issue in Section K concludes with the following statement: “Therefore, the NRC proposes to require submittal of the IFMP to the NRC as a license amendment request. The NRC also proposes to require licensees to submit to the NRC any changes to the IFMP as an application for an amendment to its license.”<sup>43</sup> In addition to being inconsistent with the NRC’s general licensing framework for at-reactor ISFSI storage of spent fuel and the significant changes to the decommissioning process implemented via the 1996 rulemaking (see Section I above), the proposed amendments to sections 50.54(bb), 51.53, and 51.95 lack coherence, are inconsistent with the Commission’s long-held position on the nature of the IFMP, and are unnecessary from a legal standpoint.<sup>44</sup>

### b. The Proposed Changes to 10 CFR 50.54(bb) Lack Coherence

Specifically, the requirement in the proposed rule for approval of IFMPs via the license amendment process makes little sense when considering the purpose of the IFMP. Specifically, both the current version and proposed amendment to section 50.54(bb) require that the IFMP demonstrate how the actions described in the document “will be consistent with NRC requirements for licensed possession of irradiated nuclear fuel” and that if the actions described in the IFMP require any NRC authorizations (exemptions, license amendments, amendment to Certificates of Compliance, etc.) the licensee must provide notice that requests for such authorizations have been or will be submitted to NRC.<sup>45</sup> Thus, the proposed revision is internally inconsistent and lacks coherence because, in essence, it would require licensees to request a license amendment for NRC review and approval of the IFMP when the primary purpose of the IFMP is to explain why no amendment or other NRC authorizations are required; and, if they are, that they have been or will be requested from the NRC separately.

This lack of coherence carries over into the proposed revisions to the environmental regulations at 10 CFR 51.53 and 51.95, which flow from the proposal to require approval of IFMPs and changes to IFMPs via the license amendment process.<sup>46</sup> The proposed rule would modify paragraph 51.53(d) to require licensees requesting approval of IFMPs to submit an environmental report to reflect any new or significant environmental change associated with the licensee’s planned storage of spent fuel. In turn, the proposed rule would modify paragraph 51.95(d) to require the NRC to prepare either a

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<sup>42</sup> *Id.*

<sup>43</sup> *Id.* at 12,296.

<sup>44</sup> While we understand that the process to implement direction provided in Commission SRMs can be quite complex for rulemakings of this scope, the method used to propose the requirement for approval of IFMPs through the license amendment process lacked transparency. The need for a license amendment was not discussed or directed in SRM-SECY-18-0055, was not proposed by the NRC staff in SECY-18-0055, and is a significant departure from the current process used to review IFMPs, which has been in place for nearly 38 years. In the future, if it is necessary to depart from the Commission direction provided in SRMs approving proposed rules for publication, it would be more transparent and create a more informed public comment process if the NRC specifically identified and explained the bases for those departures – particularly in cases where the departure from the Commission’s direction will impose significant changes to processes that have been in place for decades.

<sup>45</sup> 10 CFR 50.54(bb); 87 Fed. Reg. 12,325.

<sup>46</sup> 87 Fed. Reg. 12,332.

supplemental environmental impact statement (EIS) or an environmental assessment (EA) to update prior environmental assessments.

But it is unclear what potential environmental impacts would be addressed in the proposed environmental report and associated EIS or EA. For example, as described above, most licensees storing spent fuel in at-reactor ISFSIs are doing so pursuant to a Part 50 license and the associated general licensing provisions of Part 72.<sup>47</sup> And, as described in the 1990 rulemaking promulgating the general licensing provisions of Part 72, the environmental impacts associated with storing spent fuel pursuant to a Part 72 general license were evaluated generically as part of the rulemaking process.<sup>48</sup> Likewise, the environmental impacts of storing spent fuel pursuant to a Part 72 specific license would have been evaluated as part of that licensing process.<sup>49</sup> Finally, the environmental impacts of storing spent fuel beyond the licensed life for operation of a reactor are addressed generically in 10 CFR 51.23 and NUREG-2157, “Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel.” Citing section 51.23, 10 CFR 51.53 explicitly states that “no discussion of the environmental impacts of the continued storage of spent fuel is required” in a licensee’s environmental report. In turn, section 51.95 states that the generic environmental determinations regarding continued storage of spent fuel will be deemed incorporated in into any EIS or EA prepared under that section.

Therefore, unless the IFMP is proposing activities that are outside the authority granted in the existing licenses governing spent fuel storage, there would be no environmental impacts associated with those activities that have not already been evaluated generically or as part of a licensing proceeding for a part 72 specific license. And if the IFMP were proposing activities outside the authority granted in existing licenses governing storage of spent fuel, then a separate licensing action or exemption (and associated environmental reviews) would be necessary prior to the licensee implementing such actions. So, the lack of coherence associated with requiring approval of the IFMP via the license amendment process will also result in repeated environmental reports and (presumably) EAs with associated Findings of No Significant Impact (FONSI) to describe the environmental impacts of activities that have already been evaluated by the NRC. This is an inefficient use of both licensee and NRC resources.

c. The Proposed Changes to 10 CFR 50.54(bb) are Inconsistent with the Commission’s Long-Standing View on the Nature of the IFMP.

In the 1984 final rule promulgating section 50.54(bb), the Commission responded to comments challenging the “review and approval” of the IFMP as confusing, unnecessary, burdensome, and creating a new layer of approvals.<sup>50</sup> The Commission explained:

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<sup>47</sup> See FN 19.

<sup>48</sup> See 55 Fed. Reg. 29,187 (“Potential environmental impacts related to this rulemaking were analyzed in [the] environmental assessment, in previous rulemakings related to the revision of part 72, and in the Commission’s waste confidence proceedings. . . .”). See also, 55 Fed. Reg. 29,190 (“The Commission has determined . . . that [the 1990 rule promulgating the general license for spent fuel storage in at-reactor ISFSIs] would not be a major federal action significantly affecting the quality of the human environment, and therefore an Environmental Impact Statement (EIS) is not required. The finding is premised on two actions, which are (1) the licensing of an operating reactor for a particular site for which an EIS has been previously prepared and (ii) the independent certification of spent fuel storage casks for use at any reactor site.”).

<sup>49</sup> See 10 CFR 72.34.

<sup>50</sup> 49 Fed. Reg. 34,691 (emphasis added)(internal quotation marks in the original).

The Commissions review of each licensee's plans for management and ultimate disposal of all irradiated fuel at the reactor following operating license expiration is intended to assure that each licensee had made adequate advance preparations, including allowance for contingencies, for managing spent fuel in a manner that provides adequate protection of the public health and safety and the environment until it is transferred to the Secretary of Energy for disposal. . . . The notification [provided in section 50.54(bb)] is part of an information gathering process which is more specific, but similar in nature to the provisions of § 50.54(f), which states:

The licensee will at any time before expiration of the license, upon request of the Commission submit written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended or revoked.

The provisions of § 50.54(bb) may be used by the Commission in determining if it needs to take any further action. The Commission's review will focus on the identification of discrepancies or omissions and its "approval" will signify that, based on the information available at the time of filing the notification, the licensee's plans are sound and will provide adequate protection of the public health and safety and the environment. . . . The plan would then, at license expiration and termination of reactor operation, become part of the conditions of an amended Part 50 license for a shut down reactor facility, or a Part 72 license for storage of spent nuclear fuel following termination of reactor operation.

In order to clarify the Commission's intent that the Commission's approval of the licensee's plans for spent fuel management is not a final approval, the word "preliminary" has been inserted before "approval" in the first sentence of the proposed § 50.54(bb) and the following sentence is inserted after the first sentence: "Final Commission review will be undertaken as part of the proceeding for continued licensing under Part 50 or Part 72."<sup>51</sup>

Several points are clear based on the Commission's robust explanation. First, the Commission clearly considered the notification required under section 50.54(bb) as akin to a specific, codified information request. Further, the Commission's "preliminary approval" of such requests were simply viewed as confirmation that the licensee's plans for management of irradiated fuel were sound, and to determine whether further Commission action was necessary. Responses to information requests, whether issued under section 50.54(f) or specifically codified in other sections of the regulations like 50.54(bb), are not requests for license amendments. Treating the IFMP in this way will create unnecessary burdens for both licensees and NRC staff.

Although the 1984 final rule did modify section 50.54(bb) to clarify that final review of the IFMP would be undertaken as part of the then-relevant proceeding for continued licensing, nothing in the 1984 rulemaking indicates that the Commission believed that approval of the IFMP, standing alone, required a license amendment. The Commission's decision to include final review of the IFMP during the licensing

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<sup>51</sup> 49 Fed. Reg. 34,691-34,692 (emphasis added)(internal quotation marks in the original).

amendment proceeding that was necessary to transition to a possession-only part 50 or specific part 72 license made sense in 1984 because those license amendment proceedings were necessary at that time – independent of the NRC’s review and approval of the IFMP. But the decision to consider the IFMP as part of a licensing action that was already required does not indicate that the Commission intended that review and approval of the IFMP, which it described as akin to a response to an information request, would warrant creation of a license amendment proceeding standing on its own.

Finally, nothing in the Commission’s November 2021 SRM disapproving the NRC staff’s recommendation to remove the “preliminary approval” and “final review” of the IFMP indicates that the Commission now believes that a license amendment is necessary. The discussion in Section K of the proposed rule provides no explanation of why the NRC staff now believes that NRC “approval” of licensee responses to the information request contained in section 50.54(bb) requires a license amendment.

d. The Proposed Changes to 10 CFR 50.54(bb) are Unnecessary from a Legal Standpoint.

As the Commission has explained, the NRC’s “case law acknowledges that an agency action not formally labeled as a license amendment could constitute a *de facto* license amendment and trigger hearing rights . . . if the action (1) granted the licensee any greater authority or (2) otherwise altered the original terms of the license.”<sup>52</sup> The NRC’s review and “approval” of the IFMP does neither. To the contrary, as explained above, the Commission has long described the requirement to submit the IFMP as akin to an information collection under 10 CFR 50.54(f).<sup>53</sup> Further, section 50.54(bb) itself makes it clear that the point of NRC’s “preliminary approval” and “final review” of the IMFP are for the licensee to demonstrate that the actions described in the IFMP “will be consistent with the NRC’s requirements for licensed possession of irradiated nuclear fuel and that the actions will be implemented on a timely basis.”

In other words, the regulatory history and language of section 50.54(bb) make it clear that the purpose of the NRC’s “preliminary approval” and “final review” of the IFMP is to execute the agency’s ongoing oversight of spent fuel management, rather than to expand the licensee’s authority or alter the terms of the Part 50 or Part 72 licenses. And the Commission has held that the NRC’s review of licensee responses to information requests undertaken as an exercise of the agency’s regulatory oversight function, are not *de facto* license amendments.<sup>54</sup>

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<sup>52</sup> *In the Matter of Pacific Gas & Electric Company* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-16-9, 83 NRC 472 (2016), citing *Omaha Public Power District* (Fort Calhoun Station, Unit 1), CLI-15-5, 81 NRC 329, 334 (2015). See also, *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 326-327 (1996) (“In evaluating whether challenged NRC authorizations effected license amendments within the meaning of section 189a, courts repeatedly have considered the same key factors: did the challenged approval grant a licensee any greater operating authority, or otherwise alter the original terms of a license?”) (internal quotations omitted), citing *In re Three Mile Island Alert*, 771 F.2d 720, 729 (3d Cir. 1985); *San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287, 1314 (D.C. Cir. 1984); *Citizens Awareness Network, Inc. v. NRC*, 59 F.3d 284, 295 (1st Cir. 1995)(holding that authorization of component dismantling was a *de facto* license amendment because such actions were “beyond the ambit of the presumptive authority granted” in NRC licenses); *Sholly v. NRC*, 651 F.2d 780, 791 (D.C. Cir. 1980) (holding that an NRC order allowing purging of the TMI 2 containment was a license amendment because it “granted the licensee authority to do something that it otherwise could not have done under the existing license authority.”).

<sup>53</sup> 49 Fed. Reg. 34,691-34,692.

<sup>54</sup> 83 NRC 472, at 485 (“But as we have held, NRC oversight activities gathering information about and evaluating plant performance do not amend a license. . . .”)(citing cases)(internal quotation marks omitted).

Indeed, if any NRC approvals are necessary that would expand the licensee’s authority (i.e., exemptions or license amendments), section 50.54(bb) indicates that the licensee would need to request those NRC approvals outside of the IFMP review and approval process and must indicate that such requests have or will be submitted to the NRC. NRC’s review and approval of the IFMP itself would not be the source of any such NRC approvals.<sup>55</sup> And the Commission has clarified that “ongoing oversight – including oversight that may eventually result in a licensee requesting to amend an operating license – does not constitute a license amendment proceeding that triggers hearing rights.”<sup>56</sup>

Thus, the proposed revisions to section 50.54(bb) are not necessary from a legal standpoint. To the contrary, since promulgation of the 1984 final rule, the NRC staff has issued many “preliminary approvals” of IFMPs and IFMP updates by letter, without the need for license amendments.<sup>57</sup> And the proposed rule provides no rationale for why a license amendment would now be necessary to “approve” an IFMP under the Commission’s case law discussed above.

### III. The Proposed Changes to 10 CFR 50.54(bb) Represent an Unanalyzed Backfit.

The proposed changes to section 50.54(bb) to require license amendments for initial approval of IFMPs and any subsequent changes are not mere “clarifications.” To the contrary, the proposed changes will require licensees to modify their procedures for the submittal of IFMPs, will make the decommissioning process less efficient and impose unnecessary regulatory burden on licensees (up to and including the

<sup>55</sup> This view of the IFMP is confirmed by the Commission’s statements in the 1984 final rule pointing out that despite the requirement to submit the IFMP for review and approval being added in section 50.54(bb), “[n]o specific course of action is required of the licensee by the NRC.” 49 Fed. Reg. 34,689. The Commission went on to state that “[t]he proposed licensee actions must be consistent with the NRC requirements for licensed possession of irradiated fuel” and, while licensees are required to notify the NRC of any significant changes to their IFMPs “changes are not precluded provided that the licensee maintains the capability to manage spent fuel safely.” *Id.*

<sup>56</sup> *Diablo Canyon*, 83 NRC 472, 474 (internal quotation marks omitted)(citing *Omaha Public Power District* (Fort Calhoun Station, Unit 1), CLI-15-5, 81 NRC 329, 334 (2015)).

<sup>57</sup> See, e.g., Letter from T.L. Fredrichs (NRC) to R.A. Mellor (Connecticut Yankee Atomic Power Company)(Jan. 11, 1999)(providing preliminary approval of the IFMP for Connecticut Yankee); Letter from P.S. Tam (NRC) to C.M. Crane (AmerGen Energy Company, LLC)(March 25, 2005)(providing preliminary approval of the IFMP for Oyster Creek Nuclear Generation Station with an accompanying safety evaluation); Letter from T.G. Colburn (NRC) to J.A. Spina (Nine Mile Point Nuclear Station, LLC)(Aug. 17, 2005)(providing preliminary approval of the IFMP for Nine Mile Point Nuclear Station, Unit No. 1 with accompanying safety evaluation); Letter from P.S. Tam (NRC) to J.T. Conway (Nuclear Management Company, LLC)(May 18, 2006)(providing preliminary approval of the IFMP for the Monticello Nuclear Generating Plant with accompanying safety evaluation); Letter from J. Kim (NRC) to Site Vice President (Entergy Nuclear Operations, Inc.)(Feb. 3, 2009)(providing preliminary approval of the IFMP for the Vermont Yankee Nuclear Power Station with accompanying safety evaluation); Letter from T.J. Wengert (NRC) to M.D. Wadley (Northern States Power-Minnesota)(June 1, 2009)(providing preliminary approval of the IFMP for Prairie Island Nuclear Generating Plant, Unit 1 with accompanying safety evaluation); Letter from C.F. Lyon (NRC) to S.B. Minahan (Nebraska Public Power District)(Sept. 25, 2009)(providing preliminary approval of the IFMP for Cooper Nuclear Station with accompanying safety evaluation); Letter from K.D. Feintuch (NRC) to D.A. Heacock (Dominion Energy Kewaunee, Inc.)(Sept. 28, 2009)(providing preliminary approval of the IFMP for the Kewaunee Power Station with accompanying safety evaluation); Letter from J.P. Boska (NRC) to Vice President, Operations (Entergy Nuclear Operations, Inc.)(March 17, 2010)(providing preliminary approval of the IFMP for the Indian Point Nuclear Generating Units 1 and 2 with accompanying safety evaluation); Letter from K. Feintuch (NRC) to C.R. Costanzo (Duane Arnold Energy Center)(March 29, 2010)(providing preliminary approval of the IFMP for the Duane Arnold Energy Center with accompanying safety evaluation); Letter from T.J. Wengert (NRC) to M.A. Schimmel (Northern States Power Company – Minnesota)(July 27, 2010)(providing preliminary approval of the IFMP for the Prairie Island Nuclear Generating Plant, Unit 2 with accompanying safety evaluation); Letter from M.D. Orenak (NRC) to T.D. Hobbs (Crystal River Nuclear Plant)(Dec. 19, 2014)(providing preliminary approval of an update to the IFMP for Crystal River Unit 3 Nuclear Generating Plant with accompanying safety evaluation); Letter from J. Kim (NRC) to M.J. Fisher (Omaha Public Power District)(March 30, 2018)(providing preliminary approval of the IFMP for Fort Calhoun Station, Unit 1 with accompanying safety evaluation); Letter from J.C. Tobin (NRC) to R.L. Penfield (FirstEnergy Nuclear Operating Company)(Dec. 18, 2019)(providing preliminary approval of the IFMP for Beaver Valley Power Station, Units 1 and 2 and accompanying safety evaluation); Letter from J.G. Lamb (NRC) to B.C. Hanson (Exelon Generation Company)(Sept. 28, 2018)(providing preliminary approval of updates to the IFMP for the Oyster Creek Generating Station and accompanying safety evaluation); Letter from S.P. Wall (NRC) to B.R. Sullivan (Entergy Nuclear Operations, Inc.)(June 11, 2019)(providing preliminary approval of updates to the IFMP for the Pilgrim Nuclear Power Station and associated safety evaluation).

potential need to adjudicate license amendment requests seeking approval of the IFMP or IFMP updates), and will not improve the safety of spent fuel storage.

The backfitting evaluation of this proposed change states:

The NRC would revise 50.54(bb) and 72.218 to clarify the contents of an irradiated fuel management plan, which licensees are already required to submit to the NRC for approval. This clarification of a reporting requirement would not result in a modification of or addition to SSCs or the design of a facility or the procedures or organization required to design, construct, or operate a facility. Therefore, the proposed changes would not meet the definition of “backfitting” and would not affect the issue finality of a COL.<sup>58</sup>

This explanation mischaracterizes the proposed change as a “clarification of a reporting requirement.” While it is true that section 50.54(bb) itself could be characterized as a “reporting requirement,” the current regulations do not require amendment of a facility license as part of this IFMP review and approval process.

Modifying a regulation to require amendment of a facility license where no such amendment is currently required, as well as potentially imposing new change control requirements governing future modifications to an IFMP, are not mere “clarification[s] of a reporting requirement.” Further, this proposed change to section 50.54(bb) is in no way a clarification of an existing requirement – there is no current requirement for a licensee to amend its license to obtain NRC review and approval of an IFMP. To the contrary, over the past 17 years the NRC has provided preliminary approval for well over a dozen IFMP submittals and updates, without the need for a license amendment.<sup>59</sup> Rather, this is a substantive change to how a licensee must manage its Part 50 license. This proposed amendment to the regulations will not only require Part 50 licensees to modify procedures required to decommission the facility (i.e., the procedures necessary to prepare and submit an IFMP), it will require modification of the facility license itself. This change meets the definition of backfitting and should be evaluated consistent with the requirements of 10 CFR 50.109.

#### **IV. Clarification and Alignment between §§ 50.54(bb), 50.82, 52.110, and 72.218**

Setting our concerns regarding use of the license amendment process aside, the IFMP submittal requirements should be relocated from section 50.54 to sections 50.82 and 52.110. This will result in alignment of the requirements addressing the IFMP with the requirements for spent fuel management and funding that commence with permanent cessation of operations.

In its 2011 decommissioning planning final rule, the Commission (76 FR 35512, June 17, 2011) amended the regulations in section 50.82 to require that licensees include the projected cost of managing spent fuel in the site-specific cost estimate submitted with the PSDAR.<sup>60</sup> That rulemaking also added

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<sup>58</sup> 87 Fed. Reg. 12,312.

<sup>59</sup> See FN 57.

<sup>60</sup> “Decommissioning Planning: Final Rule,” 76 Fed. Reg. 35,512, 35,571 (June 17, 2011).

paragraph 50.82(a)(8)(vii), which requires annual reporting on the status of a licensee's funding for irradiated fuel management after submittal of the site-specific cost estimate associated with the PSDAR.<sup>61</sup> The funding information to be provided in the IFMP is redundant to the reporting requirements on cost and funding in the regulations added by the 2011 decommissioning planning final rule.

With the proposed deletion of the requirement to submit the IFMP 5 years before expiration of the reactor license, the timing provisions of the requirements in sections 50.82 and 50.54(bb) are aligned. To improve the clarity and efficiency of these requirements, the IFMP submittal requirements should be relocated from section 50.54 and logically grouped with the other regulations addressing spent fuel management and funding after permanent cessation of operations (i.e., the requirements of section 50.82 and 52.110). Aligning the IFMP submittal requirements with the decommissioning regulations at 50.82 and 52.110 would reduce uncertainty and enhance overall regulatory transparency and openness regarding decommissioning and spent fuel management planning, consistent with the stated purpose of the proposed rule.

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<sup>61</sup> 76 Fed. Reg. 35,571.

**Specific NEI Comments on NRC Proposed Rule:  
Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning**

| <b>Comments Related to Decommissioning Financial Assurance</b> |   |  |  |
|--|---|--|--|
| <b>Comment Number</b>  | <b>NRC Reference</b>  | <b>Industry Comment</b>  | <b>Proposed Resolution</b>   |
| 1.   | Proposed change to 10 CFR 50.82(a)(9)(ii)(F), page 12327 of Proposed Rule | The change to add a requirement to identify specific sources of funds for remaining license termination, spent fuel management, and ISFSI decommissioning costs at the time that the license termination plan is submitted is redundant. This requirement is already fulfilled as part of the annual reports required by 10 CFR 50.82(a)(8)(v) and (vii) and triennial reports required by 10 CFR 72.30 (c). | Remove this change as it is duplicative of the regulations, adding unnecessary burden on both licensees and the NRC staff.   |
| 2.   | Proposed change to 10 CFR 72.30, page 12334 of Proposed Rule              | 10 CFR 72.30(c) resubmittal requirements for ISFSI decommissioning funding plans should be clarified to reflect that license renewal under § 72.42 is not applicable to general licenses.  | In § 72.30 (c) replace “At the time of license renewal and at intervals not to exceed 3 years” with “At intervals not to exceed 3 years and at the time of specific license renewal” |
| 3.   | DG-1348 (draft Reg Guide 1.159) section 2.6.1                             | The date of the first required triennial report is March 31, 2021, but this date has already passed.   | Change the date of the first triennial report to reflect the implementation date of the final rule.  |
| 4.   | DG-1349 (draft Reg Guide 1.185) section 2, Page 11                        | This section lists several items that are recommended to be discussed in the PSDAR. Two of these items (a and e) most likely contain business confidential information are not appropriate for a public document.  | Remove or modify these items to be clear that business confidential information is not expected to be included in the PSDAR.   |

| Comment Related to License Termination |                           |  |  |
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| Comment Number                         | NRC Reference             | Industry Comment   | Proposed Resolution  |
| 5.                                     | 50.82(a)(9),<br>52.110(i) | The NRC is proposing to amend its regulations to clarify that the requirement for a license termination plan in § 50.82(a)(9) and § 52.110(i) applies only to power reactor licensees that commenced operation. This clarification, which essentially defines commencement of operation as “fuel loaded into the reactor,” is being proposed in response to apparent confusion among combined license holders who seek to surrender their licenses before operation. | Replace “fuel loaded into the reactor” with “criticality achieved and fission products produced” in 10 CFR 52.110(i) and 10 CFR 50.82(a)(9). |

| Comments Related to Physical Security |  |   |  |
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| Comment Number                        | NRC Reference  | Industry Comment  | Proposed Resolution  |
| 6.                                    | 10 CFR 50.54(p),<br>decrease in<br>safeguards<br>effectiveness | <p>The term “decrease the safeguards effectiveness” is presently used in 10 CFR 50.54(p). Staff proposes to add a definition of this term into this section.</p> <p>The new proposed definition of “decrease in safeguards effectiveness” includes a requirement to evaluate changes as they relate to effects on a licensee’s capabilities as set forth in section 73.55(b)(3)(i). However, section 73.55(b)(3)(i) <i>does not apply</i> to licensees upon the NRC docketing of the certifications required under section 50.82(a)(1) or section 52.110(a), and when all spent fuel has been placed in dry cask storage at the facility. For example, the requirements of 73.55(b)(3)(i) to interdict and neutralize do not apply to</p> | Reword the new definition of “decrease in safeguards effectiveness” to clarify that evaluation of changes needs to be made against 73.55(b)(3)(i) OR 72.212(b)(9)(i) through (vi) OR subpart H of Part 72 and section 73.51. |

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|     |  | a licensee with all spent fuel in dry cask storage. Rather, in this plant condition, licensees provide for physical protection of the spent fuel under sections 72.212(b)(9)(i) through (vi), or subpart H of Part 72 and section 73.51, which do not include requirements to interdict and neutralize. The new proposed definition of “decrease in safeguards effectiveness” does not take this into account. |   |
| 7.  | 10 CFR 50.54(p), decrease in safeguards effectiveness  | The term “decrease the safeguards effectiveness,” in addition to its use in section 50.54(p), is also used in section 72.186(a) and (b). However, staff is not proposing to include the new definition of the term into that section.  | Add this new definition to 10 CFR 72.186 for consistency with the proposed addition to 50.54(p).  |
| 8.  | 10 CFR 50.54(p), decrease in safeguards effectiveness  | NEI requests clarification on the basis document for this standard.  | Is a review of a proposed change under this section to be evaluated against the cited regulation <i>as implemented via the plan most recently approved by NRC?</i>  |
| 9.  | 10 CFR 73.55(b)(3), protection against significant core damage   | Staff proposes to clarify that the design of the physical protection program include prevention of significant core damage until NRC has docketed the certification requirement under sections 50.82(a)(1) or 52.110(a). However, other sections containing the same wording have not been similarly clarified.  | Make the same changes to 10 CFR 73.55(b)(9)(i) insider mitigation program, and 10 CFR 73.55(k) response requirements, which also mention prevention of significant core damage.   |
| 10. | 10 CFR 73.55(p), Suspension of security measures – approval when licensee has neither licensed senior operator nor | Staff proposes to add Certified Fuel Handler (for licensees with docketed certifications under section 50.82(a)(1) or 52.110(a)) to approval authority for suspension of security measures, along with licensed senior operator. This would provide consistency with the present wording in section 50.54(x) and (y), concerning departure from a license condition or a technical specification.              | The NRC should clarify in 50.54(x) and (y) and in 73.55(p), that decisions to depart from the operating license or technical specifications, or suspend security measures, can be authorized by a senior licensed operator, or a certified fuel handler (for licensees who have docketed 10 CFR 50.82(a)(1) or 52.110(a) certifications), or any individual in a superior position to a |

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|     | certified fuel handler                       | Licensees with all spent fuel in dry cask storage at the facility may have neither licensed senior operators nor certified fuel handlers. NRC found it necessary to clarify approvals in RIS 2008-26. In that RIS NRC clarified that, relating to a decision to depart from the license or technical specification, “such a decision could be made either by any senior licensed operator or any individual in a superior position to a licensed senior operator.”     | senior licensed operator or certified fuel handler (suggested wording is – or by an appropriately trained senior on-shift licensee representative), consistent with RIS 2008-26.  |
| 11. | 10 CFR 73.51(a)(3), “notify” versus “submit” | <p>This is a new section, and as worded it states its applicability is for a general licensed ISFSI, upon docketing or certifications under 50.82(a)(1) or 52.110(a), when all spent fuel is in dry storage, and notification has been made to NRC under 72.212(b)(9)(vii).</p> <p>Section 72.212(b)(9)(vii)(B) (also a new section) requires a licensee electing to provide physical protection under subpart H and 73.51 to submit their physical security plan.</p> | <p>Recommend replacing... “<i>When all spent fuel is in dry storage, and <b>notification</b> has been made to NRC under 72.212(b)(9)(vii)...</i>” with, “<i>When all spent fuel is in dry storage, and <b>submittal</b> has been made to NRC under 72.212(b)(9)(vii).</i>”</p> <p>OR with “<i>and notification has been made to NRC under 72.212(b)(9)(vii)(B).</i>”</p>  |
| 12. | 10 CFR 73.51                                 | Use of “ <i>the</i> ” protected area versus “ <i>a</i> ” protected area  | Section 73.51 uses the term “ <i>the protected area</i> ” in many locations such as 73.51(b)(2), (d)(1), (d)(2), (d)(3), (d)(4), (d)(9), (d)(10), (d)(13). Section 73.55 uses the term “ <i>a protected area.</i> ” A licensee may establish more than one protected area. The use of “ <i>the protected area</i> ” could be interpreted to mean a licensee can only have one protected area. Recommend using “ <i>a protected area</i> ” consistently. |

| Comments Related to Cyber Security |                    |  |  |
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| Comment Number                     | NRC Reference      | Industry Comment   | Proposed Resolution  |
| 13.                                | 73.55(b)(9)(ii)(C) | The NRC should clarify in 73.55(b)(9) what elements of a cyber security plan would be needed at Level 2 and beyond.  | <p>To maintain consistency with proposed change to 10 CFR 73.55(c)(6) and 10 CFR 73.54(i):</p> <p>Change 10 CFR 73.55(b)(9)(ii)(C) from:</p> <p>The cyber security program described in § 73.54; and...</p> <p>to</p> <p>The cyber security program described in § 73.54 <u>until the conditions in § 73.54(i) have been satisfied</u>; and...</p> |
| 14.                                | 73.54(j)           | <p>The proposed new regulations states, "<i>Removal of cyber security license condition. The cyber security plan license condition, which requires the licensee to fully implement and maintain in effect all provisions of the Commission-approved cyber security plan including changes made pursuant to the authority of § 50.90 of this chapter and § 50.54(p) of this chapter, is removed from the license once the conditions in paragraph (i) of this section are satisfied.</i> "</p> <p>Administrative Comment – Discussing removal of the license condition in the regulation could be misleading. NRC approval via a license amendment request is</p> | <p>Recommend re-wording the regulation to address applicability of the license condition as shown below:</p> <p>"...chapter, is no longer applicable once the conditions in paragraph (i) of this section are satisfied."</p>  |

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|  |  | required to remove the license condition from the license. |  |
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| Comments Related to Fitness For Duty (FFD) |   |   |   |
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| Comment Number                             | NRC Reference                               | Industry Comment  | Proposed Resolution   |
| 15.  | Proposed changes to § 26.3(a)               | <p>NEI continues to support clarifying that 10 CFR Part 26 does not apply to power reactor licensees that have submitted the § 50.82(a)(1) certifications and supports aligning the requirements for Part 52 licensees and Part 50 licensees so that Part 26 does not apply to licensees for nuclear power reactors after submitting the § 50.82(a)(1) or § 52.110(a) certifications.</p> <p><i>Consider</i> revising proposed § 26.3(a)(2) to clarify that the requirements of Part 26 do not apply once the licensee has submitted the § 50.82(a)(1) or § 52.110(a) certifications, rather than after the NRC’s docketing of the certifications. This would align with other paragraphs related to changes based on these certifications, for example § 50.54(hh)(2) and § 50.155(a)(2)(i).</p> | <p>Consider revising proposed § 26.3(a)(2) as follows:</p> <p>Each holder of an operating license for a nuclear power reactor under part 50 of this chapter and each holder of a combined license under part 52 of this chapter for which the Commission has made the finding under § 52.103(g) of this chapter must comply with the requirements of this part, except for subpart K of this part, until the <del>NRC’s docketing of the license holder’s certifications required under</del> licensee has submitted the <u>certifications described in § 50.82(a)(1) of this chapter</u> or § 52.110(a) of this chapter.</p> |
| 16.  | Proposed changes to § 73.55(b)(9)(ii)(B)(2) | <p>NEI supports subjecting the categories of individuals identified in § 73.55(b)(9)(ii)(B)(2)(i) to the requirements of Part 26, except for subparts I and K, as part of the required elements of a licensee’s insider mitigation program. NEI continues to maintain that a potentially fatigued individual is not an indicator of an insider threat.</p>  | <p>NEI would provide and request NRC endorsement of stand-alone guidance for implementing elements of Part 26 as part of an insider mitigation program for licensees of facilities transitioning to decommissioning, to supplement the proposed changes to the regulations. Specific topics needing additional</p>  |

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|            |                      | <p>NEI supports subjecting the categories of individuals identified in § 73.55(b)(9)(ii)(B)(2)(ii) to the specified elements of Part 26.</p> <p>For the reasons provided in NEI comments related to drug and alcohol testing in the draft Regulatory Basis document, NEI continues to maintain that additional detail and discussion on the Staff’s position on which elements of Part 26 for an insider mitigation program at decommissioning facilities should not be provided in an update to Regulatory Guide 5.77, e.g., DG-5044.</p> <p>NEI continues to support development of stand-alone guidance specific to fitness for duty requirements for an insider mitigation program appropriate for decommissioning facilities. This would provide greater clarity than is practical through specific changes to the regulations, promote consistent implementation of the program, and avoid potential unintended impacts on previous commitments to NEI 03-12 in the physical security plans of licensees.</p> <p>Guidance NEI offers to develop would include addressing behavioral observation and employee assistance aspects of the fitness for duty program, as required elements of an insider mitigation program for a decommissioning facility.</p> <p>NEI would request that NRC endorse this guidance as supplemental to the clarifications provided in the proposed changes to the regulations.</p> | <p>guidance include training, reporting requirements, and violations.</p> |
| <p>17.</p> | <p>§ 73.55(b)(9)</p> | <p>Under proposed § 72.212(b)(9)(vii), a licensee for a general license ISFSI may elect to provide physical</p>   | <p>Propose new § 73.55(b)(9)(iii) as follows:</p>                         |

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|     |                                | protection under § 73.51 when all spent fuel has been placed in dry cask storage at the facility, as an alternative to the requirements of § 72.212(b)(9)(i) through (vi). Since § 73.51 does not require a licensee to maintain an insider mitigation program, § 73.55(b)(9) also should not require this program after the licensee has submitted the § 50.82(a)(1) or § 52.110(a) certifications and all irradiated fuel has been permanently removed from the spent fuel pool(s). | “Holders of operating licenses or combined licenses for which the certifications described in § 50.82(a)(1) or § 52.110(a) of this chapter have been submitted need not meet the requirements of this section once all irradiated fuel has been permanently removed from the spent fuel pool(s).” |
| 18. | Proposed change to § 26.825(b) | The Proposed Rule clarifies that Part 26 does not apply to decommissioning facilities. The proposed change to § 26.825(b) appears to be outside the scope of this rulemaking.   | Remove the proposed change to § 26.825(b).  |

| <b>Comments Related to the Certified Fuel Handler (CFH) Definition and Elimination of the Shift Technical Advisor (STA)</b> |                      |  |  |
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| <b>Comment Number</b>   | <b>NRC Reference</b> | <b>Industry Comment</b>  | <b>Proposed Resolution</b>   |
| 19.   | 10 CFR 73.55(p)      | The NRC is proposing to amend the requirements in § 73.55(p) to allow a CFH to suspend security measures in the event of an emergency or severe weather once the reactor has shut down and all fuel has been removed from the reactor core. Once all fuel is in dry storage, most ISFSI-only and standalone ISFSI sites utilize an appropriately trained Security Shift Supervisor as the senior on-shift licensee representative empowered to supervise the safe operations of the ISFSI during normal and accident conditions. The applicable technical specifications for a standalone ISFSI during STORAGE OPERATIONS generally only have one applicable LCO | The language in 10CFR73.55(p)(i) and (p)(ii) should be written to include provisions for “an appropriately trained senior on-shift licensee representative” to authorize suspension of security measures in the event of an emergency or severe weather once all fuel has been off-loaded into dry cask storage and the site has achieved ISFSI-only or Standalone ISFSI status. |

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|     |   | <p>which is to ensure the operability of the passively cooled Cask Heat Removal System. The simplistic design and passive nature of these dry cask storage systems should permit an individual who is appropriately trained in accordance with the site’s NRC approved Security and/or Emergency Plan, to make such decisions in an appropriately informed manner.</p>  |   |
| 20. | 10 CFR 50.2   | <p>The NRC is proposing to amend the definition of a CFH in § 50.2 to provide an alternative that would eliminate the need for licensees to seek NRC approval for fuel handler training programs by adding a provision that requires the training program to address the safe conduct of decommissioning activities, safe handling and storage of spent fuel, and appropriate response to plant emergencies, and specifies that a CFH must be qualified in accordance with a fuel handler training program that meets the same requirements as training programs for non-licensed operators required by § 50.120.</p> | <p>The industry concurs with the proposed change to provide the alternative definition.</p>   |
| 21. | <p>10 CFR 50.54(m)<br/>and<br/>Draft Reg Guide DG-1347, Rev. 1: Section 8.7 – Certified Fuel Handler Staffing and Management Role</p> | <p>The NRC proposes to revise a footnote to the table titled <i>“Minimum Requirements Per Shift for On-Site Staffing of Nuclear Power Units by Operators and Senior Operators Licensed Under 10 CFR Part 55”</i> in § 50.54(m)(2)(i) to state that an STA is not required upon the NRC’s docketing of the license holder’s certifications required under §§ 50.82(a)(1) or 52.110(a).</p> <p>The industry agrees with the proposed addition of the note stating when the STA is no longer required but believes additional changes should be made.</p>  | <p>In addition to the proposed change to add a note to 50.54(m)(2)(i) that the STA position is no longer required after all certifications associated with permanent cessation of operation have been submitted, include the following:</p> <ul style="list-style-type: none"> <li>• Addition of a note that specifies when the number of nuclear power units operating is “None” because the unit has permanently ceased operation and completed all required certifications, shift staffing can be met with a CFH and non-</li> </ul> |

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|  |  | <p>The NRC analysis references licensee-requested changes to technical specifications that have been previously approved, which requested the addition of the CFH to shift staffing along with the removal of the STA after all certifications associated with permanent cessation of operations have been submitted, and then the removal of the CFH after all fuel has been transferred to dry storage.</p> <p>In addition to addressing the STA position, the change to 50.54(m)(2)(i) should also address both the expected addition of the CFH to shift staffing to replace the Senior Reactor Operator/STA following permanent cessation of operations, and the removal of the CFH from staffing requirements after all fuel has been transferred to dry storage.</p> <p>The basis for adding these changes to those proposed for 50.54(m)(2)(i) is the same as that used in the NRC’s safety evaluation reports for previous approvals of licensee-requested changes associated with the CFH position.</p> <p>For the addition of the CFH to the shift staffing complement, the justification is that with certifications of permanent cessation of operations submitted in accordance with 10 CFR 50.82(a), the licensee is no longer authorized to operate the reactor or load fuel into the reactor vessel, such that the requirements of 50.54(m) requiring licensed operator staffing no longer apply. Individuals qualified under CFH programs that</p> | <p>licensed operators in lieu of the Senior Operator and Operator requirement.</p> <ul style="list-style-type: none"> <li>• Addition of a note that specifies the CFH is not required upon completion of the transfer of all spent fuel to dry storage.</li> <li>• Addition of language that permits these changes (i.e., elimination of the STA position, replacement of minimum staffing positions with a CFH and non-licensed operators, and elimination of the CFH following transfer of fuel to dry storage) to be made without requiring the licensee to submit a license amendment request to NRC for approval.</li> </ul> <p>Similarly, in Draft Reg Guide DG-1347, Rev. 1: Section 8.7, “Certified Fuel Handler Staffing and Management Role,” it should be clarified that the CFH is not required upon completion of the transfer of all spent fuel to dry storage.</p> |
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|     |   | <p>meet the definition of CFH in 50.2 have the appropriate knowledge and skills to provide oversight of fuel safety while it is stored in the spent fuel pool.</p> <p>For the removal of the CFH, the basis is that with all fuel removed from the spent fuel pool and placed in dry storage, there is no longer a need for a CFH to oversee safe fuel storage and handling.</p> <p>The change should also acknowledge licensee ability to make these changes to shift staffing requirements without having to request prior NRC approval if all conditions associated with the change have been met.</p> |  |
| 22. | Draft Regulatory Guide DG-1347 (Revision 1) – Proposed Revision 2 to Regulatory Guideline 1.184 | Regarding the requirements for an on-shift CFH, there is no safety basis for maintaining an on-shift CFH during ISFSI-only Storage Operations. RG 1.184 as currently drafted implies that this requirement will continue until fuel is removed from the site.   | DG-1347 (RG 1.184) should be revised to ensure clarity that an on-shift CFH is only required when a plant that has permanently ceased operations has spent fuel stored in its spent fuel pool(s) and is <u>not</u> required after all fuel has been transferred to a passive dry storage system. |

| <b>Comments Related to Emergency Preparedness</b> |  |  |   |
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| <b>Comment Number</b>                             | <b>NRC Reference</b>   | <b>Industry Comment</b>  | <b>Proposed Resolution</b>  |
| 23.   | Federal Register / Vol. 87, No. 42 Proposed § 50.54(q)(1)(iii) | Proposed definition: <i>“Emergency planning function means a capability or resource necessary to prepare for and respond to a radiological emergency, as set forth in the elements of section IV. of appendix E to this part</i> | Revise proposed § 50.54(q)(1)(iii) to: <i>Emergency planning function means a capability or resource necessary to prepare for and respond to a radiological emergency, as set forth in the applicable elements of the</i> |

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|            | <p><i>Emergency planning function</i></p>          | <p><i>and, for nuclear power reactor licensees, the planning standards of § 50.47(b)"</i></p> <p>This change deletes the latter part of the existing definition which clarifies <i>"as set forth in the elements of section IV. of appendix E to this part and, for nuclear power reactor licensees, the planning standards of § 50.47(b)."</i></p> <p>Deleting this clarification could result in an overly broad interpretation of the definition.</p>  | <p><u>content of emergency plans and planning standards.</u></p>   |
| <p>24.</p> | <p>Federal Register / Vol. 87, No. 42 p. 12272</p> | <p><i>"Although NUREG-1738 did not evaluate the potential consequences of a sabotage event that could directly cause offsite fission <del>production</del> dispersion."</i></p>   | <p>Change "production" to "product."</p>   |
| <p>25.</p> | <p>10 CFR 50.54(q)(5)</p>                          | <p>Existing § 50.54(q)(5) states:</p> <p><i>"The licensee shall retain a record of each change to the emergency plan made without prior NRC approval for a period of three years from the date of the change and shall submit, as specified in § 50.4, a report of each such change made after February 21, 2012, including a summary of its analysis, within 30 days after the change is put in effect."</i></p> <p>Requirement to submit <i>"within 30 days after"</i> the change is put into effect could present a conflict or require a redundant submittal for changes under proposed § 50.54(q)(8)(i) required to be submitted <i>"at least 60 days prior to implementation."</i> This paragraph should clarify that submitting the changes prior to 30 days after the change is put in effect would comply and redundant submittals are not required.</p> | <p>Revise § 50.54(q)(5) as follows:</p> <p><i>"The licensee shall retain a record of each change to the emergency plan made without prior NRC approval for a period of three years from the date of the change and shall submit, as specified in § 50.4, a report of each such change made after February 21, 2012, including a summary of its analysis, <u>prior to or within 30 days after the change is put in effect."</u></i></p> |

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| <p>26.</p> | <p>Proposed § 50.54(q)(8)(ii)</p>   | <p>Proposed § 50.54(q)(8)(ii) states: <i>“For structures, systems, and components that are no longer needed to provide support for an emergency planning function as defined in paragraph (q)(1)(iii) of this section, licensees may make a determination under paragraph (q)(3) of this section that changes to the emergency plan related to these structures, systems, and components are not reductions in effectiveness if the Final Safety Analysis Report demonstrates that these structures, systems, and components are no longer required to be in service due to the decommissioning status of the facility.”</i></p> <p>This paragraph should address SSC <u>functions</u> no longer needed to support an emergency planning function. As written, the proposed paragraph could be interpreted as requiring all functions of the SSCs to no longer be in service for this to apply, including those SSC functions that do not support an emergency planning function. This should be clarified to allow functions of SSCs that do not support an emergency planning function to remain in service without this restriction.</p> | <p>Revise § 50.54(q)(8)(ii):</p> <p><i>“For structures, systems, and components <u>functions</u> that are no longer needed to provide support for an emergency planning function as defined in paragraph (q)(1)(iii) of this section, licensees may make a determination under paragraph (q)(3) of this section that changes to the emergency plan related to these structures, systems, and components are not reductions in effectiveness if the Final Safety Analysis Report demonstrates that these structures, systems, and components <u>functions</u> are no longer required to be in service due to the decommissioning status of the facility.”</i></p> |
| <p>27.</p> | <p>Proposed § 50.54(q)(8)(iii)<br/>- AND -<br/>Proposed § 50.200(c)(1)(ii)(B)</p> | <p>DG-1346 Rev 1 (ML21347A046) p. A-2 states:</p> <p><i>“Licensees that have permanently ceased operations and defueled may revise their emergency action level (EAL) scheme to a scheme appropriate for the risk posed to the public from spent fuel stored in a spent fuel pool or dry cask storage system, in accordance with 10 CFR 50.54(q)(8)(iii).”</i></p> <p>New paragraph § 50.54(q)(8)(i) states that plan changes complying with § 50.200 or § 72.32(a) as permitted by</p>   | <p>Revise proposed § 50.54(q)(8)(iii):</p> <p><i>Changes to emergency action levels based on plant conditions that are not physically achievable or instrumentation that is no longer in service due to the decommissioning status of the facility, <u>and changes to an entire emergency action level scheme that has been approved by NRC for a decommissioning facility with spent fuel stored in a spent fuel</u></i></p>  |

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|            |   | <p>(q)(7)(i), (ii), or (iii) are not reductions in effectiveness and do not need to be submitted to the NRC for prior approval.</p> <p>New paragraph § 50.54(q)(8)(iii) also allows that certain changes to EALs are not reductions in effectiveness.</p> <p>However, § 50.200(c)(1)(ii)(B) would appear to require prior NRC approval via a license amendment to change the entire EAL scheme, without exception.</p> <p>The proposed regulations should clarify that changing the entire EAL scheme to a scheme appropriate for decommissioning facilities with spent fuel stored in a spent fuel pool or dry cask storage system – such as the EAL scheme presented in DG-1346 Rev 1, Appendix A Attachments – would not require prior NRC approval via a license amendment.</p> <p>Recent experience implementing NRC approved site-specific EAL schemes, e.g., based on NEI 99-01 Rev 6, for PDEP and IOEP supports a determination that a standard EAL scheme can be applied.</p> | <p><i>pool or dry cask storage system, are not reductions in effectiveness provided that the evaluation under paragraph (q)(3) of this section demonstrates that these changes do not reduce the capability of the emergency plan to take timely and appropriate protective actions.</i></p> <p>Revise § 50.200(c)(1)(ii)(B):</p> <p><i>A licensee desiring to change its entire emergency action level scheme, <u>except as provided in § 50.54(q)(8)(iii) of this chapter,</u> must submit an application for an amendment to its license and receive NRC approval before implementing the change. Licensees must follow the change process in § 50.54(q) for all other emergency action level changes.</i></p> <p>Accordingly, DG-1346 should be updated to reflect these changes. Note that DG-1346 Appendix B, “Change Process,” does not appear to address changes to the EAL scheme.</p> |
| <p>28.</p> | <p>Proposed § 50.200(c)(1)(i)(A)(5)</p> | <p>Proposed § 50.200(c)(1)(i)(A)(5) states:</p> <p><i>“Identification of assistance expected from appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including an act directed toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using</i></p>   | <p>Revise proposed § 50.200(c)(1)(i)(A)(5):</p> <p><i>Identification of assistance expected from appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, <del>including an act directed toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end.</del> This includes</i></p>   |

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|            |  | <p><i>guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.”</i></p> <p>PDEPs would not fall within the scope of “hostile action,” and enhancements to EP in response to hostile action, such as alternative facilities for the staging of ERO personnel, protection of onsite personnel, and drills and exercises involving hostile action, would not be warranted.</p> <p>Appendix E to 10 CFR Part 50, section IV.A.7 states: <i>“For purposes of this appendix, ‘hostile action’ is defined as an act directed toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.”</i></p> <p>Therefore, in addition to not including the term “hostile action” this paragraph as applied to PDEP (and IOEP) should also not include the definition of hostile action.</p> <p>PDEPs would still be required to identify assistance resources that would respond to a security-based event. No action would be expected or required from State or local government organizations in response to an event at a PDEP site other than firefighting, law enforcement, and ambulance/ medical services.</p> | <p><del><i>attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.</i></del></p> <p>Alternatively, replace the deleted text with <i>“including security-based events”</i> or <i>“including security related events.”</i></p> |
| <p>29.</p> | <p>Proposed § 50.200(c)(1)(iii)(B)</p> | <p>Proposed § 50.200(c)(1)(iii)(B) states:<br/><i>“Licensees must establish and maintain the capability to assess, classify, and declare an emergency condition as</i></p>   | <p>Revise § 50.200(c)(1)(iii)(B):<br/><i>“Licensees must establish and maintain the capability to assess, classify, and declare an</i></p>  |

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|  |  | <p><i>soon as possible and within 60 minutes after the availability of indications to plant operators that an emergency action level has been exceeded and must promptly declare the emergency condition as soon as possible following identification of the appropriate emergency classification level. Licensees must not construe these criteria as a grace period to attempt to restore plant conditions to avoid declaring an emergency action due to an emergency action level that has been exceeded. Licensees must not construe these criteria as preventing implementation of response actions deemed by the licensee to be necessary to protect public health and safety provided that any delay in declaration does not deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety."</i></p> <p>The phrase "as soon as possible and within 60 minutes" in the first sentence includes the words "as soon as possible" which are not used in the corresponding sentence in Appendix E to 10 CFR Part 50 section IV.C.2.</p> <p>Including the phrase "as soon as possible" in the first sentence is not necessary, since the intent for licensees to assess, classify, and declare as soon as possible is clearly conveyed in the sentences that follow.</p> <p>Furthermore, including "as soon as possible" in the first sentence, as an aspect of the required "capability" of licensees, may set a subjective and impossible to verify expectation.</p> | <p><i>emergency condition <del>as soon as possible and</del> within 60 minutes after the availability of indications to plant operators that an emergency action level has been exceeded and must promptly declare the emergency condition as soon as possible following identification of the appropriate emergency classification level. Licensees must not construe these criteria as a grace period to attempt to restore plant conditions to avoid declaring an emergency action due to an emergency action level that has been exceeded. Licensees must not construe these criteria as preventing implementation of response actions deemed by the licensee to be necessary to protect public health and safety provided that any delay in declaration does not deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety."</i></p> |
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| <p>30.</p> | <p>See proposed § 50.54(q)(8)(iii) and markup above.</p> | <p>NRC should clarify whether a change to an IC/EAL for cask damage that has been approved by NRC for a decommissioning facility, without changing an entire EAL scheme, is not a reduction in effectiveness and not would require a license amendment, subject to (q)(3) evaluation.</p> <p>For example, a licensee of a decommissioning facility using an NRC-approved EAL scheme based on NEI 99-01, Rev 6 that is replacing IC/EAL E-HU1 for damage to spent fuel cask with IC/EAL EU2 for damage to spent fuel cask based on DG-1346 or a future revision to new RG 1.235.</p> <p>This question is specifically limited to IC/EALs for cask damage, which typically do not include ECL escalation criteria via other IC/EALs.</p> <p>The ability of licensees to make this change without a license amendment would promote standardization of IC/EALs for damage to a spent fuel cask for decommissioning facilities and for ISFSIs at operating power reactor sites, facilitating the transition to decommissioning.</p> | <p>Revise § 50.54(q)(8)(iii) to allow a licensee to make a change to an IC/EAL for damage to a spent fuel cask that has been approved by the NRC, without changing an entire EAL scheme.</p>  |
| <p>31.</p> | <p>§ 50.54(q)(8)<br/>DG-1346 Rev 1,<br/>C.1.d.</p>       | <p>Based on precedent, a licensee for a Level 1 decommissioning facility should have the option to continue using the EAL scheme in effect prior to submitting the § 50.82(a)(1) or § 52.110(a) certifications.</p> <p>Licensees for decommissioning facilities shut down since 2013 have not included an EAL scheme change with license amendment requests for PSEP changes.</p>   | <p>Clarify in DG-1346 (C.1.d.) that a licensee for a decommissioning facility in Level 1 (PSEP) has the option to continue using the NRC approved EAL scheme in effect prior to submitting the § 50.82(a)(1) or § 52.110(a) certifications.</p> <p>Clarify that IC/EALs applicable to a “PERMANENTLY DEFUELED REACTOR” or “AT</p> |

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|     |                                       | <p>These licensees continued to apply IC/EALs that remain applicable to a “PERMANENTLY DEFUELED REACTOR” or “AT ALL TIMES” and identified those IC/EALs that are precluded from occurring using operator aids.</p> <p>NRC guidance should clarify this would continue to be an acceptable option pursuant to § 50.54(q)(8).</p>   | <p>ALL TIMES” remain applicable, and that licensees may identify those IC/EALs that are precluded from occurring, through the use of operator aids, pursuant to § 50.54(q)(8)(iii):</p> <p>For Level 1 PSEP, licensees should have the option to continue to use the NRC approved EAL scheme in place prior to shutdown. Based on PSEP precedents (all plants shut down since 2013), after the § 50.82(a)(1) or § 52.110(a) certifications have been submitted, licensees may continue using the NRC approved EAL scheme in place prior to shut down by continuing to apply the ICs and EALs applicable to a “PERMANENTLY DEFUELED REACTOR” or “AT ALL TIMES.” Licensees may identify the ICs and EALs that are precluded from occurring through the use of operator aids.</p> |
| 32. | General                               | <p>The IOEP regulatory improvements do not address elimination of arrangements for medical services for contaminated injured individuals or elimination of the annual medical drill. There is no technical justification for postulating a contaminated injury once spent fuel is in dry cask storage, given the set of credible accidents in the storage systems’ FSARs.</p> | <p>Eliminate consideration of contaminated injured individuals.</p>  |
| 33. | DG-1346, Revision 1, general comment. | <p>There is ambiguity associated with the meaning of the terms, “onsite,” and “offsite” and “site boundary” used throughout this document.</p>  | <p>It would be helpful if the phrases, “...within the Exclusion Area Boundary” and “...beyond the Exclusion Area Boundary” were added, where applicable. Alternately, the terms could be clearly defined as such and not used to</p>   |

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|     |   |  | mean anything other than “...within the Exclusion Area Boundary” and “...beyond the Exclusion Area Boundary” in all cases. Similarly, the term “site boundary” should be clearly defined as the legal property boundary per 10 CFR 20.1003 and not be interchanged with “Exclusion Area Boundary,” which should have its definition from 10 CFR 50.2 included.   |
| 34. | DG-1346, Revision 1, general comment              | The word “buses” is not spelled correctly in six locations throughout the document.  | Correct spelling throughout document.  |
| 35. | DG-1346, Revision 1, C.1.a(1) (PSEP)              | Provides a one-time clarification that DG references to NUREG-0654/FEMA-REP-1 are for multiple versions of that document. Why does Section C.1.n(1) revert back to "a version of NUREG-0654/FEMA-REP-1 "?  | Revise the wording to be consistent with Sections C.1.b through m as follows: "...The emergency plan should follow the guidance in Section"... "of NUREG-654/FEMAREP-1.  |
| 36. | DG-1346, Revision 1, C.2.h.(1)a., pp.14-15 (PDEP) | <p><i>“The emergency plan should describe the principle and alternate locations...”</i></p> <p>An alternate location is not necessary when in the PDEP state. In addition, the requirement for an alternate location was in a draft version of ISG-02, “EMERGENCY PLANNING EXEMPTION REQUESTS FOR DECOMMISSIONING NUCLEAR POWER PLANTS,” but was removed in the final issued version dated May 2015.</p> | <p>Eliminate reference to an alternate location from C.2.h.(1)a. to align with the requirements of ISG-02, Attachment 1, H.2., page 38.</p> <p>If this proposed change is adopted, then no additional change is needed to C.3.h.(1)a. If the proposed change is not adopted, then section C.3.h.(1) should include an exception to C.2.h.(1)a. which would not require an alternate command center which is in alignment with past precedence.</p> |
| 37. | DG-1346, Revision 1, C.3, p.21 (IOEP)             | The last sentence on page 21: “An IOEP prepared in accordance with 10 CFR 72.32(a) should meet the following criteria.” This is not correct because 10 CFR 72.32(a) is referring to applicability only. In addition,   | Revise sentence to clarify that an IOEP prepared using the criteria in section C.3 satisfies the information requirements in 72.32(a)(1) thru (16), or also consider: “An  |

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|     |  | 72.32(a)(1) thru (16) and section C.3 pp. 22-25 are not equivalent and should not be construed as such, suggest avoiding terminology “in accordance with.”   | IOEP prepared in accordance with the following criteria meets the requirements of 10 CFR 50.54(q)(7)(iii) <u>for the option to use 50.54(q)(7)(ii) and the planning standards of 50.200(b) and emergency plan content requirements of 50.200(c).”</u> |
| 38. | DG-1346, Revision 1, C.3 second bullet, p.21 (IOEP)    | <i>“Specific license: If a power reactor licensee chooses to apply for a 10 CFR Part 72 specific license, the licensee would need to provide, as part of its application, an emergency plan that complies with the emergency planning requirements of 10 CFR 72.32.”</i> | Stipulate “10 CFR 72.32(a),” since a power reactor licensee with a 10 CFR Part 72 general license may comply with 10 CFR 72.32(c)   |
| 39. | DG-1346, Revision 1, C.3, Table B-1-ISFSI, p.23 (IOEP) | The use of “On-Call” could mean a variety of ready expected status.  | Use “In contact” and explain that the HP and Technical Expert(s) are not required to physically report to the Emergency Response Facility. “In contact” could be remotely via a communication system.   |
| 40. | DG-1346, Revision 1, C.3.h.(1)a., p.24 (IOEP)          | Section C.3.h.(1)a.i requires meteorological equipment, yet past precedence has not required physical equipment, only provisions for acquiring the data.   | Delete section C.3.h.(1)a.i on page 24.   |
| 41. | DG-1346, Revision 1, C.3.j.(1)b., p.25 (IOEP)          | Requires provisions for respiratory protection during ISFSI Only even though there is no design basis accident that would result in airborne radioactivity.  | Provide basis for requiring respiratory protection during the ISFSI Only phase or remove requirement.   |
| 42. | DG-1346, Revision 1, C.3.l. and C.3.n., p.25 (IOEP)    | Due to the nature of the possible accidents with all spent fuel in dry storage, the need for contaminated injured pre-planning should not be required for ISFSI-Only.  | Revise 50.200(b)(12) as follows:<br><br>50.200(b)(12) Arrangements are made for medical services for contaminated injured individuals, until all the spent fuel is in dry cask storage.   |

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| <p>43.</p> | <p>DG-1346, Revision 1, C.3.p.(1), p.25 (IOEP)</p>                                      | <p>C.3.p. states <i>“Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans</i><br/> <i>(1) The emergency plan should continue to follow guidance in Section C.2.p of this RG.”</i></p> <p>The proposed rule includes 10 CFR 50.54(t)(3) which states <i>“The review of the emergency preparedness program elements is no longer required once all fuel is in dry cask storage.”</i>, therefore, C.2.p.(9) does not apply to the IOEP.</p> | <p>Revise C.3.p.(1) to read as follows:</p> <p>The emergency plan should continue to follow guidance in Section C.2.p of this RG, with the following exception:</p> <p style="padding-left: 40px;">a. C.2.p.(9) does not apply once all spent fuel is in dry cask storage.</p>                          |
| <p>44.</p> | <p>DG-1346, Revision 1, C.3.n.(1)a., p.25 (IOEP)</p>                                    | <p>C.3.n.(1)a. does not make sense as currently written: <i>“The revised wording of the evaluation criterion under Section C.2.n(1)a for IOEPs is as follows: The emergency plan should address the following.”</i></p>  | <p>Delete the following: <i>“The emergency plan should address the following:”</i> and 2) <i>“a”</i> (from C.2.n(1)a).</p> <p><i>“The revised wording of the evaluation criterion under Section C.2.n(1)a for IOEPs is as follows: <del>The emergency plan should address the following:</del>”</i></p> |
| <p>45.</p> | <p>DG-1346, Revision 1, Appendix A Table of Contents, p. A-3</p>                        | <p>The title of Attachment 2 reads <i>“Permanent Defueled Emergency Plan Emergency Action Level Scheme.”</i> Also, attachment 3 reads <i>“ISFI.”</i></p>   | <p>Revise <i>“Permanent”</i> to <i>“Permanently.”</i><br/>                 Revise <i>“ISFI”</i> to <i>“ISFSI.”</i><br/>                 Correct Table of Contents pages for Attachment 1, 2, and 3; they are all off by 1.</p>  |
| <p>46.</p> | <p>DG-1346, Revision 1, Appendix A Table of Contents, p. A-5 (Generic EAL guidance)</p> | <p>The last paragraph discusses the ability to change EAL scheme as the plant enters different phases of decommissioning. However, the last sentence then says that <i>“A licensee desiring to change entire EAL scheme must submit an application for an amendment to its license and receive NRC approval before implementing the change.”</i> Is this discussing changes beyond those needed for entering the PSEP?</p>   | <p>Please provide an example and/or clarify what would constitute an entire scheme change.</p>  |

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| <p>47.</p> | <p>DG-1346 Appendix A, p.13<br/>Section 5 Definitions: HOSTILE ACTION (Generic EAL guidance)</p> | <p>The Note under the definition of HOSTILE ACTION states: <i>“A Hostile Action-Based program is not necessary for permanently defueled nuclear power reactors; however, the consideration of HOSTILE ACTIONS for EAL purposes is still applicable.”</i></p> <p>From the Proposed Rule: PDEPs would not fall within the scope of “hostile action,” and enhancements to EP in response to hostile action, such as alternative facilities for the staging of ERO personnel and protection of onsite personnel, would not be warranted. PDEPs are excluded from the definition of “hostile action” and its related requirements as they apply to EP. Elements for security-based events would still be maintained for these facilities, including EALs for security-based events, and licensees with PDEPs would be required to identify offsite response organization resources that would respond to a security event, and the assistance licensees expect from those resources would be maintained in PDEPs. For licensees with PDEPs, no action would be expected or required from state or local government organizations in response to an event at a decommissioning site other than firefighting, law enforcement, and ambulance/medical services.</p> <p>The HOSTILE ACTION definition Note should clarify that hostile action is also not necessary for ISFSIs, and state that elements of security-based events, vice Hostile Actions, are still applicable to PDEPs and IOEPs.</p> | <p>Revise the Note for definition of HOSTILE ACTION to clarify that a Hostile Action-Based program is also not necessary for ISFSIs.</p> <p>Revise the Note to state that EALs for security-based events, vice hostile actions, remain applicable to PDEPs and IOEPs.</p> |
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| <p>48.</p> | <p>DG-1346, Revision 1, p. A-13 (Generic EAL guidance)</p>         | <p>The requirement for a radiological emergency plan is due to the presence of spent nuclear fuel and if the spent fuel was removed from the site, then there would be no requirement to have a radiological emergency plan and/or ECLs; ECL definitions for decommissioned plants should take into consideration the location of the fuel.</p> <p>The definition of ALERT refers to “level of safety of the plant” which does not align with the IOEP. The “plant” encompasses more than just the ISFSI.</p> | <p>Delete “of the plant” and consider replacing “of the plant” with “within the protected area.”</p>   |
| <p>49.</p> | <p>DG-1346, Revision 1, p. A-13 (Generic EAL guidance)</p>         | <p>The definition of GENERAL EMERGENCY refers to “core degradation” and “containment integrity” which does not align with the PSEP with spent fuel in wet storage.</p>  | <p>Reword the definition to align with the PSEP (refer to page A-42).</p>  |
| <p>50.</p> | <p>DG-1346, Revision 1, p. A-14 (Generic EAL guidance)</p>         | <p>The definition for IMMEDIATE states “within a relatively short period of time” which is subjective.</p>  | <p>Delete the words “within a relatively short period of time.”</p>  |
| <p>51.</p> | <p>DG-1346, Revision 1, p. A-15 (Generic EAL guidance)</p>         | <p>The definition of UNUSUAL EVENT refers to “level of safety of the plant” which does not align with the IOEP. The “plant” encompasses more than just the ISFSI.</p>   | <p>Delete “of the plant” and consider replacing “of the plant” with “within the protected area.”</p>   |
| <p>52.</p> | <p>DG-1346 Rev. 1, Appendix A, pg. A-16 (Generic EAL guidance)</p> | <p>The list of references does not include the most-recent NEI guidance (NEI 99-01) currently under NRC review.</p>   | <p>Add a reference for NEI 99-01, Revision 7.</p>  |
| <p>53.</p> | <p>DG-1346, Revision 1, pp. A31-32 (PSEP EALs)</p>                 | <p>Developer notes discuss the SFP level as determined in NRC order EA-12-051.... The order may no longer apply if the licensee has asked for rescission.</p>   | <p>Consider clarifying that the order is being used as a reference and there is likely no need to maintain the SFP instrumentation as was needed during operation.</p> |

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| <p>54.</p> | <p>DG-1346 Rev. 1, Appendix A, pg. A-31 (PSEP EALs)</p>                           | <p>ICs DU2 and DA2 rely on wide-range SFP level instruments installed to comply with Order EA-12-051 (made generically applicable by 10 CFR 50.155(e)). Requiring licensees to maintain these instruments for decommissioning EALs appears to conflict with 10 CFR 50.155(a)(2)(i) which states licensees need not comply with paragraph (e) after the reactor is permanently defueled.</p>  | <p>Revise the wording to be aligned with proposed language of NEI 99-01 Rev 7 ICs AU2 and AA2. DG-1346 EALs should be consistent with NEI 99-01 rev.7 (i.e., the ICs that address the same events and concerns).</p> |
| <p>55.</p> | <p>DG-1346 Rev. 1, Appendix A, pg. A-33, A-35, A-48, and A-50 (PSEP EALs)</p>     | <p>Separate ICs/EALs (EU1 &amp; EA1) for ISFSI security-based events are proposed from those for the site (DU3 &amp; DA3). DG-1346 Section 3.1 states that the reason for including the separate security-based EALs for ISFSI in the PSEP and PDEP schemes is “because many licensees may need a PSEP or PDEP EAL scheme in parallel with having some spent fuel already in the ISFSI.” However, this reasoning would also apply to an operating plant with an ISFSI, NEI 99-01 guidance, and past precedents for PDEP EALs approved by NRC. As written, these are redundant EALs that will unnecessarily complicate event classifications for decommissioning sites.</p> | <p>Revise to be consistent with NEI 99-01, Rev. 6, which addresses security-based events for ISFSIs under the same ICs/EALs (HU1 &amp; HA1) for the site.</p>  |
| <p>56.</p> | <p>DG-1346 Rev 1, Appendix A Attachments 1 and 2: IC DU1 (PSEP and PDEP EALs)</p> | <p>This IC and the associated EALs are unnecessary as the covered events present a very low safety risk to the public. Activation of the site emergency plan and ERO mobilization would not be necessary to effectively respond to the event. Sites have sufficient procedures and capabilities to respond to this condition without the declaration of an emergency (e.g., use of Radiation Protection and Chemistry resources for locating and assessing airborne or waterborne releases). Depending on event-specific conditions, some plant response actions may be required by Technical Specifications and</p>   | <p>Delete IC DU1 in Attachments 1 and 2.</p>   |

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|            |  | <p>the site will make a report to the NRC in accordance with the requirements in 10 CFR Part 20 and/or 10 CFR 50.72.</p> <p>IC DA1 appropriately bounds releases that begin to present some elevated risk to the public (i.e., an airborne release with offsite consequences at or above 1% of the EPA PAG).</p> <p>NEI has proposed changes to IC AU1 in the draft version of NEI 99-01, Revision 7, which is currently under discussion with the NRC. For licensing and inspection consistency, DG-1346 EALs should be consistent with NEI 99-01 rev.7 (i.e., the ICs address the same events and concerns).</p>  |  |
| <p>57.</p> | <p>DG-1346 Rev 1, Appendix A Attachments 1 and 2: IC DU1 EAL #1 (PSEP and PDEP EALs)</p> | <p>IC DU1 EAL #1 may lead to an inappropriate emergency classification. EAL values calculated using assumed source terms and assumed meteorological conditions (affecting plume transport and dispersion) will likely be different than those present during an actual event, perhaps significantly so. The preferred approach is to perform a dose assessment at the time of the event using actual effluent monitor readings and meteorological conditions; this approach will yield the emergency classification most reflective of the actual facility conditions. Licensees maintain the capability to perform a dose assessment at all times (i.e., both on-shift and when the ERO is activated). With respect to the use of averaged meteorological data from a plant computer, the differences between any two consecutive data sets (e.g., 15- minute averages</p> | <p>If IC DU1 is retained in the EAL scheme (refer to previous comment), then delete IC DU1 EAL #1 in Attachments 1 and 2.</p> <p>Delete EAL Note: “If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release no longer valid for classification purposes.”</p> <p>Relevant discussions in the Basis and Developer Notes should also be deleted.</p> |

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|     |   | delivered on the quarter hour) would not be significant; therefore, performing an initial dose projection using the immediately preceding meteorological data set, if necessary, is not expected to meaningfully impact on the accuracy of the results.  |   |
| 58. | DG-1346 Rev 1, Appendix A Attachments 1 and 2: IC DU1 and EAL #2 (PSEP and PDEP EALs) | IC DU1 and EAL #2 for release of liquid radioactivity are unnecessary as they are bounded by other EALs. Given the effluent dilution and dispersion that could reasonably be expected to occur between the source of the liquid (e.g., a tank) and the site boundary, it is highly unlikely that doses that present some elevated risk to the public could be reached. In addition, an event covered by the EAL would generally be reported to the NRC as required by 10 CFR 50.72(b)(2)(xi). Finally, this type of event would not impact the ability of the site to implement the Emergency Plan or Security Plan or require ERO mobilization or offsite support to address. It is also noted that state and local public safety and environmental officials, upon being notified of a spill, would take actions to minimize the risk to the public. | If IC DU1 is retained in the EAL scheme (refer to previous comment), then references to a release of liquid radioactivity in IC DU1 and EAL #2 should be deleted in Attachments 1 and 2. Discussions on liquid release should also be deleted from the Basis.   |
| 59. | DG-1346 Rev 1, Appendix A Attachments 1 and 2: IC DA1 EAL #1 (PSEP and PDEP EALs)     | Similar to the comment on IC DU1 EAL #1, IC DA1 EAL #1 may lead to an inappropriate emergency classification. EAL values calculated using assumed source terms and assumed meteorological conditions (affecting plume transport and dispersion) will likely be different than those present during an actual event, perhaps significantly so. The preferred approach is to perform a dose assessment at the time of the event using actual effluent monitor readings and   | Delete IC DU1 EAL #1 in Attachments 1 and 2.<br><br>Delete EAL Note: "The pre-calculated effluent monitor values presented in EAL #1 should be used for emergency classification as a dose assessment using actual meteorology are available."<br><br>Relevant discussions in the Basis and Developer Notes should also be deleted. |

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|            |  | <p>meteorological conditions; this approach will yield the emergency classification most reflective of the actual facility conditions. Licensees maintain the capability to perform a dose assessment at all times (i.e., both on-shift and when the ERO is activated). With respect to the use of averaged meteorological data from a plant computer, the differences between any two consecutive data sets (e.g., 15- minute averages delivered on the quarter hour) would not be significant; therefore, performing an initial dose projection using the immediately preceding meteorological data set, if necessary, is not expected to meaningfully impact on the accuracy of the results.</p>  |   |
| <p>60.</p> | <p>DG-1346 Rev 1, Appendix A Attachments 1 and 2: IC DA1 and EAL #3 (PSEP and PDEP EALs)</p> | <p>Similar to a comment on IC DU1, IC DA1 and EAL #3 for release of liquid radioactivity is unnecessary as it is bounded by other EALs. Given the effluent dilution and dispersion that could reasonably be expected to occur between the source of the liquid (e.g., a tank) and the site boundary, it is highly unlikely that doses <u>that present some elevated risk to the public</u> could be reached. In addition, an event covered by the EAL would generally be reported to the NRC as required by 10 CFR 50.72(b)(2)(xi). Finally, this type of event would not impact the ability of the site to implement the Emergency Plan or Security Plan or require ERO mobilization or offsite support to address. It is also noted that state and local public safety and environmental officials, upon being notified of a spill, would take actions to minimize the risk to the public.</p> | <p>Delete IC DA1 reference to a release of liquid radioactivity and delete EAL #3 for analysis of liquid effluent sample in Attachments 1 and 2. Discussions on liquid release should also be deleted from the Basis.</p> |

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| <p>61.</p> | <p>DG-1346 Rev 1, Appendix A<br/>Attachment 1: IC DS1 EAL #1 (PSEP EAL)</p>     | <p>Similar to comments on EAL #1 for ICs DU1 and DA1, IC DS1 EAL #1 should be deleted because it may lead to an inappropriate emergency classification. EAL values calculated using assumed source terms and assumed meteorological conditions (affecting plume transport and dispersion) will likely be different than those present during an actual event, perhaps significantly so. The preferred approach is to perform a dose assessment at the time of the event using actual effluent monitor readings and meteorological conditions; this approach will yield the emergency classification most reflective of the actual plant conditions. Sites maintain the capability to perform a dose assessment at all times (i.e., both on-shift and when the ERO is activated). With respect to the use of averaged meteorological data from a plant computer, the differences between any two consecutive data sets (e.g., 15- minute averages delivered on the quarter hour) would not be significant; therefore, performing an initial dose projection using the immediately preceding meteorological data set, if necessary, is not expected to meaningfully impact on the accuracy of the results.</p> | <p>Delete IC DS1 EAL #1 in Attachment 1.</p> <p>Delete EAL Note: "If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release path, then the effluent monitor reading is no longer valid for classification purposes."</p> <p>Delete EAL Note: "The pre-calculated effluent monitor values presented in EAL #1 should be used for emergency classification assessments until the results from a dose assessment using actual meteorology are available."</p> <p>Relevant discussions in the Basis and Developer Notes should also be deleted.</p> |
| <p>62.</p> | <p>DG-1346 Rev 1, Appendix A<br/>Attachment 1 (PSEP EALs)<br/>IC DG1 EAL #1</p> | <p>Similar to comments on EAL #1 for ICs DU1, DA1 and DS1, IC DG1 EAL #1 should be deleted because it may lead to an inappropriate emergency classification. EAL values calculated using assumed source terms and assumed meteorological conditions (affecting plume transport and dispersion) will likely be different than those present during an actual event, perhaps</p>   | <p>Delete IC DG1 EAL #1 in Attachment 1.</p> <p>Delete EAL Note: "If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release path, then the effluent monitor reading is no longer valid for classification purposes."</p>  |

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|     |  | <p>significantly so. The preferred approach is to perform a dose assessment at the time of the event using actual effluent monitor readings and meteorological conditions; this approach will yield the emergency classification most reflective of the actual plant conditions. Sites maintain the capability to perform a dose assessment at all times (i.e., both on-shift and when the ERO is activated). With respect to the use of averaged meteorological data from a plant computer, the differences between any two consecutive data sets (e.g., 15- minute averages delivered on the quarter hour) would not be significant; therefore, performing an initial dose projection using the immediately preceding meteorological data set, if necessary, is not expected to meaningfully impact on the accuracy of the results.</p> | <p>Delete EAL Note: “The pre-calculated effluent monitor values presented in EAL #1 should be used for emergency classification assessments until the results from a dose assessment using actual meteorology are available.”</p> <p>Relevant discussions in the Basis and Developer Notes should also be deleted.</p> |
| 63. | DG-1346 Rev 1, Appendix A Attachment 1: IC DG1 (PSEP EALs) | <p>Developer Notes for IC DG1, 2<sup>nd</sup> paragraph on page A-29, discusses EPA PAGs and references thyroid CDE.</p> <p>The 2017 EPA PAG Manual, (EPA-400/R-17/001, “PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents”) eliminated the (5 rem) thyroid committed dose equivalent (CDE) dose as a (primary) PAG for evacuation or sheltering in the early phase.</p> <p>Based on the updated EPA PAGs, the reference to thyroid CDE should be deleted.</p>  | <p>For IC DG1, delete the reference to thyroid CDE from the Developer Notes discussion on EPA PAGs.</p>  |
| 64. | DG-1346 Appendix A Section 5 Definitions                   | <p>DG-1346 Appendix A, the terms Level 1, Level 2 and Level 3 are defined in accordance with NRC Order EA-12-051 (ML12054A679, dated 3/12/2012). Order EA-12-</p>   | <p>Consistent with § 50.155(a)(2)(i), revise ICs/EALs for DU2 and DA2 EALs to remove reliance on instrumentation with the same or</p>  |

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|  | <p>Level 1, Level 2 and Level 3<br/>Attachment 1<br/>ICs DU2 and DA2<br/>Attachment 2<br/>ICs DU2 and DA2</p> | <p>051 was issued to operating power reactor licensees (including holders of construction permits), and not to licensees for permanently defueled reactors.</p> <p>The NRC rescinded Order EA-12-051 for licensees for operating power reactors that were issued the Order and then subsequently submitted the certifications required by § 50.82(a)(1). The Order states that all power reactor licensees and construction permit holders must have a reliable means of remotely monitoring wide-range spent fuel pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. This statement forms the basis of the Order and reflects the need to effectively deploy limited resources to mitigate very low frequency events with the potential to challenge both the reactor and spent fuel pool. With reliable indication of the spent fuel pool coolant level, decision-makers can determine when to deploy resources to the spent fuel pool and avoid unnecessary deployment of staff to monitor pool level. Once the licensee has certified permanent removal of fuel from the reactor vessel, the safety of the spent fuel in the spent fuel pool becomes the primary safety function for site personnel. In the event of a challenge to the safety of spent fuel stored in the spent fuel pool, decision-makers would not have to prioritize actions and the focus of the staff would be the spent fuel pool condition. Thus, the basis for the Order no longer applies to the configuration of the facility, which provided good cause for rescinding the Order. The basis</p> | <p>similar capability as wide-range spent fuel pool level instrumentation required in accordance with Order EA-12-051 and generically § 50.155(e), which licensees are not required to comply with after the § 50.82(a)(1) or § 52.110(a) certifications are submitted, in accordance with § 50.155(a)(2)(i) and the basis for NRC rescission of the Order for a permanently defueled reactor.</p> <p>In Attachments 1 and 2, IC DU2, delete references to “Level 2” SFP level in the EAL, Basis and Developer Notes. Also, delete references to Order EA-12-051 and NEI 12-02 in the Developer Notes. The Basis should be revised to state that escalation of the emergency classification level would be via IC DA2 <u>or DA1</u>, in order to be consistent with the escalation statement for DA2.</p> <p>In Attachments 1 and 2, IC DA2, delete references to “Level 3” SFP level in the EAL and Developer Notes. Also, delete references to Order EA-12-051 and NEI 12-02 in the Developer Notes. In the Basis, delete the sentence: “SFP water level at this value is usually that SFP level where fuel remains covered and actions to implement make-up water addition should no longer be deferred.” This statement is inconsistent with the basis for § 50.155(a)(2)(i) not requiring licensees to</p> |
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|  |  | <p>for NRC rescinding Order EA-12-051 for licensees for permanently shut down and defueled reactors is also discussed in the Appendix to Power Reactor Transition from Operations to Decommissioning Lessons Learned Report (ML16302A022), section 1.4.4.</p> <p>Licensees for facilities transitioning to decommissioning have implemented an NRC approved EAL scheme based on NEI 99-01 Revision 6, Appendix C “Permanently Defueled Station ICs/EALs,” which does not include EALs that rely on wide-range spent fuel pool level instrumentation required by Order EA 12-051. NEI 99-01, Revision 6, Section 6, “Abnormal Rad Levels / Radiological Effluent ICs/EALs,” for operating reactors includes three EALs within ICs AA2, AS2 and AG2 that reflect the availability of the enhanced spent fuel pool level instrumentation associated with Order EA-12-051. No EALs relying on instrumentation required by Order EA-12-051 were included in NEI 99-01, Revision 6 for permanently defueled reactors (Appendix C), which was consistent with the basis for rescission of Order EA-12-051. No significant safety concerns have been identified that would warrant imposing new requirements for wide-range spent fuel level instrumentation for decommissioning facilities. NEI 99-01, Revision 6 is endorsed by Regulatory Guide 1.101, “Emergency Planning and Preparedness for Nuclear power Reactors,” Revision 6.</p> <p>The requirements of Order EA-12-051 were made generically applicable by Mitigation of Beyond-Design-Basis Events, Final Rule, 84 FR 39684, dated August 9,</p> | <p>comply with the spent fuel pool monitoring requirements of § 50.155(e) after the licensee has submitted the § 50.82(a)(1) or § 52.110(a) certifications, since with the reactor permanently defueled, decision-makers would not have to prioritize actions and the focus of the staff would be on the spent fuel pool condition, i.e., not deferred.</p> |
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|  |  | <p>2019 (MDBDE Rule), which also withdrew Order EA-12-051. Consistent with the Order EA-12-051 withdrawal for shutdown nuclear power plants, the NRC via the MBDBE Rule no longer requires licensees in decommissioning to have a reliable means to remotely monitor wide-range spent fuel pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event with the potential to challenge both the reactor and spent fuel pool. In accordance with § 50.155(a)(2)(i), once a licensee has submitted the § 50.82(a)(1) or § 52.110(a) certifications, the licensee does not need to comply with the requirements of § 50.155(e) for spent fuel pool monitoring, which made the wide-range spent fuel pool level instrumentation required by Order EA-12-051 generically applicable.</p> <p>The MDBDE Rule states the need for prioritization of event mitigation and recovery actions is also inapplicable to spent fuel pools for which the decay heat load is sufficiently low that spent fuel pool cooling is not challenged in the same time frame as event progression for the reactor core. This is consistent with NEI 12-02, Revision1 guidance for compliance with Order EA-12-051, which eliminated applicability to a spent fuel pool that does not contain fuel used for power generation within the preceding 5 years. This is clarified in § 50.155(e) by including a termination of the requirement 5 years after the spent fuel in the pool was last used for power generation in a reactor vessel.</p> |  |
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|            |   | <p>NRC Regulatory Guide 1.227, "Wide-Range Spent Fuel Pool Level Instrumentation," Revision 0, states "10 CFR 50.155(a) makes 10 CFR 50.155(e) applicable to operating power reactor licensees until the NRC has docketed their certifications of permanent cessation of operation and permanent removal of fuel from the reactor vessel."</p> <p>DG-1346 Appendix A provides an EAL scheme in Attachments 1, 2 and 3 for licensees that have permanently ceased operations and defueled the reactor, i.e., submitted the § 50.82(a)(1) or § 52.110(a) certifications. Therefore, ICs and EALs in Appendix A should not rely on wide-range spent fuel pool level instrumentation with the same or similar capability as required by § 50.155(e), and previously by Order EA-12-051, as stated in § 50.155(a)(2)(i).</p> |  |
| <p>65.</p> | <p>DG-1346 Appendix A Section 3.1 Attachments 1 and 2 ICs DU3, DA3, EU1 and EA1</p> | <p>Appendix A Attachments 1 and 2 include separate IC/EALs for SECURITY CONDITION and HOSTILE ACTION for the site/plant/facility (DU3 and DA3) and for the ISFSI (EU1 and EA1).</p> <p>DG-1346 Appendix A section 3.1 states: "Also note that the three individual EALs applicable to IOPs are included under Attachment 1 (PSEPs) and Attachment 2 (PDEPs) because many licensees may need a PSEP or PDEP EAL scheme in parallel with having some spent fuel already in the ISFSI. When the licensee transitions to an IOEP EAL scheme, then only the three IOEP EALs would remain. The intent for this approach is for each EAL scheme to be used as a stand-alone reference for</p>  | <p>Clarify in DG-1346 Appendix A that licensees in PSEP or PDEP with some spent fuel stored in the ISFSI may combine the separate IC/EALs for security-based events at the site and at the ISFSI, in order to clarify their applicability to the current level of decommissioning, and would not require a license amendment, subject to an evaluation under (q)(3).</p> |

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|            |   | <p>each level of decommissioning rather than combining all decommissioning EALs into one attachment.”</p> <p>NRC RIS 2003-18 Supplement 2 discusses that a “difference” is an EAL change where the basis scheme guidance differs in wording but agrees in meaning and intent, such that classification of an event would be the same. Examples of differences include “Combining like ICs that are exactly the same but have different operating modes as long as the intent of each IC is maintained and the overall progression of the EAL scheme is not affected.” Similar guidance should apply to EALs in DG-1346, and the guidance should clarify that a licensee may change an IC and/or EAL, and/or basis wording, as provided in DG-1346, that does not alter the intent of the IC and/or EAL, i.e., the IC and/or EAL continues to:</p> <ul style="list-style-type: none"> <li>• Classify at the correct classification level,</li> <li>• Logically integrate with other EALs in the EAL scheme, and</li> <li>• Ensure that the resulting EAL scheme is complete, i.e., classifies all potential emergency conditions.</li> </ul> <p>DG-1346 Appendix A, Attachments 1 and 2, basis for IC DU3 and DA3 state: “Security related events at the ISFSI are bound by ICs EU1 and EA1.”</p> |   |
| <p>66.</p> | <p>DG-1346 Rev. 1, Appendix A, Attachments 1 &amp; 2 (PSEP &amp; PDEP EALs)</p> | <p>The following new ICs/EALs are included in the DG but have not been required for previously shutdown facilities. No safety concerns have been identified that indicate a need for the NRC to impose new requirements:</p>   | <p>Delete ICs DU5, DU6, DU7 from Attachments 1 and 2.</p> |

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|     |  | <ul style="list-style-type: none"> <li>• DU5: Loss of all onsite or offsite communications</li> <li>• DU6: Loss of all power to SFP equipment or Control Room instrumentation for SFP level or temperature for 60 minutes or greater</li> <li>• DU7: Hazardous Events</li> </ul> <p>PDEPs have significantly reduced radiological source term and risks associated with wet and dry spent fuel storage, and potential events would be expected to develop much slower. For PDEPs, no preplanned offsite response is required, therefore loss of communications does not immediately result in a challenge to the safety of the spent nuclear fuel or personnel.</p> <p>Additionally, proposed § 50.200(c)(1)(v) emergency facilities and equipment, paragraph (I) would require at least one onsite and one offsite communications system, with a backup power source for each.</p> |   |
| 67. | DG-1346, Appendix A Attachments 1 and 2 IC DU8 | IC DU8 is not necessary since the covered event presents a very low safety risk to the public. Although a temperature limit would be exceeded, bulk boiling of the spent fuel pool is not imminent. Activation of the site emergency plan and ERO would not be necessary to effectively respond. If the event persisted, then it would be classified under IC DU2. Depending on event circumstances, it may also be reported to the NRC in accordance with § 50.72.   | This IC should be revised to reflect recent changes to IC/EALs proposed to be included in the next revision to NEI 99-01 and other relevant guidance documents, as appropriate. |
| 68. | DG-1346, Revision 1, pp. A-52, A-76, and       | IC/EAL EU2 should be revised to reflect recent changes to IC/EAL E-HU1 proposed to be included in the next revision to NEI 99-01.   | In Attachments 1, 2 and 3, make the following changes to IC/EAL HU2 for a loaded spent fuel cask.   |

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|  | <p>A-82 (PSEP, PDEP, and IOEP EALs)</p> | <p>A revision to NEI 99-01 is in progress that includes changes to E-HU1 in Section 8 ISFSI ICs/EALs for operating reactors. These changes were initiated after DG-1346, Revision 0 was issued. For the next revision to NEI 99-01, Appendix C, Permanently Defueled Station ICs/EALs (Recognition Category PD) in Appendix C is proposed to be deleted in their entirety, so that future changes to guidance for a decommissioning EAL scheme will be addressed in new Regulatory Guide 1.235 (DG-1346). In order to promote consistent classification for an event involving damage to a loaded spent fuel cask at ISFSIs, IC/EAL EU2 in DG-1346 should be changed to reflect recent changes to the analogous IC/EAL E-HU1 in NEI 99-01.</p> <p>The next revision to NEI 99-01 and issuance of new Regulatory Guide 1.235 are both expected to occur in the near future. Reasonable alignment between E-HU1 and EU2 would provide additional clarity in NRC approved guidance, promote consistency, and facilitate the transition to decommissioning.</p> <p>Note that if this change is made, DG-1346 references to CONFINEMENT BOUNDARY (e.g., in Appendix A section 5 definitions, and in the Basis for ICs DU2 and DA2 in Attachments 1 and 2) should be removed.</p> | <p>Replace <u>IC</u> with: “Damage to a loaded spent fuel cask.”</p> <p><u>Replace the Emergency Action Level with:</u></p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• NORMAL LEVELS of radiation means the average reading for the past 24 hours excluding the current peak value, if available, or the most recent available radiation survey result at the location of a reading or as determined by licensee expertise and experience.</li> <li>• The “pad boundary” is the outer edge of a reinforced concrete pad designed to store loaded spent fuel casks.</li> </ul> <p>(1) For a loaded spent fuel cask on the ISFSI pad, a closed window survey indicates a general area dose rate greater than 10x NORMAL LEVELS at any point along the pad boundary.</p> <p>(2) For a loaded spent fuel cask in transit to the ISFSI pad, a closed window survey indicates a cask dose rate greater than 10x the dose rate measured at the time the cask was sealed, at approximately the same distance.</p> <p><u>Replace the Basis with:</u></p> <p>This IC addresses an event or condition that damages a cask loaded with spent nuclear</p> |
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|  |  |  | <p>fuel. The cause of the damage could be internal (e.g., a failure caused by chemical or environmental degradation) or external (e.g., an earthquake, tornado strike or flood), including man-made causes (e.g., a dropped or tipped over cask, or an EXPLOSION). The issues of concern are the potential creation of a radioactivity release pathway to the environment, degradation of cask shielding, degradation of the loaded fuel assemblies, and configuration changes that could challenge removal the cask or spent fuel from storage. The emphasis for this classification is the degradation in the level of safety of the cask and not the magnitude of an associated dose, dose rate, or radioactivity release.</p> <p>The term “cask” encompasses the following components:</p> <ul style="list-style-type: none"><li>• <i>[List of Components - See Developer Notes]</i></li></ul> <p>The IC is applicable at all times after a cask has been loaded with spent nuclear fuel and sealed (welded or bolted closed), regardless of location (e.g., in the fuel building, during transit to the ISFSI, or in storage at the ISFSI). Prior to the sealing of a cask, an event involving spent fuel would be assessed against other radiological ICs/EALs to determine if an emergency declaration is warranted.</p> |
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|  |  |  | <p>To support the capability to make a timely emergency classification, the EAL uses confirmatory radiation readings as an indication of damage sufficient to warrant an Unusual Event declaration. NORMAL LEVELS of radiation means the average reading for the past 24 hours excluding the current peak value, if available, or the most recent available radiation survey result at the location of a reading or as determined by licensee expertise and experience. This approach obviates the need for a protracted post-event damage inspection and assessment to support the emergency classification. For casks in storage, the radiation readings may be taken at locations along the pad boundary that can be safely accessed by an individual with a hand-held monitor, consistent with the site radiological and industrial safety requirements.</p> <p>The “pad boundary” means the outer edge of the reinforced concrete pad designed and built to store loaded spent fuel casks. This boundary is inside the ISFSI Protected Area and Controlled Area.</p> <p>In the case of extreme damage, radiological or other safety considerations may necessitate that a dose rate be measured at a distance greater than that specified in the EAL. The intent is for personnel to start taking radiation</p> |
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|  |  |  | <p>readings at some distance from the pad boundary or the cask, and continue their approach while taking readings. If at any point during the approach the EAL is met, then no survey at a closer location is required for EAL assessment purposes.</p> <p>Security-related events at the ISFSI are bound by ICs EU1 and EA1.</p> <p><u>Replace the Developer Notes with:</u></p> <p>For (<i>List of Components</i>), enter the primary/major components used to transfer and store dry spent nuclear fuel. Depending on the technology in use, this would typically be one or more of the following:</p> <ul style="list-style-type: none"><li>• Bare fuel storage cask</li><li>• Storage canister</li><li>• Transfer cask</li><li>• Storage cask/module</li><li>• Concrete cask/overpack</li></ul> <p>A “bare fuel storage cask” is a heavy-walled, bolted lid metal cask into which the individual “bare” fuel assemblies are loaded; it does not incorporate a welded canister.</p> <p>The multiple of 10x was determined to provide a reasonable threshold for declaring an Unusual Event (e.g., normal readings are typically in the range of 0.1 to 1 mR). A reading of greater than 10x normal radiation levels or the cask dose rate at the time of</p> |
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|            |  |  | <p>sealing is sufficient to indicate that a degradation in the level of safety of a cask may have occurred but is high enough to accommodate fluctuations in background radiation due to natural causes. Field survey results are generally available only as a “whole body” dose rate; for this reason, the EAL specifies a “closed window” survey reading.</p> <p>This IC could be assessed following an observable/detectable event (e.g., an earthquake or explosion) or because of a reading from a routine survey; however, all assessments should be made using existing licensee procedures and capabilities. There is no expectation for a licensee to install additional instrumentation or change the type or frequency of routine surveys.</p> <p>It should be noted that the minimum distance from the ISFSI to the nearest boundary of the controlled area must be at least 100 meters (per 10 CFR 72.106); therefore, radiation levels at the controlled area boundary would be a small fraction of the radiation levels measured at the pad boundary.</p> |
| <p>69.</p> | <p>DG-1346, Revision 1, pp. A-76 and A-82 (PDEP and IOEP EALs)</p> | <p>There is an extra “in” in the last sentence of the last paragraph on pages A-76 and A-82.</p> | <p>Delete extra “in” in last paragraph.</p>   |

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| 70. | DG-1346, Revision 1, p. A-77 (IOEP EAL)  | The ISFSI Only Emergency Plan EAL Scheme does not include Judgment EALs DU4 and DA4, when the PSEP and PDEP schemes do.   | Include IOEP Judgment EALs, DU4 and DA4.   |
| 71. | DG-1346, Revision 1, p. A-78 (IOEP EAL)  | Timely and accurate communication between Security Shift Supervision and the Control Room is essential for proper classification of a security-related event. Classification of these events will initiate appropriate threat related notifications to plant personnel and offsite response organizations (OROs). Stand-alone ISFSIs no longer have a Control Room. Security Shift Supervision communicates with the Security Alarm Station for all events. Also, stand-alone ISFSIs' current Emergency Plans do not require the ISFSI to maintain an offsite response organization (ORO). All Emergency Plan actions are accomplished by on shift personnel. | Replace "Control Room" with "Security Alarm Station." Replace "offsite response organizations (ORO's)" with "offsite agencies" or "resource assistance."   |
| 72. | DG-1346, Revision 1, p. A-78 (IOEP EAL)  | IC EU1 EAL #3, "A validated notification from the US Nuclear Regulatory Commission (NRC) providing information of an aircraft threat." This is not currently within the EALs of stand-alone ISFSI sites.  | Delete IC EU1 EAL#3 for IOEP.  |
| 73. | DG-1346 Rev 1, Appendix A Attachment 2 ICs DU3, DA3, DA4 and EA1 Attachment 3 IC EA1 | <p>For PDEPs and IOEPs, ICs/EALs should not be based on hostile action or its associated requirements.</p> <p>The Emergency Preparedness Final Rule (76 FR 72560; November 23, 2011), amended certain requirements in 10 CFR Part 50, and added the definition of "hostile action" as an act directed toward a nuclear power plant or its personnel in Appendix E paragraph IV.A.7.</p> <p>NSIR/DPR-ISG-02 EP Exemption Requests for Decommissioning NPPs (ML14106A057), Basis for Change to Appendix E section IV.A.7, states that the licensee's physical security plan must continue to</p>  | <p>In Attachment 2 (PDEP), revise references to hostile action:</p> <ul style="list-style-type: none"> <li>• IC DU3 Basis, 1<sup>st</sup> paragraph, revise the second sentence to state that other security-related (or security-based) events, vice hostile actions, are classifiable under IC DA3.</li> <li>• Revise IC DA3 to refer to Security-related (or Security-based) event, vice HOSTILE ACTION, and make corresponding changes in the Basis. In the Basis, 4<sup>th</sup> paragraph, delete the sentence describing implementation of</li> </ul> |

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|  |  | <p>provide high assurance against a potential security event impacting a designated target set. Therefore, some EP requirements for security-based events are maintained.</p> <p>Several sections of the Proposed Rule discuss reasons for not including requirements for hostile action and its related requirements for PDEPs, as follows.</p> <p><i>Section PDEP Emergency Classification Levels and Emergency Action Levels</i> states that EAL and ECL requirements for licensees with PDEPs that do not include hostile action-based EALs but would still require EALs for security-based events. The definition for a “hostile action” and its related requirements does not apply to PDEPs, however elements for security-based events would be maintained. The classification of security-based events, notification of offsite authorities and coordination with offsite agencies under a CEMP would still be required. Other security-related requirements in the EP Final Rule would be <u>exempted</u> such as ERO augmentation and alternative facilities and protection of onsite personnel.</p> <p><i>Section Offsite Radiological Emergency Response Plan</i> states that for licensees with PDEPs, no action would be expected or required from state or local government organizations in response to an event at a decommissioning site other than firefighting, law enforcement, and ambulance/medical services.</p> <p><i>Section PDEP Hostile Action</i> states licensees with PDEPs would not fall within the scope of hostile action, and</p> | <p>onsite protective measures (e.g., evacuation, dispersal, or sheltering).</p> <ul style="list-style-type: none"> <li>• Revise IC DA3 EAL #1 to refer to Security-related (or Security-based) event, vice HOSTILE ACTION. Make corresponding change to the Basis for EAL #1.</li> <li>• Revise IC EA1 to refer to Security-related (or Security-based) event, vice HOSTILE ACTION, and make corresponding changes in the Basis. In the Basis, 4<sup>th</sup> paragraph, delete the sentence describing implementation of onsite protective measures (e.g., evacuation, dispersal, or sheltering).</li> <li>• Revise IC DA4 EAL #1 to replace reference to hostile action with security-related, or security-based, event.</li> </ul> <p>In Attachment 3 (IOEP), revise references to hostile action:</p> <ul style="list-style-type: none"> <li>• Revise IC EA1 to refer to Security-related (or Security-based) event, vice HOSTILE ACTION, and make corresponding changes in the Basis. In the Basis, 4<sup>th</sup> paragraph, delete the sentence describing implementation of onsite protective measures (e.g., evacuation, dispersal, or sheltering).</li> </ul> |
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|  |  | <p>enhancements to EP in response to hostile action, such as alternative facilities for the staging of ERO personnel, and protection of onsite personnel. Licensees with PDEPs would be excluded from the definition of “hostile action” and its related requirements as they apply to EP, however elements for security-based events would still be maintained for PDEP facilities, including EALs for <i>security-based</i> events. Under the Proposed Rule, licensees with PDEPs would be required to identify ORO resources that would respond to a security event, and the assistance licensees expect from those resources would be maintained in PDEPs. For physical security, the objective for these facilities relates to protection of the spent fuel against sabotage.</p> <p>The term “sabotage” appears in NRC Bulletin 2005-02, Emergency Preparedness and Response Actions for Security-Based Events, Attachment 2, in an example of an initiating condition for Unusual Event from NUREG-0654: “Security threat or attempted entry or attempted sabotage.”</p> <p>NRC Bulletin 2005-02, which was addressed to all holders of operating licenses for nuclear power reactors, except those for permanently defueled reactors, defined “hostile action” (since incorporated into Appendix E to 10 CFR Part 50 paragraph IV.A.7). It further stated that hostile action should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the nuclear power plant.</p> | <p>In consideration of the above proposed changes, EALs for security related events can be distinguished by classifying threats directed at the site but not within the OCA at the UE level, and threats that are within the OCA at the Alert level. This approach reflects the objective of the facility to protect spent fuel against sabotage.</p> |
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|  |  | <p>For PDEPs, EALs for PDEPs should not be required to address hostile actions or its related requirements. However, EALs for security-based events would still be required. Proposed § 50.200(c)(1)(ii)(A) does not include the requirement from analogous Appendix E section IV.B that “action levels must include hostile action that may adversely affect the nuclear power plant.”</p> <p>Other requirements in Appendix E for hostile action and related requirements are also not included in the analogous paragraphs in the Proposed Rule.</p> <p>An exception is paragraph § 50.200(c)(1)(i)(A)(5), analogous to Appendix E section IV.A.7, which does not include the term “hostile action” but does include all of the words in the definition of hostile action from NRC Bulletin 2005-02. A separate comment is provided for this paragraph.</p> <p>In summary, as stated in the Proposed Rule, PDEPs would not fall within the scope of hostile action and enhancements to EP in response to hostile action, such as alternative facilities for the staging of ERO personnel and protection of onsite personnel, would not be warranted. PDEPs are excluded from the definition of hostile action and its related requirements as they apply to EP. Elements for security-based events would still be maintained for these facilities, including EALs for security-based events, and licensees with PDEPs would be required to identify offsite response organization resources that would respond to a security event, and</p> |  |
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|            |  | <p>the assistance licensees expect from those resources would be maintained in PDEPs. For licensees with PDEPs, no action would be expected or required from state or local government organizations in response to an event at a decommissioning site other than firefighting, law enforcement, and ambulance/medical services.</p> <p>In Attachment 2, ICs/EALs for security related events should be revised to reflect the objective of PDEP facilities to protect spent fuel against sabotage, and not hostile action.</p> <p>Note that IC DU3 Basis states: "Security events assessed as HOSTILE ACTIONS are classifiable under ICs DA5 or DS5." Attachment 2 does not include ICs DA5 or DS5, therefore the reference should be corrected.</p> |   |
| <p>74.</p> | <p>DG-1346 Rev 1, Appendix A Attachments 1, 2 and 3: ICs EU1 and EA1</p> | <p>For ISFSIs and IOEPs, ICs/EALs should not be based on potential aircraft threat.</p> <p>10 CFR 50.54(hh)(1) requires licensees to develop, implement and maintain procedures if notified of a potential aircraft threat. § 50.54(hh)(2) states that (hh)(1) does not apply after the licensee has submitted the § 50.82(a)(1) or § 52.110(a) certifications.</p> <p>Security-based ICs and EALs were provided to licensees in NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security Based Events," dated July 18, 2005, which was addressed to all holders of operating licenses for nuclear power reactors, except those for permanently defueled reactors.</p>   | <p>In Attachments 1, 2 and 3, remove EALs for potential or actual aircraft threat directed at the ISFSI, as follows:</p> <p>IC EU1, remove EAL #3 for validated notification from the NRC providing information of an aircraft threat (directed at the ISFSI). Note that IC DU3 EAL #3 will continue to apply for PSEPs and PDEPs for such a threat directed at the site.</p> <p>IC EA1, remove EAL #2 for validated notification from NRC of an aircraft attack threat within 30 minutes of the site (directed at the ISFSI). Note that IC DA3 EAL #2 will</p> |

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|  |  | <p>In the Final Rule for Power Reactor Security Requirements (74 FR 13926, March 27, 2009), the NRC amended its security regulations adding new security requirements for nuclear power reactors. This rulemaking established and updated generically applicable security requirements similar to those previously imposed by Commission orders issued after the terrorist attacks of September 11, 2001. In the Statements of Consideration, the Commission stated, in part, that current reactor licensees comply with these requirements through strategies that fall into the three general areas of firefighting, operations to mitigate fuel damage, and actions to minimize radiological release. The firefighting response strategy encompasses a number of elements, including spent fuel pool mitigation measures. Requirements for these strategies are currently specified in 10 CFR 50.155(b)(2).</p> <p>As such, the NRC staff-maintained requirements for EALs for potential or actual aircraft threats for facilities transitioning into decommissioning with spent fuel stored in a spent fuel pool, in addition to the mitigative strategies license conditions required by NRC Order EA-02-026 at that time.</p> <p>Statement of Consideration for the 2009 final Security Rule also stated, in part, that the NRC believes it is inappropriate that § 50.54(hh) should apply to a permanently shutdown defueled reactor where the fuel was removed from the site or moved to an ISFSI.</p> | <p>continue to apply for PSEPs and PDEPs for such a threat directed at the site.</p> |
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|  |  | <p>Therefore, ICs/EALs associated with the mitigative strategies and response procedures for potential or actual aircraft attack procedures should not be included for the ISFSI, as part of a PDEP site, or for IOEPs with all spent fuel removed from the spent fuel pool and stored at the ISFSI.</p> <p>A similar argument could be made that aircraft threat does not apply to decommissioning facilities. As discussed in Supplement to SECY-16-0142 (ML17045A163): “Once the licensee permanently removes the fuel from the reactor, the licensee will be in the same situation as the then-decommissioning reactors at the time of the issuance of Order EA-02-026, <i>Interim Safeguards and Security Compensatory Measures</i>, when the NRC concluded that potential aircraft threat procedures for decommissioning reactors were not warranted.”</p> <p>AND</p> <p>“Order EA-02-026, from which 10 CFR 50.54(hh) derives, was justified as an adequate protection backfit. In issuing that order, the NRC determined that the 10 CFR 50.54(hh)(1) procedures were necessary for adequate protection due to the risk presented by the presence of fuel in the reactor. Because that risk exists until the fuel is removed from the reactor, the NRC staff suggests that a licensee’s maintenance of the 10 CFR 50.54(hh)(1) procedures until the licensee submits its 10 CFR 52.110(a)(2) certification stating that fuel has</p> |  |
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|            |   | <p>been removed from the reactor, could be considered as necessary for adequate protection.”</p> <p>→Refer to ICs DU3 and DA3.</p>   |  |
| <p>75.</p> | <p>DG-1346, Appendix A Attachments 1, 2 and 3, ICs related to aircraft threat</p> | <p>NRC should identify the process controlling and licensee responsibility for HOO communications related to aircraft threats.</p> <p>Basis for IC DU3 EAL #3 and for IC DA3 EAL #2: “The NRC Headquarters Operations Officer (HOO) will communicate to the licensee if the threat involves an aircraft.”</p> <p>“This EAL is met when the threat-related information has been validated in accordance with (site-specific procedure).”</p> <p>Appendix to NRC Lessons Learned Report (ML16302A022), section 1.4.6 applicability of 50.54(hh)(1):</p> <p>“Although 10 CFR 50.54(hh)(1) does not apply to decommissioning facilities, the NRC HOO will continue to send the daily threat authentication information to the licensees of decommissioning facilities. These licensees can voluntarily use this information, including verification of the authenticity of threat notifications. The HOO will continue to provide the daily threat authentication information to these licensees until NRA/DORL provides explicit directions that the threat information can be discontinued. If a licensee chooses to discontinue the use of the daily authentication threat information, then it can voluntarily use one of the alternative authentication methods.”</p> | <p>Proposed resolution will depend on previous comment that aircraft threat does not apply for ISFSIs at PSEPs and PDEPs or for IOEPs.</p> |

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| <p>76.</p> | <p>DG-1346, Appendix A<br/>Section 3.1<br/>Attachment 1<br/>ICs DU4, DA4,<br/>DS4 &amp; DG4<br/>Attachment 2<br/>ICs DU4 &amp; DA4<br/>Attachment 3</p> | <p>DG-1346 Appendix A section 3.1 states “When the licensee transitions to an IOEP EAL scheme, then only the three IOEP EALs would remain.” This refers to two IC/EALs (EU1 and EA1) for security-based events and the IC/EAL for damage to a loaded spent fuel cask (EU2) identified in Attachment 3 to Appendix A.</p> <p>DG-1346 Appendix A Attachments 1 and 2 include IC/EALs for declaring events based on Emergency Director judgment.</p> <p>Attachment 3 (IOEP) does not include IC/EALs for declaring events based on Emergency Director judgment. Consistent with precedent and previous NRC guidance, IC/EALs for declaring an event based on Emergency Director judgment should be included in Attachment 3 for IOEP.</p> | <p>In DG-1346, Appendix A, Attachment 3 for IOEP, add ICs/EALs for other conditions which in the judgment of the Emergency Director judgment warrant declaration of an Unusual Event or Alert.</p>                                       |
| <p>77.</p> | <p>DG-1346, Sections C1, C2, and C3.</p>  | <p>Minimum ERO staffing tables/matrices are not consistent with previously NRC approved PSEPs, PDEPs, and/or IOEPs</p>   | <p>Revise ERO staffing tables/matrices to ensure consistency with previously NRC approved PSEPs, PDEPs, and/or IOEPs</p>   |
| <p>78.</p> | <p>DG-1346, Appendix B, p. B-1</p>  | <p>Appendix B states that it provides guidance on emergency plan changes for transitioning to PSEP or PDEP. As such, the bullets on page B-1 addressing specific paragraphs should also discuss 10 CFR 50.54(q)(7)(ii) as applicable to the transition to PDEP.</p>  | <p>The bullets on page B-1 should reference 10 CFR 50.54(q)(7)(ii) for transitioning to PDEP.</p>  |
| <p>79.</p> | <p>DG-1346, Appendix B</p>  | <p>Appendix B should be expanded to provide additional guidance for the transition to IOEP, particularly with respect to the 10 CFR 50.54(q)(3) reference to the applicable requirements of 10 CFR 72.32, the 10 CFR 50.54(q)(7)(iii) reference to the standards in 10 CFR</p>   | <p>Clarification is needed to understand how 10 CFR 72.32(a) and/or the standards in 10 CFR 72.32(a)(1) through (16) would apply for the transition from PDEP to IOEP for a facility with an emergency plan that satisfies, and will</p> |

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|     |   | 72.32(a)(1) through (16), and (3), and the 10 CFR 50.54(q)(8)(i) references to 10 CFR 72.32(a).   | continue to satisfy, proposed 10 CFR 72.32(c) and 10 CFR 50.200(b).   |
| 80. | DG-1346, Appendix B, Section B-1.1 on page B-2, item d. | The statement “the need for incident planning remains as long as licensed radioactive material remains onsite” should be clarified with respect to proposed 10 CFR 50.54(q)(7)(iv) that states an emergency plan (that meets the proposed requirements) is not required when all spent fuel is removed from the site.   | Remove ambiguity referencing the need for incident planning as in conflicts with the proposed 10 CFR 50.54(q)(7)(iv). Consider using terminology such as All Hazards Planning.              |
| 81. | DG-1346, Appendix C and 10 CFR 50.54(q)(7)(ii)          | The zirconium fire analysis performed in accordance with 10 CFR 50.54(q)(7)(ii)(A)/(B) should not require a license amendment request (LAR) since the acceptance criteria is already specified in (q)(7)(ii)(C). Similarly, the analysis in 10 CFR 50.155(a)(2)(ii) for the boil-off time is also related to beyond-design-basis event requirements, and that does not require an LAR for approval. | Instead of requiring an LAR, allow the 10 CFR 50.54(q)(7)(ii)(A)/(B) analysis to be submitted to the NRC at least 60 days prior to implementation in accordance with 10 CFR 50.54(q)(8)(i). |

## Response to Section V: Specific Requests for Comments (87 Fed. Reg. 12,303) Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning

**PSDAR Approval:** *The current decommissioning regulations establish that once a licensee permanently ceases operation of the nuclear power reactor, it cannot undertake any major decommissioning activities until it provides the public and the NRC with additional information. The NRC requires that the licensee submit this information in the form of a PSDAR, which consists of the licensee's proposed decommissioning activities and schedule through license termination, a discussion of the reasons for concluding that the proposed activities will be bounded by existing analyses of environmental impacts, and a site-specific cost estimate for the proposed activities. The PSDAR is made available to the public for comment and is subject to NRC review (but not approval). Additionally, the current decommissioning regulations prohibit, at any time, the performance of any decommissioning activity that may result in significant environmental impacts not previously reviewed. Under this regulatory framework, licensees are not required to have an NRC-approved decommissioning plan; instead, 90 days after the NRC has received the licensee's PSDAR, licensees may perform, under 10 CFR 50.59, those major decommissioning activities that are bounded by existing environmental analyses. Therefore, no site-specific NEPA review is required and there is no hearing opportunity under 10 CFR part 2 before these decommissioning activities begin. To perform decommissioning activities that are not bounded by existing environmental analyses, however, a licensee would have to submit a request for a license amendment or an exemption request, which would trigger a site-specific NEPA review and hearing opportunity under 10 CFR part 2. Additionally, at least two years before termination of the license, the licensee must submit an application for termination of license and a license termination plan, which must be approved by the NRC. The requirement to approve the license termination plan also triggers a site-specific NEPA review and hearing opportunity under 10 CFR part 2. As part of the development of the proposed rule, the NRC staff evaluated whether the NRC should explicitly approve each licensee's PSDAR before allowing major decommissioning activities to begin. The staff concluded that based on lessons learned and experience, there is currently no indication that requiring approval of a PSDAR has any substantial impact on the public health and safety. However, the NRC is gathering additional feedback from the public. As part of this rulemaking, should the NRC require approval of the PSDAR, a site-specific environmental review, and hearing opportunity before a licensee undertakes any decommissioning activity? Other than NRC review and approval of the PSDAR, are there other activities that could help to increase transparency and public trust in the NRC regulatory framework for decommissioning? Should the rule provide a role for the states or local governments in the process? What should that role be? What are the advantages or disadvantages of various roles? Please provide an explanation for your response.*

### NEI Response

The NRC should not modify its current regulations to require approval of the PSDAR prior to allowing licensees to undertake decommissioning activities. This issue was thoroughly evaluated in the Commission's 1996 final rule, which established the current decommissioning process.<sup>1</sup> In that rulemaking, the Commission explained the basis for eliminating NRC approval of both a

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<sup>1</sup> "Decommissioning of Nuclear Power Reactors: Final Rule," 61 Fed. Reg. 39,278 (July 29, 1996).

decommissioning plan and a possession-only license amendment, contrasting the safety concerns presented by an operating commercial power reactor with the reduced risks associated with a permanently shut down and defueled facility. Specifically, the Commission concluded that “the activities performed by the licensee during decommissioning do not have a significant potential to impact public health and safety.”<sup>2</sup> In response to comments advocating that the NRC should retain the process requiring possession-only license amendments and decommissioning plan approval, the Commission explained:

[I]nitial decommissioning activities (dismantlement) are not significantly different from routine operational activities such as replacement or refurbishment. Because of the framework of regulatory provisions embodied in the licensing basis for the facility, these activities do not present significant safety issues for which an NRC decision would be warranted. Therefore, it is appropriate that the licensee be permitted to conduct these activities without the need for a license amendment.<sup>3</sup>

The Commission’s conclusion was correct in 1996 and it is correct today – there is no safety basis for requiring approval of the PSDAR via a license amendment or other formal process prior to the initiation of decommissioning activities. The NRC’s current decommissioning process has been in place for over 25 years and the agency has effectively overseen the safe decommissioning of over 27 research and power reactors under the existing framework.

With respect to the environmental impacts of decommissioning, in its 1996 final rule the Commission pointed out that any site impacts associated with decommissioning should be bounded by previous generic and site-specific Environmental Impact Statements (EIS). To ensure that environmental impacts are appropriately bounded, the regulations prohibit licensees from performing any decommissioning activities that “result in significant environmental impacts not previously reviewed”<sup>4</sup> and require that PSDARs provide reasons for concluding that the environmental impacts of decommissioning are bounded by an existing EIS.<sup>5</sup>

Further, in the current rulemaking, the NRC proposes to “clarify that licensees, at the PSDAR stage, are required to evaluate the environmental impacts and provide . . . the basis for whether the proposed decommissioning activities are bounded by previously issued, site-specific or generic environmental reviews.”<sup>6</sup> Thus, the current decommissioning process provides assurance that the environmental impacts of decommissioning are adequately addressed and communicated to the public.

As the Commission explained in the 1996 final rule:

The purpose of the PSDAR is to provide a general overview for the public and the NRC of the licensee’s proposed decommissioning activities until 2 years before termination of the license. The PSDAR is part of the mechanism for informing and being responsive to the public prior to

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<sup>2</sup> *Id.* at 39,279.

<sup>3</sup> *Id.* at 39,284.

<sup>4</sup> 10 CFR 50.82(a)(6)(ii).

<sup>5</sup> 10 CFR 50.82(a)(4)(i).

<sup>6</sup> “Regulatory Improvements for Production and Utilization Facilities: Final Rule,” 87 Fed. Reg. 12,254, 12,291 (March 3, 2022).

any significant decommissioning activities taking place. It also serves to inform and alert the NRC staff to the schedule of licensee activities for inspection planning purposes and for decisions regarding NRC oversight activities.<sup>7</sup>

The PSDAR itself, and the NRC’s review of the document, do not grant the licensee greater authority or otherwise alter the terms of the license. Thus, they do not constitute *de facto* license amendments triggering hearing rights.<sup>8</sup> To the contrary, the PSDAR is primarily a planning document that serves to inform the public of the licensee’s plans prior to the undertaking of significant decommissioning activities, as well as to inform and facilitate the NRC’s oversight activities. And the Commission has made it clear the ongoing oversight activities do not constitute a license amendment proceeding – even when such oversight may eventually result in a license amendment request being submitted by a licensee.<sup>9</sup> Further, there is no regulatory “gap” that interrupts NRC oversight from the time a facility is constructed to the time the facility is fully decommissioned and all spent fuel is removed from the site. Thus, during decommissioning, as during operation, the need for licensing actions providing prior NRC approval of activities should be primarily driven by the applicable change control processes that are part of the agency’s existing regulatory framework (10 CFR 50.59, 50.54(q), 50.54(p), etc.).

Decommissioning projects may affect the future of a community in a variety of ways, and the role currently played by the PSDAR as a planning document supports the community’s direct pursuit of its interests. Experience with recent decommissioning projects has demonstrated that state and local governments can and do become active participants in the planning of decommissioning projects. This has been evident in licensee interactions with community engagement panels in several locations and in the agreements the licensees have reached with state and local governments. The PSDAR, in its current form, is a valuable tool in facilitating these interactions and agreements. Such experience demonstrates that the current approach is effective and should not be modified.

We understand that some stakeholders in some communities have expressed the desire for more expansive opportunities for public participation, including the creation of new licensing actions that would provide opportunities for adjudicatory hearings. However, the Atomic Energy Act and NRC precedent should continue to guide whether and when licensing actions and opportunities for adjudicatory hearings are necessary during decommissioning. Under this long-standing framework, the need for licensing actions or agency orders to approve licensee plans or activities should be driven

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<sup>7</sup> 61 Fed. Reg. 39,281.

<sup>8</sup> See *In the Matter of Pacific Gas & Electric Company* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-16-9, 83 NRC 472, 474 (2016), citing *Omaha Public Power District* (Fort Calhoun Station, Unit 1), CLI-15-5, 81 NRC 329, 334 (2015) (the NRC’s “case law acknowledges that an agency action not formally labeled as a license amendment could constitute a *de facto* license amendment and trigger hearing rights . . . if the action (1) granted the licensee any greater authority or (2) otherwise altered the original terms of the license.”); See also, *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 326-327 (1996) (“In evaluating whether challenged NRC authorizations effected license amendments within the meaning of section 189a, courts repeatedly have considered the same key factors: did the challenged approval grant a licensee any greater operating authority, or otherwise alter the original terms of a license?”) (internal quotations omitted), citing *In re Three Mile Island Alert*, 771 F.2d 720, 729 (3d Cir. 1985); *San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287, 1314 (D.C. Cir. 1984); *Citizens Awareness Network, Inc. v. NRC*, 59 F.3d 284, 295 (1st Cir. 1995) (holding that authorization of component dismantling was a *de facto* license amendment because such actions were “beyond the ambit of the presumptive authority granted” in NRC licenses); *Sholly v. NRC*, 651 F.2d 780, 791 (D.C. Cir. 1980) (holding that an NRC order allowing purging of the TMI 2 containment was a license amendment because it “granted the licensee authority to do something that it otherwise could not have done under the existing license authority.”).

<sup>9</sup> *Diablo Canyon*, 83 NRC 472, 474.

primarily by an examination of whether the proposed actions would expand the authority of the licensee to act under its existing license, otherwise alter the terms of the license, or present significant and unique safety or environmental concerns that must be reviewed and approved by NRC prior to being undertaken by a licensee. The availability of processes, such as adjudicatory hearings, should flow from the agency's decisions about whether licensing actions or prior agency approvals are necessary. Stated differently, the availability of hearings should depend on whether the NRC determines, through consideration of the factors discussed above, that a licensing action triggering hearing rights is necessary. Conversely, the desire of certain stakeholders to be afforded the opportunity for adjudicatory hearings should not drive the agency to manufacture licensing actions that would trigger such hearing rights. Hearing rights flow from the need for certain licensing actions, but the need for licensing actions should not flow from the desire of some stakeholders to participate in decision-making via adjudicatory hearings.

Finally, a change to the NRC's regulations requiring prior approval of a PSDAR via a license amendment would meet the definition of backfitting currently contained in 10 CFR 50.109(a)(1), as well as the definition specifically applicable to facilities undergoing decommissioning that is proposed in this rulemaking.<sup>10</sup> As recognized in the proposed rule, the Commission's long-standing position has been that the backfitting rule in 10 CFR 50.109 should be applied to nuclear power facilities undergoing decommissioning.<sup>11</sup> Further, the Commission has communicated an expectation that application of the backfitting requirements to facilities undergoing decommissioning "should be reasonably straightforward."<sup>12</sup>

A change to the Commission's decommissioning regulations to require approval of a PSDAR or a decommissioning plan via a license amendment prior to the commencement of decommissioning activities would require foundational modifications of, or additions to, licensee procedures necessary to decommission power reactor facilities. In addition, we note that such a sweeping change to the NRC's long-standing decommissioning process would likely require corresponding rule changes (potential changes to the content requirements for PSDARs, necessity of environmental reports, changes to the timing of major decommissioning activities, etc.). At the very least, such changes must be supported by a backfitting analysis demonstrating that the necessary amendments to the regulations would yield a substantial increase in the overall protection of the public health and safety or the common defense and security; and that the costs of implementing the changes are justified considering that increased protection. In addition, from a policy perspective, if the NRC were to propose such a fundamental change to its decades-old decommissioning process we believe that a re-noticing would be necessary to adequately gather stakeholder input on the specific changes being proposed.

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<sup>10</sup> 87 Fed. Reg. 12,328 (the proposed definition of backfitting for facilities undergoing decommissioning includes "modification of or addition to . . . the procedures or organization required to decommission the facility [that] . . . may result from a new or amended provision in the Commission's rules. . . .").

<sup>11</sup> See 87 Fed. Reg. 12,296; "Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," SECY-98-253 (Nov. 4, 1998); "Staff Requirements – SECY-98-253 – Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," (Feb. 12, 1999); "Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning," SECY-00-145 (June 28, 2000).

<sup>12</sup> Staff Requirements – SECY-98-253 – Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," SRM-SECY-98-253 (Feb. 12, 1999).

**Timeframe for Decommissioning:** *For power reactor licensees, 10 CFR 50.82(a)(3) states that decommissioning must be completed within 60 years of permanent cessation of operations. In the proposed rule, the NRC is not proposing changes to the decommissioning timeframe requirements. What are the advantages and disadvantages of requiring prompt decontamination rather than allowing up to 60 years to decommission a site? As part of its review of a PSDAR, what are the advantages and disadvantages of NRC evaluating and making a decision about the timeframe for decommissioning on a site-specific basis?*

NEI Response

The current 60-year timeframe has a sound technical and policy basis and there is no compelling safety or security basis for revisiting this aspect of the NRC's rules. Further, devoting agency resources to evaluating rule changes that would modify the 60-year timeframe currently provided in the regulations would not increase efficiency or reduce burden on either the NRC or licensees. Instead, the scope of this rulemaking should be limited to achieving the primary objective articulated in the ANPR, which is "to implement appropriate regulatory changes that reduce the number of licensing actions needed during decommissioning.

**Emergency Planning:** *As discussed in the "Technical Basis for the Graded Approach" and "Emergency Preparedness" sections of this document, although the spectrum of credible accidents and operational events requiring an emergency response is reduced at a decommissioning power reactor as compared to that for an operating power reactor, reliable emergency preparedness functions are still required to ensure public health and safety in the event of a zirconium fire scenario.*

*The NRC has concluded that dry cask storage and spent fuel pools are both very safe. What are the advantages and disadvantages of requiring dedicated radiological emergency planning, including a 10-mile EPZ, until all spent nuclear fuel at a site is removed from the spent fuel pool and placed in dry cask storage? Is there additional information the NRC should consider in evaluating whether all-hazards planning would be as effective as dedicated radiological emergency planning?*

*The NRC staff has determined that 10 hours would be a sufficient amount of time for an emergency response to a spent fuel pool accident based on an all-hazards plan. Is there additional information the NRC should consider in evaluating this issue?*

NEI Response

There are no advantages to maintaining dedicated radiological emergency planning, including a 10-mile EPZ, when there is no technical basis for these requirements. The establishment of EP requirements absent a supporting technical basis would not be consistent with the NRC's Principles of Good Regulation.

The disadvantages to maintaining dedicated radiological emergency planning, including a 10-mile EPZ, include requiring a licensee and surrounding communities to divert resources away from more important activities.

If necessary, offsite protective actions could still be implemented using a CEMP process. A CEMP in this context, also referred to as an emergency operations plan (EOP), is addressed in the Federal Emergency Management Agency's (FEMA) Comprehensive Preparedness Guide (CPG) 101, "Developing and Maintaining Emergency Operations Plans." CPG 101 is the foundation for state, territorial, Tribal, and local EP in the United States. It promotes a common understanding of the fundamentals of risk-informed planning and decision-making and helps planners at all levels of government in their efforts to develop and maintain viable, all-hazards, all-threats emergency plans. An EOP is flexible enough for use in all emergencies. It describes how people and property will be protected; provides details regarding who is responsible for carrying out specific actions; identifies the personnel, equipment, facilities, supplies and other resources available; and outlines how all actions will be coordinated.

If state and local jurisdictions comply with the requirements of CPG 101, then an all-hazards plan or comprehensive emergency management plan is sufficient for communities near NPPs that meet the requirements of proposed regulations set forth in 10 CFR 50.200(b) or existing 10 CFR 72.32. Hurricane response per all-hazards plans would be similar. This would include planning and executing protective actions (evacuation or sheltering)

We are not aware of additional information affecting the NRC staff's determination that 10 hours would be a sufficient amount of time for an emergency response to a spent fuel pool accident based on an all-hazards plan.

***Emergency Response Data Systems:*** *Nuclear power facilities that are shutdown permanently or indefinitely are currently not required to maintain ERDS. These systems transmit near-real-time electronic data between the licensee's onsite computer system and the NRC Operation Center. Licensees in Level 1 would maintain a capability to provide meteorological, radiological, and spent fuel pool data to the NRC within a reasonable timeframe following an event. What are the advantages and disadvantages of requiring nuclear power plant licensees to maintain those aspects of ERDS until all spent fuel is removed from the pool?*

### NEI Response

The question discusses providing spent fuel pool data, since postulated accidents after permanently defueling the reactor would include those involving the spent fuel pool. However, spent fuel pool data is not one of the required parameters for ERDS as described in Section VI in Appendix E to 10 CFR Part 50. There is no apparent safety justification to revise the required ERDS parameters to include data points for a spent fuel pool at a permanently shut down facility when it is not required for operating plants. In addition to the decay time for spent fuel following cessation of reactor operations, with the reactor permanently defueled, in the event of a challenge to the safety of fuel stored in the spent fuel pool, the focus of the licensee staff at a permanently shut down facility would be the spent fuel pool condition.

As part of recent NRC rulemaking for mitigation of beyond-design-basis events (Final Rule, 84 FR 39684, dated August 9, 2019), the NRC considered a petition for rulemaking PRM-50-97 (ML11216A237) which involved potential enhancements to ERDS for operating nuclear power plants. The NRC's consideration of the issues raised in PRM-50-97 are reflected in the 10 CFR 50.155(d) training requirements for

mitigation strategies in 10 CFR 50.155(b) and did not result in any changes to ERDS capability to specifically monitor spent fuel pool conditions. After the facility is permanently shut down, strategies associated with spent fuel pool cooling capabilities must be maintained in accordance with 10 CFR 50.155(a).

In accordance with 10 CFR 50.72, after declaration of any Emergency Class specified in its Emergency Plan, a licensee must notify the NRC Operations Center via the Emergency Notification System (ENS), or if ENS is inoperative, via a backup communication method, and maintain an open, continuous communication channel with the NRC upon request by the NRC. NRC regulations require a licensee's emergency plan to describe primary and backup communication methods with the NRC. The NRC describes ERDS as a supplement to the ENS, and has previously maintained that after permanent cessation of operations, the licensee can evaluate a change to its emergency plan under 10 CFR 50.54(q)(3) to remove ERDS information, provided the applicable regulations continue to be met and the change does not reduce the effectiveness of the plan, that providing ERDS data to the NRC is not an emergency planning function (Reference NRC Memorandum dated June 2, 2014, ML14099A520).

ERDS is not required for permanently shut down nuclear power facilities, as explicitly stated in Section VI of Appendix E to 10 CFR Part 50, because once the reactor is permanently defueled, there is no longer the need to transmit a large number of data points to monitor potentially rapidly changing parameters associated with the spectrum of postulated accidents involving an operating reactor. The number of data points associated with the spent fuel pool condition is limited and unlikely to rapidly change, and therefore would not challenge the ability of the licensee to communicate the status of the spent fuel pool condition to the NRC via ENS or a backup communication method. For decommissioning facilities at Level 2, as described in the technical basis for graded approach in the Proposed Rule, licensee mitigative actions for many initiating events would have a high likelihood of preventing uncontrolled spent fuel heat-up, and in cases where uncontrolled heat-up is not prevented, the heat-up would be relatively slow, providing significant time before a radiological release that would be low enough such that significant additional time is available to take offsite actions to protect the public.

Radiological and meteorological data parameters are required for ERDS for operating reactors but would not provide early or direct indications of a spent fuel pool condition, as compared to spent fuel pool water inventory level and temperature. For the reasons previously discussed, licensee actions would be focused on addressing the spent fuel pool condition. During an event involving the spent fuel pool, the licensee would not be challenged to relay spent fuel pool data as well as available radiological and meteorological data to the NRC via ENS or backup communication method.

Maintaining ERDS would impose an additional burden on licensees for permanently shutdown facilities to maintain and periodically test the ERDS link, and to implement potential future software or hardware modifications.

Requiring licensees for permanently shut down facilities to maintain ERDS would provide no apparent safety benefit since required ERDS parameters do not include spent fuel pool data, communications to the NRC via ENS and backup communication methods are required by regulations and as described in

the emergency plan, and the licensee would not be challenged to relay the limited data points for an event involving the spent fuel pool.

**Cyber Security:** *The proposed rule applies cyber security requirements to Level 1 plants. However, a licensee in Level 2 would not be required to maintain a cyber security plan because the NRC has determined that there is little chance that the spent fuel in the SFP could heat up to clad ignition temperature within 10 hours. What are the advantages and disadvantages of extending cyber security requirements to shutdown nuclear power plants until all spent fuel is transferred to dry cask storage?*

### NEI Response

NEI believes that there are no advantages to extending cyber security requirements to a reactor that has been defueled and permanently shut down. The cyber security requirements in 10 CFR 73.54 apply to licensees currently licensed to operate a nuclear power plant. Once that licensee is no longer authorized to operate a nuclear power plant, the requirements in 10 CFR 73.54 would no longer apply. Further, as stated in the question, there is little chance that the spent fuel in the SFP could heat up to clad ignition temperature within 10 hours. With the number of critical digital assets (CDA) decreasing as systems are removed from service, there are fewer CDAs that need to be protected. This provides the reasonable assurance that the digital and communications systems and networks associated with SSEP functions are protected against cyber-attacks, up to and including the design basis threat as described in 10 CFR 73.1. As discussed in the technical basis, “the NRC is proposing that the cyber security requirements in § 73.54 continue to apply to licensees through Level 1. This continuation of the cyber security requirements would ensure that a compromise of digital systems cannot adversely impact the effective operation of the licensees’ physical security programs and emergency preparedness functions prior to the time at which the spent fuel cannot reasonably heat up to clad ignition temperature within 10 hours after a draindown event.”<sup>13</sup>

**Insurance:** *The proposed rule would allow nuclear power reactor licensees in decommissioning to reduce the offsite liability and onsite property insurance amounts that they are required to maintain once a plant enters Level 2. The transition to Level 2 financial protection amounts would be optional for licensees and they would have to submit an analysis that demonstrates a reduced risk of a zirconium fuel cladding fire in the SFP. What are the advantages and disadvantages of requiring the existing level of insurance to be maintained until all spent fuel is in dry cask storage (Level 3)?*

### NEI Response

NEI believes that there are no advantages to requiring the existing level of insurance to be maintained until all spent fuel is in dry cask storage. The Regulatory Basis Document supporting this rulemaking contained a robust description of the history, risk considerations, and technical basis for reducing insurance requirements applicable to facilities undergoing decommissioning.<sup>14</sup> As described in the technical basis for this proposed change, the NRC has long-concluded that the risk associated with a beyond-design-basis zirconium fire is the limiting or bounding event when evaluating exemptions

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<sup>13</sup> <https://www.nrc.gov/docs/ML2130/ML21307A057.pdf> pgs. 122

<sup>14</sup> “Regulatory Improvements for Power Reactors Transitioning to Decommissioning: Regulatory Basis Document,” Nov. 20, 2017, at Append. G “Offsite and Onsite Financial Protection Requirements and Indemnity Agreements” (“Reg. Basis”).

requesting reductions in onsite and offsite insurance amounts for licensees undertaking decommissioning.<sup>15</sup> Further, the NRC staff expressed the view that the 10-hour adiabatic heat-up calculation is an adequate basis for evaluating this risk and reducing insurance requirements.<sup>16</sup> The approach suggested in the proposed rule is consistent with decades of precedent established through the exemption process, and the technical basis associated with the proposed “Level 2” transition point has been extensively considered both within and outside of this rulemaking.<sup>17</sup> Thus, there would be no public health and safety or security benefit to delaying a reduction in the insurance requirements until all fuel is in dry storage (i.e., Level 3).

The disadvantages of delaying reduction of insurance coverage amounts until all fuel is in dry storage include:

- Creating an unnecessary decrease in regulatory certainty that would result from adopting an approach that differs from the valid approach taken in granting multiple exemptions in this area;
- Unnecessarily departing from the foundational basis for this rulemaking – i.e., adjusting requirements commensurate with the level of risk posed at certain phases of a decommissioning process; and
- Unnecessarily delaying the reduction in regulatory burden warranted at Level 2 until all fuel is in dry storage.

Advantages and disadvantages of delaying reductions until a facility reaches Level 3 aside, it appears that there is a misstatement in the question. Specifically, the question states that to transition to the proposed Level 2 financial protection amounts a licensee would be required “to submit an analysis that demonstrates a reduced risk of a zirconium fuel cladding fire in the SFP.”<sup>18</sup> But the proposed rule only requires such an analysis if the licensee wishes to use an alternative to the 10- or 16-month spent fuel decay periods permitted pursuant to the proposed rule.<sup>19</sup> This error should be corrected in the discussion provided in the final rule to avoid confusion.

***Financial Assurance:*** Pursuant to § 50.75, “Reporting and recordkeeping for decommissioning planning,” specifically paragraph (b)(1), nuclear power reactor licensees and applicants must certify that reasonable assurance for radiological decommissioning funding has been (for licensees) or will be (for applicants) provided in an amount that may be more, but not less, than the generic amount provided by the Commission’s regulations (i.e., the table of minimum amounts under § 50.75(c)). Alternatively, under § 50.75(b)(4), the certified amount of funding may be based on a site-specific cost estimate for decommissioning the facility.

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<sup>15</sup> *Id.* at Append. G, pgs. G-5 – G-7.

<sup>16</sup> *See Id.* at pg. G-6.

<sup>17</sup> *See e.g., Id.* at Append. A “Emergency Preparedness” (explaining the technical basis for the graded approach to emergency preparedness, including the basis for a tailoring of requirements at “Level 2”), Append. G (explaining the basis for the reduction in insurance amounts at “Level 2,” including a summary of the “Commission paper series examining this issue and dating back to the early 1990s); 87 Fed. Reg. 12,265-67 (providing a robust explanation of the of the “graded approach” take in the proposed rule, including the technical basis for this approach).

<sup>18</sup> 87 Fed. Reg. 12,302.

<sup>19</sup> 87 Fed. Reg. 12,336.

*The current table of minimum amounts (also referred to as the minimum decommissioning formula) has not been updated for over 30 years. The NRC is considering updates to the generic decommissioning funding formula to make it more reflective of current cost considerations.*

*What are the advantages and disadvantages of updating the formula to reflect recent data and to cover all estimated radiological decommissioning costs rather than the bulk of the costs?*

### NEI Response

NEI does not believe that there are any advantages to spending NRC and stakeholder resources to explore methods to update, or otherwise significantly modify, the table of minimum amounts provided in 10 CFR 50.75(c). The generic, rule-based formula described in 10 CFR 50.75(c) has provided an effective and consistent method for determining the amount of decommissioning funding assurance required during plant operation. The NRC's regulatory approach to decommissioning funding is fundamentally sound – it offers a clear, reliable, efficient generic method to ensure that the bulk of funds necessary to decommission a facility are in place early in the licensed life of a facility, while requiring development of more precise, site-specific decommissioning cost estimates as a facility approaches the end of its operating life. This approach to regulating funding assurance has served the NRC, industry, and the public well, resulting in the adequate funding of all commercial reactor decommissioning projects to date.

As a threshold matter, the question presented in the proposed rule states that “[t]he current table of minimum amounts . . . has not been updated for over 30 years.” While it is true that the table of minimum amounts itself has not been updated, section 50.75 requires application of an adjustment factor that considers changes in costs associated with labor, energy, and low-level radioactive waste burial.<sup>20</sup> The labor, energy, and low-level radioactive waste burial costs that make up the adjustment factor are updated approximately every two years and provided by the NRC in NUREG-1307, “Report on Waste Burial Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities.” As explained in NUREG-1307, “the adjustment factor incorporated in 10 CFR 50.75(c)(2) provides a mechanism for escalating the decommissioning fund requirement . . . to current year dollars to reflect inflation and other changes in economic conditions since January 1986.”<sup>21</sup> In addition, 10 CFR 50.75(b)(2) requires that operating reactor licensees must adjust the minimum amount of decommissioning funding to be provided annually, using the rate provided in paragraph 50.75(c)(2). To the extent that the description provided with the proposed rule is intended to give the impression that the regulatory minimums have remained unchanged in over 30 years, it is incorrect. These statements should be clarified in the final rule to avoid any confusion about how often the required minimum decommissioning funding assurance amounts are updated.

As discussed in the Regulatory Basis Document (RBD) supporting the proposed rule, the NRC staff evaluated the adequacy of the table of minimum amounts in a 2013 paper to the Commission.<sup>22</sup>

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<sup>20</sup> 10 CFR 50.75(c)(2).

<sup>21</sup> “Report on Waste Burial Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities,” NUREG-1307, Rev. 18 (Dec. 2020), at pg. 9.

<sup>22</sup> “Regulatory Improvements for Power Reactors Transitioning to Decommissioning,” Regulatory Basis Document (Nov. 20, 2017)(“RBD”), at pg. F-5.

Specifically, in SECY-13-0066, “Staff Findings on the Table of Minimum Amounts Required to Demonstrate Decommissioning Funding Assurance,” the NRC staff concluded:

At this time, NRC staff does not recommend revising the Table of Minimum Amounts, as found in 10 CFR 50.75(c)(1), or the adjustment factors at 10 CFR 50.75(c)(2). The formula in 10 CFR 50.75(c) successfully establishes a common minimum standard measurement, or reference level, to which each licensee must accumulate committed financial resources during the life of the operating license as it was intended and described above. Licensees continue to have the flexibility to use a SSCE to determine if larger amounts of funding are needed for radiological decommissioning. . . . These requirements along with the requirements for reporting decommissioning funding to the NRC provide a robust program to assure that licensees will have adequate funds available for decommissioning.<sup>23</sup>

In reaching this conclusion, the staff considered a study commissioned by the NRC and carried out by Pacific Northwest National Labs,<sup>24</sup> a 2012 report by the Government Accountability Office,<sup>25</sup> as well as feedback provided during a public meeting on the topic. Nothing has changed since 2013 that would invalidate the NRC staff’s reasoning, or the conclusions reached in SECY-13-0066.

The question presented in the proposed rule references “recent data” and updating the table of minimum amounts “to cover all estimated radiological decommissioning costs rather than the bulk of the costs.” First, with respect to the “recent date” referenced in the question, while there has been some recent decommissioning experience, it is unclear how this cost data would be useful in updating the table of minimum amounts because much of the actual cost of decommissioning is driven by site-specific variables. Further, the phrasing of the question seems to indicate the current “bulk of funds” approach is not intended “to cover all estimated radiological decommissioning costs.” This is incorrect. The NRC staff explained the “bulk of funds” approach in SECY-13-0066, stating:

GAO recommended that the NRC define what is meant when it says the minimum formula represents the bulk of the funds needed for decommissioning. Applying the results of the PNNL study, the minimum formula represents the low end of the range of decommissioning costs. This is acceptable because significantly raising the minimum could result in requiring some licensees to provide financial assurance greater than the funds needed to decommission. . . . The current regulatory system provides for the cases where the cost estimate exceeds the minimum formula by requiring a SSCE five years before permanent shutdown, or within two years following a premature shutdown. The SSCE then becomes the amount of financial assurance the licensee must certify and provide. The regulatory system has been successful in the past, since no reactor has failed to perform its decommissioning obligation due to lack of funds.<sup>26</sup>

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<sup>23</sup> SECY-13-0066, at pg. 7.

<sup>24</sup> “Assessment of the Adequacy of the 10 CFR 50.75(c) Minimum Decommissioning Fund Formula,” Nov. 2011 (Accession No. ML13063A190).

<sup>25</sup> “NRC’s Oversight of Nuclear Power Reactors’ Decommissioning Funds Could Be Further Strengthened,” GAO-12-258 (April 2012).

<sup>26</sup> SECY-13-0066, at pg. 6-7(emphasis added).

So, it is not that the “bulk of funds” approach is not intended to cover all estimated radiological decommissioning costs. Rather, the “bulk of funds” approach represents the low end of the range of decommissioning costs likely to be incurred by commercial power reactor licensees (i.e., to yield a “table of minimum amounts”). This is a rational approach that avoids overfunding, while still requiring licensees to estimate and provide sufficient funds to cover all costs associated with decommissioning when those funds are needed.

For these reasons provided above, NEI believes there is no advantage to further investigating updates to the table of minimum amounts at this time.

**Site-Specific Cost Analysis:** *Currently, licensees can use either the generic amount under 10 CFR 50.75(c) or a site-specific cost estimate under 10 CFR 50.75(b)(4) to determine the certified amount of radiological decommissioning funding. As provided in 10 CFR 50.82(a)(8)(ii) and 10 CFR 52.110(h)(2), a licensee may withdraw funds from the decommissioning trust fund up to a cumulative total of 3 percent of the generic amount calculated under 10 CFR 50.75(c) for decommissioning planning purposes at any time without prior notification to the NRC. After submittal of the certifications of permanent shutdown and fuel removal required under 10 CFR 50.82(a)(1) and 10 CFR 52.110(a) and commencing 90 days after the NRC has received the PSDAR, the licensee may use up to an additional 20 percent of the decommissioning funds prescribed in 10 CFR 50.75(c) for decommissioning purposes. The licensee is prohibited from using the remaining 77 percent of the generic decommissioning funds until a site-specific decommissioning cost estimate is submitted to the NRC. Requirements in 10 CFR 50.82(a)(8)(iii) and 10 CFR 52.110(h)(3) establish that a licensee shall provide a site-specific decommissioning cost estimate within 2 years following permanent cessation of operations. If the estimate of costs provided with the PSDAR is a site-specific cost estimate, this requirement can be satisfied with the PSDAR submittal.*

*What are the advantages and disadvantages of requiring a full site investigation and characterization at the time of shutdown? What are the advantages and disadvantages of eliminating the formula and requiring a site-specific cost estimate during operations?*

### NEI Response

There is no advantage offered by requiring a full site investigation at the time of shutdown. 10 CFR 50.82 already requires that licensees create a site-specific decommissioning cost estimate. As part of these estimates, licensees incorporate the existing records that are required to be maintained pursuant to 10 CFR 50.75(g). This includes records of:

- As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination.
- The cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.
- The licensed site area, as originally licensed, which must include a site map and any acquisition or use of property outside the originally licensed site area for the purpose of receiving,

possessing, or using licensed materials; the licensed activities carried out on the acquired or used property; and the release and final disposition of any property, the historical site assessment performed for the release, radiation surveys performed to support release of the property, submittals to the NRC made in accordance with § 50.83, and the methods employed to ensure that the property met the radiological criteria of 10 CFR Part 20, Subpart E, at the time the property was released.

- Unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations and costs that would be likely to be incurred.

Further, 10 CFR 20.1406(c) requires that licensees conduct operations to minimize the introduction of residual radioactivity into the site, including the subsurface. This has shown, through experience at 13 power reactor sites, to be adequate to ensure there is no unknown contamination onsite since promulgation of the 2011 decommissioning planning rule (see 76 Fed. Reg. 35571; June 17, 2011). Given the lack of any need for such a requirement, the disadvantages include the unnecessary burden on the NRC staff and licensees to develop the relevant regulatory requirements, regulatory guidance, inspection programs, and inspection guidance.

*What are the advantages and disadvantages of eliminating the formula and requiring a site-specific cost estimate during operations?*

There are no advantages of requiring site-specific decommissioning cost estimates during operations. The disadvantages are the additional burden on the NRC to review, and potential loss of clarity and effectiveness in the current framework.

NEI strongly opposes any rule changes that would require site-specific cost estimates for all licensees in lieu of the existing generic minimum formula amount in 10 CFR 50.75(c). The NRC's regulations ensure adequate decommissioning funding by requiring that the "bulk of funds" for decommissioning be provided during a plant's operating life, either through the use of the generic minimum funding amount described in 10 CFR 50.75(c) or a site-specific cost estimate that is greater than that amount.<sup>27</sup> The current regulations adequately ensure that decommissioning funding assurance is provided throughout life of a nuclear power facility. Specifically, the current regulations already require that the licensee have a preliminary decommissioning cost estimate (DCE) five years prior to shutdown, and submit a final DCE within two years following permanent cessation of operations (10 CFR 50.75(f) and 10 CFR 50.82(a)(8)(iii)). The requirement for a site-specific DCE near plant shutdown is appropriate, since this will allow additional detail related to the licensee plans to be reviewed by the NRC in conjunction with the actual decommissioning planning done by the utility. Before this point, the minimum formula amount in 10 CFR 50.75(c) is adequate to ensure that the bulk of the funds for decommissioning are available when needed. In addition, the current structure allows NRC staff to use the generic formula as a simple benchmark for site-specific estimates when they are required. Requiring site-specific estimates

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<sup>27</sup> See 10 CFR 50.75(b)(1), (4).

instead of the generic formula would increase the burden on staff while reviewing the site-specific estimates. The potential for additional license extensions increases the uncertainty associated with developing DCE's early in the licensed life of a plant. Even for a premature shutdown, the regulations are effective in ensuring adequate funding assurance, since a site-specific estimate would be required within two years, and access to the funds are limited until the site-specific estimate has been submitted. The generic, rule-based formula described in 10 CFR 50.75(c) provides an effective and consistent method for determining the amount of decommissioning funding assurance required during plant operation. This approach to regulating funding assurance has served the NRC, industry, and the public well. The generic approach also embodies several of the Commission's principles of good regulation, including openness, efficiency, clarity, and reliability. Requiring the use of site-specific cost estimates as the basis for determining adequate decommissioning funding assurance during operation would not provide any significant safety or security benefit, and – as discussed in Preliminary Draft Regulatory Analysis previously published for comment<sup>28</sup> – would decrease regulatory efficiency and impose significant burden on licensees. Imposition of such a change through this rulemaking would also constitute backfitting and must be analyzed pursuant to the requirements of 10 CFR 50.109 prior to being imposed on licensees.

Furthermore, as discussed above, the generic formula, and the current process to update NUREG-1307, provides a stable, predictable, and effective way to ensure adequate funding through the operating life.

***Decommissioning Trust Fund (DTF):*** Under the NRC's existing regulations and this proposed rule, the amounts set aside for radiological decommissioning should not be used for the maintenance and storage of spent fuel in the spent fuel pool, or for the design or construction of spent fuel dry storage facilities, or for other activities not directly related to the long-term storage, radiological decontamination or dismantlement of the facility, or decontamination of the site.

*Should the NRC's regulations allow decommissioning trust fund assets to be used for spent fuel management if (1) there is a projected surplus in the fund based on a comparison to the expected costs identified in a site-specific cost estimate and (2) the assets are returned to the fund within an established period of time? What are the advantages and disadvantages of allowing decommissioning trust fund assets to be used for those purposes? What are the advantages and disadvantages of allowing decommissioning trust fund assets to be used for non-radiological site restoration prior to the completion of radiological decommissioning?*

### NEI Response

(1) Yes. NEI recommends that regulations be amended to allow use of the DTF for spent fuel management, provided that funding for radiological decommissioning is adequate. In granting several recent exemption requests, the NRC concluded that:

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<sup>28</sup> "Regulatory Improvements for Power Reactors Transitioning to Decommissioning; Preliminary draft regulatory analysis; request for comment," 82 Fed. Reg. 21481 (May 9, 2017). "Preliminary Draft Regulatory Analysis for Regulatory Basis: Regulatory Improvements for Decommissioning," at pgs. 61, 115.

An unnecessary financial burden without any corresponding safety benefit would be created if access to those excess funds in the Trust was prevented because irradiated fuel management and site restoration are not associated with radiological decommissioning. The adequacy of the Trust to cover the cost of activities associated with irradiated fuel management and site restoration in addition to radiological decommissioning is supported by the NRC staff's review of the licensee's site-specific decommissioning cost analysis. If [the licensee] cannot use the Trust for irradiated fuel management and site restoration activities, it would need to obtain additional funding that would not be recoverable from the Trust, or [the licensee] would have to modify its decommissioning approach and methods. The NRC staff concludes that either outcome would impose an unnecessary and undue burden significantly in excess of that contemplated when the regulation was adopted. (CR3 DTF Exemption, at pg. 5797; see also SONGS 2&3 DTF Exemption, at 55,021)

Including spent fuel management activities is also consistent with the NRC's long-standing position on the commingling of decommissioning funds in a single DTF. Historically, the NRC has not precluded the commingling of the funds in a single trust fund account to address radiological decommissioning, spent fuel management, and site restoration. But the NRC's attempt to accommodate such comingling has been difficult to apply because of the absence of any explicit authorization in the NRC rules. Amendments to allow use of the DTF for spent fuel management would clarify the use of funds that licensees may have set aside or allocated for spent fuel management and site restoration.

It should also be noted that, if spent fuel management costs are not included as allowable costs under the proposed rulemaking, the stated goal of the rulemaking may not be fully achieved. Specifically, exemptions would still be required to use the funds for this purpose, which would not result in fully reducing the burden on the licensees and the NRC and would not improve regulatory efficiency.

With respect to assessing the adequacy of funds for the purpose of allowing use of the DTF for spent fuel management after permanent cessation of operations and defueling, we recommend that funding levels be assessed on a case-by-case basis, rather than focusing on 10 CFR 50.75(c). The minimum "formula" amount is valid for operating plants, but for plants that are undergoing decommissioning or standalone ISFSIs the formula amount is no longer applicable.

(2) No, the return of assets to the Trust within an established period of time should not be required. In many cases, the licensee originally collected the funds from rate payers into a comingled account for the specific purpose of funding all three categories of activities (i.e., NRC radiological decommissioning, spent fuel management, and site restoration). In this case, a return of the funds to the Trust over a period of time is not appropriate. Furthermore, it is unclear why the NRC would require the return of such funds to the Trust. Specifically, any withdrawal of funds for the purpose of spent fuel management would be premised on demonstration by the licensee that it has adequate funds to complete radiological decommissioning, thus meeting the NRC's regulatory requirements. Once that threshold is met, it should be left to the licensee, the rate regulatory authority (if any), and any other relevant parties to determine whether funds should be returned to the Trust.

*What are the advantages and disadvantages of allowing decommissioning trust fund assets to be used for those purposes?*

See the discussion above. In many cases, the funds are commingled and were collected to cover all three categories of expenses (radiological decommissioning, spent fuel management, and site restoration). By allowing use of funds for spent fuel management and site restoration, the NRC would be removing a barrier preventing the use of licensee funds for these legitimate purposes, provided the licensee demonstrates that it can meet the NRC's decommissioning funding requirements (i.e., the licensee demonstrates that it has adequate funds to complete radiological decommissioning). The NRC's basis for restricting the use of excess funds, often collected for the purpose of funding spent fuel management and site restoration, is unclear.

*What are the advantages and disadvantages of allowing decommissioning trust fund assets to be used for non-radiological site restoration prior to the completion of radiological decommissioning?*

The same advantages of allowing use of the DTF for Spent Fuel Management in the response above would also apply for the allowing the use of the funds for Site Restoration. Additionally, for site restoration costs specifically, this is becoming even more important due to the changing nature of decommissioning. In the past, site restoration costs were incurred late in the process, after radiological decommissioning has been completed, so the fund, in theory, would no longer be regulated by the NRC. However, many projects, including the most recent successful decommissioning project (Zion Nuclear Power Station), performed site restoration concurrently with radiological decommissioning. Other recently shutdown reactors are planning to follow this model. The advantages to the overall schedule and associated cost of the project can be substantial if complimentary activities associated with decommissioning and site restoration are performed concurrently. There should be no spatial conflict between the decontamination/demolition of the power block and the demolition/restoration/final release of most of the rest of the site. The specific benefits of such parallel activities include:

- Provides for a shorter total schedule to site restoration and final release (excluding ISFSI)
- Eliminates risk of potentially requiring duplicate decontamination/remediation activities for radiological and non-radiological contaminants
- Utilizes similar equipment and labor resources
- Allows earlier site access for re-purposing

This model is also being incorporated into planning for sites that have recently entered into decommissioning and will result in a more efficient and cost-effective decommissioning process. This will strengthen the overall funding assurance position of a licensee for the reasons described above.

Finally, the NRC would not be inappropriately asserting jurisdiction over such activities by simply allowing licensees to use excess funds to pay for site restoration. Rather, the NRC would be recognizing that its regulations do "not preclude the use of funds from the decommissioning trust in excess of those

needed for radiological decommissioning for other purposes, such as irradiated fuel management or site restoration.”<sup>29</sup>

**Timing of Decommissioning Funding Assurance Reporting:** *This proposed rule would change the timing of the decommissioning funding assurance reporting requirements in § 50.75(f)(1) to coordinate them with the ISFSI decommissioning reporting requirements in § 72.30. Under this proposed rule, operating reactors would be permitted to submit decommissioning funding status reports triennially instead of biennially.*

*What are the advantages and disadvantages to extending the reporting frequency from two years to three years? Does this change affect the risk of insufficient decommissioning funding? Please provide an explanation for your response.*

NEI Response

The main advantage is to maintain consistency with the reporting requirement for ISFSI funding assurance reporting in 10 CFR 72.30(c), which requires a report every three years. This is important since the reporting required by 10 CFR 50.75(f) and 10 CFR 72.30(b) rely on similar methodology and typically use the same funding assurance mechanism. Thus, licensees typically perform calculations necessary to demonstrate compliance with these requirements simultaneously. In practice, this synergy has resulted in licensees including their 10 CFR 72.30 reports along with their 10 CFR 50.75(f) reports, every two years, adding additional burden above what was intended. Aligning the time requirements of these reports will reduce that burden and create more certainty in the schedule and process for these reports.

Since this requirement only applies to operating units that are not within five years of shutdown, it does not reduce the effectiveness of the reports, as there is sufficient time for the licensee to obtain additional funding assurance prior to shutdown, when it would be needed for decommissioning. The same requirements for annual reporting for licensees within five years of shutdown and after shutdown would be in place to ensure funding assurance for those reactors is maintained.

*Does this change affect the risk of insufficient decommissioning funding? Please provide an explanation for your response.*

No, see response above.

**Backfit Rule:** *For nuclear power reactor licensees, the NRC’s backfitting provisions are located in § 50.109, “Backfitting,” and the issue finality provisions are in 10 CFR part 52 (the “Backfit Rule”). The language of the Backfit Rule clearly applies to a licensee designing, constructing, or operating a nuclear power facility. For example, § 50.109(a)(1) defines “backfitting” to mean changes to, among other things, the procedures or organization required to design, construct, or operate a facility. This proposed*

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<sup>29</sup> “Duke Energy Florida, Inc.; Crystal River Unit 3 Nuclear Generating Plant: Exemption; issuance,” 80 Fed.Reg. 5795, 5797 (Feb. 3, 2015)(“CR3 DTF Exemption”); see also, “Southern California Edison Company; San Onofre Nuclear Generating Station, Units 2 and 3: Exemption; issuance,” 79 Fed.Reg. 55,019, 55,021 (Sept. 15, 2014)(“SONGS 2&3 DTF Exemption”).

*rule states that the Backfit Rule applies to decommissioning nuclear power plants. What are the advantages and disadvantages of applying the Backfit Rule to decommissioning nuclear power plants?*

NEI Response

NEI does not believe there are any disadvantages to applying the Part 50 backfitting requirements to facilities undergoing decommissioning. To the contrary, the Commission's long-standing position has been that the backfitting rule in 10 CFR 50.109 should be applied to nuclear power facilities undergoing decommissioning.<sup>30</sup> In SECY-98-253, the staff concluded that:

[S]ound regulatory policy dictates that there be a process and appropriate standards for ensuring that changes to requirements or commitments imposed on the decommissioning licensee are technically justified and whose costs are justified in view of the perceived safety benefits of the changes. In short, the staff believes that the backfit rule, suitably modified to accommodate the nonoperating permanently defueled condition, should be applied to plants in decommissioning.<sup>31</sup>

In SRM-SECY-98-253, the Commission approved development of a backfitting rule specifically addressing nuclear power facilities undergoing decommissioning and directed the staff to apply the existing backfitting rule to facilities undergoing decommissioning in the interim. At that time, the Commission also stated the new "rule should be reasonably straightforward and not resource intensive to draft and should not require the use of a series of workshops," as had been recommended by the staff.<sup>32</sup> As discussed in the ANPR, in SECY-00-145 the NRC staff provided the Commission with an integrated rulemaking plan for decommissioning, which included a provision that would codify the Commission's policy of applying the existing backfitting rule to plants undergoing decommissioning. Due to competing priorities, the rulemaking plan never progressed to the proposed rule stage.

The Commission's backfitting rule should continue to apply to commercial power reactors that transition to decommissioning status because those facilities remain subject to licenses issued pursuant to 10 CFR Parts 50, 52, and 72 throughout decommissioning. Further, part 50, 52, or 72 licensees managing facilities undergoing decommissioning (a process that will take years, if not decades) have the same interest in a reliable, efficient, and safety-focused regulatory program as a licensee that is managing an operating nuclear power plant. Although the risk profile of these facilities necessarily changes after permanent defueling and at various points in the decommissioning process, the licensee is entitled to rely upon applicable NRC staff regulatory positions to comply with the legally binding requirements contained in its license, as well as any orders or final regulations issued by the Commission. While the regulatory framework cannot be static, application of the backfitting requirements ensures that changes to requirements (or interpretations of those requirements) will yield demonstrable and cost-justified increases in facility safety or security.

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<sup>30</sup> See "Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," SECY-98-253 (Nov. 4, 1998); "Staff Requirements – SECY-98-253 – Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," (Feb. 12, 1999); "Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning," SECY-00-145 (June 28, 2000).

<sup>31</sup> "Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," SECY-98-253 (Nov. 4, 1998), at p. 2.

<sup>32</sup> Staff Requirements – SECY-98-253 – Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning," SRM-SECY-98-253 (Feb. 12, 1999).

Likewise, the NRC's Principles of Good Regulation would continue to apply during decommissioning, which is an important phase in the life cycle of a commercial nuclear power facility. In that vein, the principle of "reliability" requires that "[o]nce established, regulations should be perceived to be reliable and not unjustifiably in a state of transition. Regulatory actions should always be fully consistent with written regulations and should be promptly, fairly, and decisively administered so as to lend stability to the nuclear operational and planning processes." The principle of "efficiency" calls for "[r]egulatory activities [to] be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted."<sup>33</sup> Meaningful application of the backfitting provisions in 10 C.F.R. §§ 50.109 and 72.62 is a vital tool in ensuring that these policy objectives are realized for facilities undergoing decommissioning.

### Comments on Proposed Rule language

#### Proposed Rule Language – 10 CFR 50.109

*(b) Backfitting for decommissioning nuclear power reactor licensees.*

*(1) Definition.* Backfitting is defined as the modification of or addition to systems, structures, or components in use after permanent cessation of operations and certification of permanent removal of fuel from the reactor vessel has been docketed as required under § 50.82(a)(1) or § 52.110(a) of this chapter, or the design of the licensee's facility, or the procedures or organization required to decommission the facility, any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position, after the date of issuance of the operating license issued under this part or combined license issued under subpart C of part 52 of this chapter.

#### NEI Recommended Modification

*(b) Backfitting for decommissioning nuclear power reactor licensees.* This paragraph applies to facilities that have permanently ceased operations. This includes facilities that have docketed certifications of permanent cessation of operation and defueling pursuant to 10 CFR 50.82(a)(1) or 52.110(a) of this chapter; facilities with licenses that were permanently modified to allow possession, but not operation of the facility; and facilities that have been issued a final legally effective order to permanently cease operations and such order has come into effect.

*(1) Definition.* Backfitting is defined as the modification of or addition to systems, structures, or components; or the design of a facility; or the procedures or organization required to decommission the facility, any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position.

#### Basis for NEI Recommended Modification

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<sup>33</sup> "Principles of Good Regulation," available at <http://www.nrc.gov/about-nrc/values.html>.

As explained in our comments on both the previously published ANPR and draft regulatory basis, NEI agrees that 10 CFR 50.109 should be amended to explicitly state that the backfitting requirements apply to facilities undergoing decommissioning.<sup>34</sup> The edits to the proposed rule language suggested above are intended to improve the clarity of the proposed rule.

First, NEI believes it is important that the rule explicitly state that it applies to facilities that have permanently ceased operations and permanently removed fuel from the reactor vessel, *regardless of how permanent cessation and defueling were given regulatory effect*. That is, the rule should explicitly apply to all facilities that have permanently ceased operation, including facilities that did so prior to the promulgation of the certification requirements in 10 CFR 50.82(a) and 52.110(a) (i.e., “facilities with licenses that were permanently modified to allow possession, but not operation of the facility; and facilities that have been issued a final legally effective order to permanently cease operations and such order has come into effect”). The proposed edits to paragraph (b) provided above would more clearly articulate the applicability of the proposed backfitting requirements.

Next, our proposed edits would remove the reference to systems, structures, or components “in use after permanent cessation of operations and certification of permanent removal of fuel from the reactor vessel has been docketed as required under § 50.82(a)(1) or § 52.110(a) of this chapter” from the definition of backfitting. This provision is confusing for several reasons. First, as explained above, NEI believes that the proposed paragraph (b), in its entirety, applies only to facilities that have permanently ceased operation. Operating facilities would continue to be covered by the existing backfitting rule (i.e., 10 CFR 50.109(a) under the framework provided in the proposed rule). But the way the definition of backfitting is constructed in the proposed rule, the applicability of paragraph (b) is unclear because the reference to permanently ceasing operation and permanently defueling is directly tied only to defining changes to structures, systems, and components (SSCs) that would meet the definition of backfitting. In addition, the proposed definition of backfitting could be read to limit backfitting to SSCs that are “in use” at permanently shut down facilities. This would mean that new or different NRC rules or interpretations that require changes to SSCs no longer “in use” at permanently shut down facilities would not be covered by the definition of backfitting. There is no explanation or justification provided in the proposed rule for limiting the definition of backfitting in this way, and we believe that such a limitation would be arbitrary and inappropriate.

Finally, we recommend deleting the reference to the timing provisions in the proposed paragraph (b)(1) (i.e., the definition of backfitting applies after issuance of an operating license or combined license). As explained above, paragraph (b) of the proposed backfitting requirements would apply only to facilities that have permanently ceased operation. Such facilities would have necessarily been licensed to operate prior to the time that they ceased operation. Thus, the timing provision in the proposed paragraph (b)(1) is unnecessary.

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<sup>34</sup> “Industry Comments on the NRC Advance Notice of Proposed Rulemaking (ANPR) on Regulatory Improvements for Decommissioning Power Reactors; Docket ID: NRC-2015-0070,” March 17, 2016 (“NEI ANPR Comments”), at Attach 1 pgs. 27-31, Attach 2 pgs. 69-75; “NEI Comments on the NRC Draft Regulatory Basis Document Regulatory Improvements for Power Reactors Transitioning to Decommissioning; Docket ID: NRC-2015-0070,” June 13, 2017 (“NEI Reg. Basis Comments”), at Append. I.

### Comments on Discussion in Preamble

The supplementary information published with the proposed rule explains the basis for the proposed amendment of 10 CFR § 50.109.<sup>35</sup> Although we agree with the conclusion reached in that section – i.e., “the Backfitting Rule still applies to a licensee that has a license to only possess and own a facility”<sup>36</sup> – we are concerned that the analysis provided overemphasizes the importance of interpreting the term “operate” in reaching that conclusion. Specifically, the proposed rule correctly explains that once the certifications required by section 50.82(a)(1) have been docketed, the licensee is no longer authorized to operate the reactor. In addition, the proposed rule correctly points out that a portion of the existing definition of backfitting includes modifications or additions to “the procedures or organization required to design, construct or operate a facility.”<sup>37</sup> But, from there, the discussion in the proposed rule indicates that the NRC staff is interpreting the phrase “operate a facility” in section 50.109(a)(1) only “to encompass operating the SFP and associated SSCs necessary for compliance with § 50.51(b).”<sup>38</sup>

To the extent this interpretation of the phrase “operate a facility” is intended to limit the applicability of *the existing backfitting requirements* to additions and modifications to the procedures and organization necessary to operate SFPs and associated equipment at plants that have permanently ceased operation, it is unnecessarily narrow. As the NRC staff pointed out in SECY-93-258, “the term ‘operate’ as used in the backfit rule could be reasonably interpreted as including activities to decommission the reactor.”<sup>39</sup> This reading of operate is consistent with the Commission’s subsequent direction in the associated staff requirements memorandum to continue applying the existing backfitting requirements to plants undergoing decommissioning until the rulemaking being contemplated at that time was complete.<sup>40</sup> There is no indication in SRM-SECY-98-253 that the Commission believed it was necessary to limit the term “operate a facility” to operation of the SFP and associated SSCs. In fact, the Commission concluded that a rulemaking to make applicability of the backfitting rule explicit should be straightforward and “not resource intensive.”<sup>41</sup> This direction does not indicate that the Commission intended to substantially narrow the applicability of the existing backfitting requirements in applying them to decommissioning facilities.

The overly narrow interpretation of the term “operate” described in the proposed rule is also inconsistent with recent NRC statements on the continuing effect of a licensee’s operating license during decommissioning. For instance, in response to a recent licensee request to remove the term “operating” from its license after docketing of its certification of permanent fuel removal, the staff emphasized that “docketing of the certifications under 10 CFR 50.82(a)(2) does not change the form of the license— under 10 CFR 50.51(b), the operating license continues in effect until the Commission notifies the licensee in writing that the license is terminated.”<sup>42</sup>

<sup>35</sup> “Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning: Proposed Rule,” 87 Fed. Reg. 12,254, 12,296-97 (March 3, 2022).

<sup>36</sup> *Id.*, at 12,297.

<sup>37</sup> 10 CFR 50.109(a)(1).

<sup>38</sup> 87 Fed. Reg. 12,297.

<sup>39</sup> “Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning,” SECY-98-253, Nov. 4, 1998, at pg. 3.

<sup>40</sup> “Staff Requirements – SECY-98-253 – Applicability of Plant-Specific Backfit Requirements to Plants Undergoing Decommissioning,” Feb. 12, 1999.

<sup>41</sup> *Id.*

<sup>42</sup> See “Palisades Nuclear Plant – Request for Additional Information Regarding License Amendment Request for Permanently Defueled Amendment Request (EPID L-2021-LLA-0099),” (Apr. 14, 2022) (ML22102A248)

The fact that a facility in decommissioning still possesses an operating license was also reinforced in correspondence from the NRC regarding restoration operations after a shutdown, where the staff explained that “[a] facility that has permanently ceased operations and removed fuel from the reactor vessel and is being decommissioned maintains the same license that it had during operations. Pursuant to 10 CFR 50.51(b), the license for a facility that has permanently ceased operations will continue to be in effect beyond its expiration date until the Commission notifies the licensee in writing that the license is terminated.”<sup>43</sup> So, while a licensee that has submitted its certifications under section 50.82(a)(1) is no longer authorized to operate the reactor or place fuel in the reactor vessel, the Part 50 operating license remains in place. The activities associated with decommissioning are undertaken pursuant to that Part 50 license and there is no reason to interpret the term “operate” to cover only a small portion of the activities associated with decommissioning for backfitting purposes.

In conclusion, the term “operate a facility” *in the existing backfitting requirements* can and should reasonably be interpreted consistent with the language in the proposed rule, which covers activities required to decommission the facility. That is, the definition of backfitting under the existing requirements, as applied to facilities undergoing decommissioning prior to promulgation of a final rule modifying section 50.109, should be interpreted as essentially the same as the language included in the proposed rule (as modified above). Specifically, the term “procedures or organization required to . . . operate a facility” should be interpreted to mean “procedures or organization required to . . . decommission the facility.” This issue should be clarified in the supplementary information published in the final rule.

### **Comments on Backfitting Implications of this Rulemaking**

The backfitting implications of this rulemaking are discussed at pages 12,308-12,316 of the *Federal Register* notice publishing the proposed rule. The new or amended provisions provided in the proposed rule are generally structured as alternative approaches that licensees undertaking decommissioning may use voluntarily, or as non-mandatory relaxations of existing requirements. NEI agrees that the NRC’s longstanding policy has been that new or amended regulations that function as voluntary alternatives or non-mandatory relaxations of existing requirements generally do not meet the definition of backfitting.<sup>44</sup> That general agreement aside, we offer the following comments on the backfitting implications of the new and amended requirements contained in the proposed rule.

Removing requirements from the NRC’s regulations: In discussing changes to the emergency preparedness requirements for facilities undergoing decommissioning, the proposed rule states that

<sup>43</sup> See “Letter to Mr. David A. Kraft, Director Nuclear Energy Information Service,” (Aug. 4, 2016) (ML16218A266).

<sup>44</sup> See, e.g., “Backfitting Guidelines,” NUREG-1409, July 1990 (NUREG-1409)(explaining that “the backfit rule applies to actions that impose positions or requirements on licensees; it does not apply to requested actions that are optional or voluntary . . . it does not apply to relaxations”); “Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests,” MD 8.4, Sept. 20, 2019 (MD-8.4)(identifying various forms of “voluntary” actions and “non-mandatory relaxations of staff positions or regulations” as falling outside of the definition of backfitting). Although we agree that these type of new or amended regulations would generally fall outside of the definition of backfitting, we note that, in our view, promulgation of voluntary alternatives in the first instance is distinct from changes imposed on licensees that are already implementing such alternatives. Specifically, the imposition of new or amended requirements (or interpretations) on licensees that are already implementing an alternative approach provided in NRC’s regulations, would meet the definition of backfitting if it required an addition or modification to an SSC, the design of the facility, or procedures required to operate that facility, etc. See 10 CFR 50.109(a)(1).

“[r]emoving a requirement would not create a new requirement or amend a requirement *because amending means the requirement still exists in some form.*”<sup>45</sup> This rationale is cited to justify several changes to the existing requirements contained in the proposed rule.<sup>46</sup> We disagree with the proposition that the term “amended provision of the Commissions regulations” does not include removing requirements because “amending means the requirement still exists in some form.”

First, this construction is inconsistent with the dictionary definition of the word “amend.” For example, in this context (i.e., legislative rulemaking) the verb “amend” is defined in multiple dictionaries as “[t]o alter (a legislative measure, for example) formally by adding, *deleting*, or rephrasing.”<sup>47</sup> This common understanding of the meaning of the word “amend” is reflected in the section of the NRC’s *Federal Register* notice summarizing the proposed rule, which states:

The U.S. Nuclear Regulatory Commission (NRC) is proposing to *amend* its regulations that relate to the decommissioning of production and utilization facilities. The NRC’s goals in *amending* these regulations are to maintain a safe, effective, and efficient decommissioning process; reduce the need for license amendment requests and exemptions from existing regulations; address other decommissioning issues deemed relevant by the NRC; and support the NRC’s Principles of Good Regulation, including openness, clarity, and reliability.<sup>48</sup>

It seems clear from this summary that the NRC understood the action being taken in this rulemaking as amending (i.e., adding to, deleting from, or rephrasing) the agency’s existing requirements.

Further, the NRC’s backfitting policies and guidance do not support the interpretation of term “amend” put forward in the proposed rule. As explained above, the agency’s backfitting guidance has long-recognized that certain forms of regulatory “relaxations” do not constitute backfitting – *but not because implementing a relaxation through removal of a regulatory requirement is not an amendment to the regulation.* Rather, regulatory changes that relax requirements in a non-mandatory way do not meet the definition of backfitting simply because they do not require “modification of or addition to systems, structures, components, or design of a facility . . . or the procedures or organization required to design, construct or operate a facility.”<sup>49</sup> In other words, such relaxations do not meet the “effect” portion of the definition of backfitting.

With a few exceptions described below, we agree that the great majority of the changes proposed in this rulemaking do not constitute backfitting because they either provide voluntary alternative approaches to licensees, are crafted as non-mandatory relaxations of existing requirements, or would

<sup>45</sup> 87 Fed. Reg. 12,309.

<sup>46</sup> See, e.g., *Id.* at Col. II (discussing new paragraph IV.8 to appendix E to 10 CFR 50), Col. III (discussing removal of obsolete dates for certain one-time actions); *Id.* at 12,310 (discussing modifications to the requirements in section 73.55(b)(3)); *Id.* at 12,311 (discussing changes to section 72.30).

<sup>47</sup> “The American Heritage Dictionary,” 2<sup>nd</sup> College Edition (1991)(emphasis added); see also, “Merriam-Webster Dictionary” available at <https://www.merriam-webster.com/dictionary/amend> (accessed April 13, 2022)(“to alter especially in phraseology, *especially*: to alter formally by modification, deletion, or addition // amend a constitution”)(underline added); “Dictionary.com” available at <https://www.dictionary.com/browse/amend> (accessed April 13, 2022)(“to alter, modify, rephrase, or add to or subtract from (a motion, bill, constitution, etc.) by formal procedure: *Congress may amend the proposed tax bill.*”)(underline added).

<sup>48</sup> 87 Fed. Reg. 12,254 (emphasis added).

<sup>49</sup> 10 CFR 50.109(a)(1).

not otherwise meet the “effect” portion of the definition of backfitting (would not result in the modification of or addition to SSCs, design of a facility, the procedures required to operate a facility, etc.). We do not agree, however, with the idea that removing portions of the regulations does not constitute an amendment of those regulations. This justification is unsupported, unnecessary, and should be removed from the proposed rule and replaced with an appropriate explanation of why the relevant provisions do not constitute backfitting.

Imposition of new spent fuel management requirements: The proposed rule would substantively modify the current requirements governing submittal of the irradiated fuel management plan (IFMP) pursuant to 10 CFR § 50.54(bb). Specifically, if finalized, the proposed rule would require that the IFMP be submitted as a license amendment request and that any subsequent changes to the IFMP must be submitted as a license amendment request.<sup>50</sup> The backfitting evaluation of this proposed change states:

The NRC would revise 50.54(bb) and 72.218 to clarify the contents of an irradiated fuel management plan, which licensees are already required to submit to the NRC for approval. This clarification of a reporting requirement would not result in a modification of or addition to SSCs or the design of a facility or the procedures or organization required to design, construct, or operate a facility. Therefore, the proposed changes would not meet the definition of “backfitting” and would not affect the issue finality of a COL.<sup>51</sup>

We disagree. This explanation mischaracterizes the proposed change as a “clarification of a reporting requirement.” While it is true that section 50.54(bb) currently requires licensees to “submit written notification to the Commission for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor following permanent cessation of operation of the reactor,” *the current requirements do not require amendment of a facility license as part of this notification.*

Modifying a regulation to require amendment of a facility license where no such amendment is currently required is not a mere “clarification of a reporting requirement.” Further, this proposed change to section 50.54(bb) is in no way a clarification of an existing requirement – there is no current requirement for a licensee to amend its license to obtain NRC review and approval of an IFMP. Rather, this is a substantive change to how a licensee must manage its Part 50 license. This proposed amendment to the regulations will not only require Part 50 licensees to modify procedures required to decommission the facility (i.e., the procedures necessary to prepare and submit an IFMP), it will require modification of the facility license itself. This change meets the definition of backfitting and should be evaluated consistent with the requirements of 10 CFR 50.109.

Proposed Changes to 10 CFR 50.54(p): The NRC proposes to modify the requirements applicable to changes in security plans that are imposed under 10 CFR 50.54(p).<sup>52</sup> These proposed changes include provisions defining certain terms (i.e., “decrease in safeguards effectiveness” and “change”), as well as a

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<sup>50</sup> 87 Fed. Reg. 12,295-96.

<sup>51</sup> *Id.* at 12,312.

<sup>52</sup> See 87 Fed. Reg. 12,283-84.

new requirement that licensees submit supplemental information with reports already required pursuant to section 50.54(p) explaining the basis for the licensee's determination that changes made without prior NRC approval do not constitute a decrease in effectiveness. Specifically, proposed § 50.54(p)(3) would add that "[t]he licensee shall include a summary of the analysis completed to determine that the change does not decrease the safeguards effectiveness of the plan." This is not required by current 50.54(p), which only requires that licensees submit a "a report containing a description of each change within 2 months after the change is made." The supplementary information published with the proposed rule claims that "reactor licensees have *typically* included in their report supplemental information" but acknowledge that up to this point "[t]he submittal of this supplemental information in the reports has been voluntary."<sup>53</sup> The stated purpose of this change is to allow the NRC to assess the validity of a licensee's determination regarding whether a change to the security plan constitutes a decrease in effectiveness by reviewing the reports submitted under section 50.54(p), rather than verifying compliance via the inspection process.<sup>54</sup> Notably, this change (and the other changes to section 50.54(p)) would affect both operating facilities and facilities undergoing decommissioning. The backfitting discussion examining the changes to section 50.54(p) states:

The proposed changes would not require a licensee to use the 50.54(p) security plan change process unless the licensee voluntarily seeks to change its security plan and would not result in a modification of or addition to SSCs or the design of a facility or the procedures or organization required to design, construct, or operate a facility. Therefore, the proposed changes would not meet the definition of "backfitting" or affect the issue finality of a COL.<sup>55</sup>

This explanation indicates that because a licensee may choose to make changes to its facility or required plans voluntarily, amendment of the mandatory change control process does not constitute backfitting. We disagree with this proposition. The change control provisions contained in NRC's regulations are not "voluntary." For example, if a licensee wishes to make a change to its security plan, whether it believes that change is compelled by a requirement or is being made voluntarily, the licensee *must comply* with the applicable change control requirements. Thus, changes to the regulations imposing change control requirements are not "voluntary" and cannot be categorically excluded from the definition of backfitting on that basis.

In this case, the new requirement that licensees must augment the reports submitted pursuant to section 50.54(p) with an explanation of the basis for the licensee's determination that changes did not constitute a decrease in effectiveness is an amendment to the Commission's regulations that would require a change to licensee procedures for preparing and submitting the information required pursuant to section 50.54(p). These changes would be necessary for both operating reactors and facilities undergoing decommissioning. Thus, this amendment to the regulations should be evaluated as backfitting pursuant to 10 CFR 50.109.

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<sup>53</sup> *Id.* at 12,284.

<sup>54</sup> *Id.*

<sup>55</sup> *Id.* at 12,309.

The NRC's suggestion that such information is "typically" provided by licensees also does not establish that this change to the rule would not require a change in procedures and therefore a backfit. No NRC or industry guidance suggests that these additional analyses should be supplied with the 50.54(p) reports, so it is not simply codifying an existing industry voluntary practice. Further, the fact that some licensees may voluntarily choose to provide additional information does not mean that all licensees provide this information. Therefore, it would be inaccurate to conclude that this additional reporting requirement would not result in a change to procedures since it is clear that at least for some licensees, it would.

Reducing the frequency of decommissioning funding reporting: The backfitting discussion in the proposed rule states that the proposed changes to the decommissioning funding reporting requirements from every two years to every three years would not meet the definition of backfitting because it "would not result in a modification of or addition to SSCs or the design of a facility or the procedures or organization required to design, construct, or operate a facility."<sup>56</sup> We agree with this conclusion, but believe it is important for the NRC to explain why this is the case. Particularly, this change is a non-mandatory relaxation of the existing biennial reporting requirement that, instead, allows submittal of the relevant reports triennially. Thus, no change in facility design, procedures, or organization would be required for a licensee to meet the new requirement (i.e., continuing to report on a biennial basis would satisfy the requirement to report "at least once every three years"). Any such changes would be undertaken voluntarily by the licensee to take advantage of the allowance for triennial reporting.

***Exemptions:*** *As stated in this proposed rule, one of the goals of amending these regulations is to reduce the need for regulatory exemptions. 10 CFR 50.12 states that the Commission may grant exemptions from the requirements of the regulations in 10 CFR part 50 if the request will not present an undue risk to the public health and safety, and is consistent with the common defense and security. What are the advantages and disadvantages of the current 10 CFR 50.12 approach to decommissioning-related exemptions? What standard should the NRC apply in determining whether to grant exemptions from the new or amended regulations? What are the advantages and disadvantages of providing an opportunity for the public to weigh in on such exemption requests? Are there other process changes the NRC should consider in determining whether to grant exemptions from the new or amended regulations?*

### NEI Response

NEI supports amending the regulations to reduce the need for unnecessary regulatory exemptions as an underlying goal of the proposed rule. While the proposed rule is expected to eliminate the need for most exemption requests that have been historically associated with the transition to decommissioning, it is reasonable to expect there will continue to be instances unique to a licensee's situation or approach to decommissioning that may warrant an exemption from existing regulations. The existing standards in 10 CFR 50.12 will continue to be adequate for these situations.

***Applicability:*** *Section III of this document provides a discussion of the applicability of this proposed rule. Specifically, there is a discussion for the applicability to NRC licensees during operations and to ISFSI-Only*

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<sup>56</sup> *Id.* at 12,311.

*and Standalone ISFSI/Decommissioned Reactor Sites. Permanently shutdown nuclear power plants will be at different stages of decommissioning when the new decommissioning regulations become effective and will have previously received varying regulatory exemptions.*

*Can you foresee any implementation issues with the proposed rule as it is currently written? For any new or amended requirement included in this proposed rule, how should the requirement apply to sites currently in different stages of decommissioning?*

### NEI Response

When these new decommissioning regulations become effective it is expected that plants still undergoing decommissioning will either be in Level 2 or 3 as defined the regulation, and will have received exemptions, license amendments, and other forms of regulatory relief needed to support their transition through decommissioning. In most respects, the proposed rule, once final and effective, will not result in conditions that are contrary to the licenses held by decommissioning companies. A significant exception would include the proposed requirement to submit a license amendment request for an irradiated fuel management plan, as previously discussed in detail under a separate question.

Regarding the definition of the stages of decommissioning, NEI believes that the proposed rule does not sufficiently distinguish between plants that are in active decommissioning with all spent fuel in dry storage, and plants that have achieved ISFSI-only status after completion of decommissioning. An additional level could be defined between the proposed “Level 3, All fuel in dry cask storage” and “Level 4, All fuel offsite” and would help clarify applicable requirements. This should be seriously considered.

***Insurance for Specific License ISFSI:*** *A 10 CFR part 50 or 10 CFR part 52 nuclear power reactor licensee with a 10 CFR part 72 general license ISFSI at the reactor site is subject to the financial protection requirements under 10 CFR part 140, whereas a specific license ISFSI under 10 CFR part 72 is not. In SECY-04-0176, “Exemption Requests to Reduce Liability Insurance Coverage for Decommissioning Reactors after Transfer of all Spent Fuel from a Spent Fuel Pool to Dry Cask Storage,” dated September 29, 2004 (ADAMS Accession No. ML040850518), the NRC staff noted that general license ISFSIs subject to the requirements under 10 CFR part 72 were also subject to the requirements of a 10 CFR part 50 license and by virtue of this license, they are required to maintain some level of liability insurance under section 170, “Indemnification and Limitation of Liability,” of the AEA (known as the Price-Anderson Act) and the NRC’s implementing regulations at 10 CFR part 140. Further, the NRC staff acknowledged that there was little technical difference between a general license ISFSI and a specific license ISFSI. The NRC recognizes that as a reactor site is decommissioned, eventually all that remains of the 10 CFR part 50 or part 52 licensed site is a general license ISFSI under 10 CFR part 72, which is essentially the same as a specific license ISFSI under 10 CFR part 72. Considering that 10 CFR part 72 specific license ISFSIs have no financial protection requirements, should the NRC address the disparity between specific license and general license ISFSIs as a part of this rulemaking? Please provide an explanation for your response.*

NEI Response

As stated in NEI's previous comments on the draft regulatory basis document,<sup>57</sup> we oppose the imposition of financial protection requirements on specifically-licensed ISFSIs. Part 72 specific licensees are not included in the class of licensees required to have offsite protection under the Price-Anderson Act (PAA), and thus, there is no statutory mandate to impose financial protection requirements on such licensees. As noted in the proposed rule, the NRC staff discussed the fact that the agency does not require specific Part 72 licensees to maintain liability coverage in SECY-04-0176.<sup>58</sup> Likewise, in that SECY the staff pointed out that specific Part 72 licensees are also not entitled to federal indemnification or limitations on liability under the PAA or the associated NRC regulations.<sup>59</sup>

The maintenance of liability coverage (and, in certain circumstances, entitlement to federal indemnification) by ISFSIs managed pursuant to the general licensing provisions of Part 72 is due solely to the fact that those general Part 72 licenses are inherent to the licensee's Part 50 license, pursuant to 10 CFR 72.210. As stated in SECY-04-0176, it is "[b]y virtue of the Part 50 license, [that] every decommissioning reactor must carry some level of commercial liability insurance under Price-Anderson until all radioactive material has been removed from the site."<sup>60</sup> Contrary to the suggestion in the proposed rule, no "disparity" exists because the Congressionally mandated liability coverage obligation stems from the Part 50 license, not the Part 72 license. The technical similarities between generally and specifically licensed ISFSIs (noted as a basis for this proposed change in the proposed rule) is an irrelevant consideration for liability coverage because financial protection is required for sites containing generally licensed ISFSIs solely because they are (by definition) located at power reactor sites licensed pursuant to 10 CFR Part 50 or 52.<sup>61</sup> The proposed rule does not articulate a technical or regulatory basis justifying liability coverage for spent fuel storage independent of an association with the operation of a reactor.

Further, insurance amounts for specifically-licensed Part 72 facilities have been successfully addressed on a site-specific basis without the need for NRC requirements.<sup>62</sup> Indeed, in SECY-04-0176 the NRC staff concluded that "[t]he business practices of [the away-from-reactor ISFSIs licensed at that time] regarding liability insurance coverage exemplify how risk associated with an ISFSI might be more appropriately determined by the financial community rather than the NRC."<sup>63</sup> There is simply no need for the NRC to impose additional requirements on specific Part 72 licensees in this area. In addition, the discretionary imposition of new requirements mandating insurance coverage for existing specific Part 72 licensees would constitute an "addition . . . or modification, after the license has been issued, of . . .

<sup>57</sup> "NEI Comments on the NRC Draft Regulatory Basis Document Regulatory Improvements for Power Reactors Transitioning to Decommissioning; Docket ID: NRC-2015-0070," June 13, 2017 ("NEI Reg. Basis Comments"), at Append. G, pg. 56.

<sup>58</sup> "Exemption Requests to Reduce Liability Insurance Coverage for Decommissioning Reactors After Transfer of All Spent Fuel from a Spent Fuel Pool to Dry Cask Storage," SECY-04-0176 (Sept. 29, 2004).

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*; see also, section 170.a. of the Atomic Energy Act, as amended.

<sup>61</sup> See 10 CFR 72.210 ("A general license is hereby issued for the storage of spent fuel in an independent spent fuel storage installation *at power reactor sites to persons authorized to possess or operate nuclear power reactors* under 10 CFR part 50 or 10 CFR part 52.") (emphasis added).

<sup>62</sup> See SECY-04-0176, at pg. 7 (explaining that while the only two ISFSIs not directly associated with a reactor licensee at that time had no legislated insurance obligation, both elected to carry hundreds of millions of dollars in private insurance coverage); see also, "Final Safety Analysis Report for the WCS Consolidated Interim Storage Facility Independent Spent Fuel Storage Installation, Specific Materials License No. SNM-2515, Docket No. 72-1050," Sept. 2021, at pg. 14-12 (explaining that the applicant for an away-from-reactor, consolidated interim storage facility committed to maintain \$100 million in offsite nuclear liability insurance and \$450 million for onsite liability).

<sup>63</sup> SECY-04-0176, at pg. 8.

[p]rocedures or organization required to operate an ISFSI. . .” and, therefore, would meet the definition of backfitting in 10 CFR 72.62. Thus, prior to imposing such a requirement the NRC would need to meet the backfitting requirements provided in section 72.62(b) and (c).

**Recordkeeping Requirements for Facilities Licensed under 10 CFR Part 52:** *The current appendices in 10 CFR part 52 contain section X, “Records and Reporting,” for all of the certified designs codified in 10 CFR part 52. Section X requires, in part, that all departures from the certified design be recorded and those records kept throughout the term of the license. However, as part of this rulemaking, the NRC is proposing to change the record retention requirements for nuclear power reactors in the decommissioning process such that they no longer need to retain certain records associated with SSCs that are no longer in service or necessary to keep the plant in a safe condition. The NRC is considering making conforming changes to section X of the applicable appendices to 10 CFR part 52 to allow this change to apply to records of departures from the certified design as well as the associated SSCs. Given the already existing change control procedures in the appendices to 10 CFR part 52, as well as the significant changes in recordkeeping technology since the NRC’s record retention requirements were introduced (i.e., digital media instead of paper copies), should additional changes be made to the 10 CFR part 52 appendices as a part of this rulemaking, and would such changes be beneficial to 10 CFR part 52 licensees or add efficiency to the decommissioning process for these facilities? Please provide an explanation for your response.*

NEI Response

To promote regulatory consistency, NEI supports making conforming changes to section X of the applicable appendices to 10 CFR part 52 to allow the change discussed above to apply to records of departures from the certified design as well as the associated SSCs when those SSCs are no longer in service or necessary to keep the plant in a safe condition.

**Identical Requirements under § 50.82 and § 52.110:** *As part of this rulemaking, the NRC proposes to revise § 52.110 to make the same changes proposed in § 50.82 for the reasons previously discussed and for consistency. The NRC also proposes to add paragraphs (h)(5) through (h)(7) to § 52.110 with site-specific decommissioning cost estimate reporting requirements that are identical to the requirements in § 50.82(a)(8)(v) through (vii). Given that the decommissioning financial assurance requirements in § 52.110 are identical to the requirements in § 50.82, should the NRC consider removing the specific requirements from § 52.110(f)–(h) and instead add a reference in § 52.110 to the identical regulations in § 50.82(a)(6)–(8)? Are there any other provisions in § 52.110 that the NRC should consider removing and replacing with a reference to an identical requirement in § 50.82 (e.g., the decommissioning requirements under § 52.110(c)–(e))? Please provide an explanation for your response.*

NEI Response

NEI has no strong opinion on what approach is taken by NRC to maintain consistency between 10 CFR 50.82 and 10 CFR 52.110.

**Removal of License Conditions and Withdrawal of Orders:** *This rulemaking seeks to improve regulatory efficiency by removing license conditions and withdrawing an order for which substantively identical*

requirements have been imposed by rulemaking. This would avoid the future administrative expenditures by licensees and the NRC to accomplish the removal of these requirements on a license-specific basis through a generic regulatory action either upon the effective date of the final rule or when conditions permit the removal during the decommissioning process. The NRC has identified certain orders that were issued following the terrorist events of September 11, 2001, license conditions regarding these orders, and license conditions regarding cyber security implementation as having substantively identical requirements made generically applicable through rulemaking. Because these license-specific requirements are duplicative with other generic requirements, the NRC concludes there would be no reduction in safety. Please provide any comments you may have on rescinding Order EA-06-137 and the related license conditions. As part of this rulemaking, are there other license-specific requirements in license conditions or orders that have substantively identical generic requirements that should be addressed in this rulemaking? Please provide an explanation for your response.

NEI Response

NEI supports NRC's proposal to improve regulatory efficiency by rescinding orders and license conditions that have become duplicative with existing regulations.

**Spent Fuel Management Planning:** Section IV.K of this document discusses spent fuel management planning in the § 50.54(bb) regulation. The § 50.54(bb) current rule language requires NRC preliminary approval and final review, as part of any proceeding for continued licensing under part 50 or part 72, of the IFMP. The discussion in Section IV.K points out that the proceedings for continued licensing under part 50 or part 72 no longer exist. Therefore, the proposed rule includes language intended to clarify the current IFMP approval process by requiring submittal of the IFMP for NRC review and approval by license amendment. What, if any, challenges do you foresee with implementing this part of the proposed rule? Please provide an explanation for your response. The § 50.54(bb) current rule language requires licensees to notify the NRC of any significant changes to the IFMP. As discussed in section IV.K, the NRC proposes to revise this requirement to require licensees to submit to the NRC any changes to the IFMP as an application for an amendment to its license. The NRC is also considering replacing the notification requirement with a change control provision to specify what changes a licensee can make to the IFMP without NRC approval. Examples of change control provisions in the current NRC regulations include § 50.54(a) for quality assurance programs and § 50.54(q) for emergency plans. If the NRC includes a similar change control provision in § 50.54(bb), what should the safety and environmental criteria be for determining whether a licensee could make a change to its IFMP without seeking NRC approval? For example, the NRC could permit changes that are not considered to be reductions in the commitments, including 1) changes to the planned actions for managing spent fuel that result in an addition of one or more SSCs that the licensee relies on for irradiated fuel management, and 2) changes to the projected cost or funding for managing irradiated fuel that is already included in the report required by 10 CFR 50.82(a)(8)(vii) or 10 CFR 52.110(h)(7). Should the NRC also include recordkeeping and reporting provisions for a licensee to retain a record of each change to the IFMP made without prior NRC approval and submit a report to the NRC of those changes? If so, what should be the timeframe for the records to be retained and the timeframe for reporting to the NRC after the change is made, taking into consideration the estimated frequency of performing IFMP changes? Please provide an explanation for your response.

NEI Response

Our position on the proposal to require approval of the IFMP and any changes to that document via the license amendment process are described in detail in attachment 2 to this comment package.

## Response to Section X: Specific Requests for Comments (87 Fed. Reg. 12,316) Cumulative Effects of Regulation

1. *In light of any current or projected CER challenges, does the proposed rule's effective date provide sufficient time to implement the new proposed requirements, including changes to programs, procedures, and facilities?*

### NEI Response

The proposed rule does not specify an effective date, but assuming that a final rule is published in late 2023 or early 2024, and it contains an implementation period of 90-180 days, there should be ample time to complete any needed changes to programs and procedures affected by the rule.

2. *If CER challenges currently exist or are expected, what should be done to address them? For example, if more time is required for implementation of the new requirements, what period of time is sufficient?*

### NEI Response

CER challenges are not expected from this rule, other than the proposed new requirement to submit irradiated fuel management plans (IFMP) to NRC for approval in the form of license amendment requests. Our concern is explained in detail in NEI's remarks in Attachment 2 and 3 to this submittal.

3. *Do other (NRC or other agency) regulatory actions (e.g., orders, generic communications, license amendment requests, inspection findings of a generic nature) influence the implementation of the proposed rule's requirements?*

### NEI Response

Yes. We are aware of two other actions by the Commission that intersect with this rulemaking and may influence a licensee's ability to plan for decommissioning in a timely fashion. One involves the decision to defer the completion of the revised Generic Environmental Impact Statement for decommissioning to a date that is likely to occur after this rule becomes final. Another includes the future implementation of a Commission Policy Statement on Environmental Justice. Both of these actions will influence the treatment of environmental matters in the PSDAR. The NRC should explore ways to address the regulatory uncertainties these pending actions could create, possibly by promulgating interim guidance.

4. *Are there unintended consequences? Does the proposed rule create conditions that would be contrary to the proposed rule's purpose and objectives? If so, what are the unintended consequences, and how should they be addressed?*

### NEI Response

Yes. The proposed new requirement to submit irradiated fuel management plans (IFMP) to NRC for approval in the form of license amendment requests is contrary to the spirit of the rulemaking to eliminate licensing actions that do not contribute to the health, safety, and security of the public and environment. The unintended consequences of this change could be significant, including the potential

for lengthy public challenges to NRC's previous conclusions around the reasonableness of spent fuel storage plans during site-specific licensing reviews. Our concern is explained in detail in NEI's remarks in Attachment 2 and 3 to this submittal.

5. *Please comment on the NRC's cost and benefit estimates in the draft regulatory analysis that supports the proposed rule. The draft regulatory analysis is available as indicated in the "Availability of Documents" section of this document.*

### NEI Response

The NRC's cost-benefit estimates appear reasonable.