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August 2, 2013

Ms. Cindy Bladey
Chief
Rules, Announcements, and Directives Branch (RADB)
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: NEI Comments on Rulemaking to Address Prompt Remediation of Residual Radioactivity During Operations, NRC Docket ID NRC-2011-0162, *Federal Register 33008*, Vol. 78, June 3, 2013

Project Number: 689

Dear Ms. Bladey:

The Nuclear Energy Institute (NEI)¹ is pleased to provide these comments on the draft Technical Basis² dealing with prompt remediation of residual radioactivity during operations. The NRC published a request for comment in the *Federal Register* on June 3, 2013, explaining that the agency is seeking additional stakeholder input on a potential rulemaking that would explicitly require remediation of residual radioactivity during operations in order to "avoid [] complex decommissioning challenges that can lead to legacy sites."³ As

¹ NEI is responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including regulatory, financial, technical and legislative issues. NEI members include all companies licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

² We note that the *Federal Register* notice describing the document refers to the analysis as both a "technical" basis and a "regulatory" basis. 78 Fed. Reg. 33008 (June 3, 2013).

³ 78 Fed. Reg. 33008.

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reflected in our comments on a previous version of the Technical Basis,⁴ NEI believes that the rulemaking being contemplated has significant regulatory and policy implications and appreciates the NRC's efforts to obtain stakeholder input. We also, however, continue to believe that the draft Technical Basis falls far short of providing an adequate justification for the contemplated rulemaking.

Specifically, the draft Technical Basis does not support a rulemaking requiring remediation during operations because the analysis contained in the document: (1) assumes that a rulemaking is required, rather than meaningfully assessing the need for new requirements; (2) fails to identify a concrete generic issue that requires resolution via the contemplated rulemaking; and (3) fails to adequately address the backfit implications of the contemplated rulemaking – despite Commission direction to do so. Given the lack of a basis for this rulemaking, NEI believes that development of a proposed rule would be wholly inappropriate. Further, moving forward to the proposed rule stage without an adequate basis or meaningful consideration of backfitting implications would also be inconsistent with recent efforts to ensure that the cumulative effect of regulation is appropriately managed by both the NRC and the industry. Each of these points is discussed in greater detail below.

(1) The Draft Technical Basis Assumes that a Rulemaking is Required, Rather than Assessing the Need for a Rulemaking.

The draft Technical Basis is premised on the assumption that the Commission has directed the staff to develop new regulations requiring remediation of contamination during plant operation. This assumption is not consistent with the Commission's most recent direction regarding prompt remediation, which, in essence, was to determine whether a rulemaking requiring remediation during operation is justified. Instead, the Technical Basis assumes that a rulemaking is necessary to satisfy the Commission's direction and attempts to justify such a rulemaking in a post hoc fashion. Specifically, although earlier Commission direction on this topic included more definitive language, the most recent Staff Requirements Memorandum dealing with prompt remediation directed the staff to provide a notation vote paper examining:

[T]he pros and cons of moving forward with a proposed prompt remediation rulemaking including the staff's initial analysis of whether the cost/benefit analysis satisfies the backfit requirements.⁵

This direction does not suggest that the Commission is dictating that a rule be promulgated. Rather, the Commission's direction appropriately focuses on whether a rulemaking is warranted. Contrary to this

⁴ See NEI (R. Andersen) Letter to NRC (C. Bladey), "Comments on the Consideration of Rulemaking to Address Prompt Remediation of Residual Radioactivity During Operations (Docket ID NRC-2011-0162," Sept. 16, 2011.

⁵ Staff Requirements – SECY-12-0046 – "Options for Revising the Regulatory Approach to Ground Water Protection," May 24, 2012.

direction, the draft Technical Basis is premised on the assumption that a rulemaking has already been directed by the Commission. This is evident, for example, in the staff's summary dismissal of all alternatives to the imposition of new regulations requiring "prompt remediation" because such alternatives are "not responsive to" or "would not meet the intent of" the Commission's direction to mandate licensee action regarding radiological contamination.⁶

Thus, the draft Technical Basis largely misses the point, which is to meaningfully evaluate the need for (*i.e.*, the "pros" and "cons" of) a rulemaking in the first instance. Given this fundamental flaw in the premise for this draft analysis, it cannot be used as a basis for the development of a proposed rule.

(2) The Draft Technical Basis Fails to Identify a Concrete Generic Issue that Requires Resolution via the Contemplated Rulemaking.

Putting aside the unwarranted assumption regarding the Commission's direction on the prompt remediation rulemaking, the current iteration of the draft Technical Basis fails to identify a specific problem requiring a regulatory solution. The draft Technical Basis states that there are currently "about one half dozen legacy sites" and acknowledges that no legacy sites have occurred since the decommissioning funding assurance requirements went into effect a quarter of a century ago, and that no nuclear power reactor has ever become a legacy site. Further, the draft Technical Basis provides no specific information indicating that any current sites are at risk of becoming "legacy" sites. Thus, the fundamental premise on which this analysis rests – *i.e.*, that a rule is required to prevent such sites in the future – is utterly unsupported. Any reasoned analysis examining the need for a rulemaking in this area should acknowledge the robust nature of the current regulatory framework and begin with experience subsequent to the establishment of decommissioning financial assurance requirements in 1988.

NEI has raised this concern in its previous comments (on both the decommissioning planning rule and in the context of prompt remediation), and nothing provided in the current draft Technical Basis alters the conclusions previously reached by NEI. It warrants reiteration, however, that the current regulatory scheme has worked to prevent legacy sites. Indeed, the draft Technical Basis states:

- "Existing exposure limits provide adequate protection for public health and safety during operations."
- "Current regulations are sufficient to ensure adequate site characterization and resources, including funding, to complete decommissioning at the time of license termination."
- "Current financial assurance regulations are sufficient to ensure adequate resources to complete decommissioning."
- "Mandated remediation during operations could adversely impact operational safety and flexibility."

⁶ "Draft Technical Basis for Prompt Remediation," Rev. 4 (April 2013), at pp. 13-15.

- "Prompt remediation during operations may result in licensees remediating the same area multiple times during plant life, thereby increasing operational costs."⁷

Despite these statements, the staff expresses concern that "some sites have experienced decommissioning costs significantly greater than the value of the decommissioning fund; this condition has the potential to create new legacy sites."⁸ But concerns that there have been sites where decommissioning costs exceeded estimates does not refute the fact that, with respect to power reactors, all such sites have been adequately decommissioned or are in the process of being decommissioned. The staff provides no analysis or meaningful discussion supporting its assertion that cost overruns at "some sites" reveal an increased, generic risk of legacy sites that justifies a substantial rulemaking of the type contemplated by the draft Technical Basis.

Further, the factors cited in the draft Technical Basis as supporting the rule (see Draft Technical Basis pages 7-8) are speculative, or logically or factually incorrect. Indeed, upon close examination they simply make the same point five different ways. No matter how many ways the same premise is reiterated, the result is the same - there is no basis provided in the draft Technical Basis supporting the significant changes contemplated in the rule being considered.

The first factor relied upon claims that not having a prompt remediation rule "can result in large volumes of contamination requiring remediation at the time of license termination that may exceed decommissioning funds." Such an assertion is a false tautology. Not pursuing a rulemaking will in no way result in "large volumes of contamination requiring remediation." Licensee operational performance and decommissioning funding are determinative of whether there will be contamination and whether the cost of cleanup exceeds decommissioning funding. There has been no demonstration that performance with respect to either element has been deficient over the past twenty five years since promulgation of the decommissioning funding requirements. To the contrary, the bulleted statements quoted above indicate that the current regulations are fully adequate to both protect public health and safety and to ensure that adequate resources are available to properly decommission sites.

Next, the draft Technical Basis notes, without citation to the particular sites, that some sites have "large volumes of contamination" with "insufficient resources to remediate to release criteria at license termination." The staff claims that "[r]emediation during the operational phase could moderate this situation." Whether any particular action "could moderate" any particular situation is speculative and not capable of being addressed in generalities. The draft Technical Basis lacks any discussion of specific sites and how the rulemaking being considered could "moderate [the] situation" at these troubled sites. In fact, the proposed rulemaking could have potentially adverse unintended consequences on operational safety of a facility by imposing expectations that licensees take action within weeks-to-months to reduce or remediate concentrations of licensed material

⁷ *Id.* at pp. 7-8.

⁸ *Id.*

that are located in the subsurface of the facility, which is an area not typically accessible to the public and that, therefore, does not present an immediate exposure pathway. Excavating or digging around safety-related or important-to-safety equipment could result in increased risk during facility operation.

Another factor used to support a new rulemaking is to "explicitly require remediation to implement ALARA during operations," which the staff concludes "could reduce the cost of remediation at license termination [and] the likelihood of occurrence of legacy sites in the future." This is essentially communicating the same point as the other factors cited in the draft Technical Basis and, again, relies on speculation rather than specific facts or operating experience. The discussion of this factor also incorrectly implies that licensees would not implement appropriate radiological controls during operation, consistent with ALARA, if needed to meet operational radiological dose limits.

Making much the same point, the next factor relied upon to support a new rule reframes the base assertion by stating that "prompt remediation could minimize the amount of contamination, and cost, to remediate." Again, this claim is premised on speculation that without this new rule there will be contamination that requires remediation. Also, it fails to justify a broad summary conclusion with respect to a highly fact-specific condition – *i.e.*, whether, if such contamination were to occur, remediation during operation would provide a safety benefit or be cost-effective.

Finally, the document makes the same assertion again (prompt remediation reduces the risk of legacy sites), but this time adds that such a claimed benefit would also apply in the event of "early shutdown." The NRC does not regulate decommissioning funding assurance based on the assumption of early shutdown. And, as stated in the draft Technical Basis, "[c]urrent financial assurance regulations are sufficient to ensure adequate resources to complete decommissioning of a licensed activity." This begs the question, if an early shutdown assumption is not used in the Commission's decommissioning funding requirements and those requirements are sufficient, then why would the NRC use an early shutdown assumption to support a prompt remediation rulemaking? There is no reason that such an assumption is any more appropriate in the context of prompt remediation than in the context of decommissioning funding.

In sum, the factors cited in support of a new rule on prompt remediation amount to no more than a single unfounded claim and do not demonstrate a need to undertake a major rulemaking.

(3) The Draft Technical Basis Fails to Adequately Address the Backfit Implications of the Contemplated Rulemaking – Despite Commission Direction to Do So.

Contrary to the direction provided in the Staff Requirements Memorandum addressing SECY-12-0046, no cost/benefit analysis is performed, or even attempted, and no backfit analysis is undertaken. Rather, the draft Technical Basis obfuscates the backfitting issue by attempting to justify a key element of its rulemaking as no more than a request for information from licensees, which the staff asserts does not require backfit "justification." In support of this position, the draft Technical Basis provides some generalized statements

about the NRC's authority to request information from licensees (presumably pursuant to 10 C.F.R. § 50.54(f)), and proceeds immediately to the conclusion that "the ALARA-type analyses identified in the preferred alternative is within the scope of information collection, and that it is justified."

So, the draft Technical Basis proposes a major new rulemaking that could require significant changes to the plant processes and procedures, but seeks to avoid application of the backfit rule to a key element of the contemplated rule (i.e., new ALARA requirements) by conflating the information collection requirements contained in 10 C.F.R. § 50.54(f) with the requirements contained in 10 C.F.R. § 50.109 (and other applicable backfit provisions). The draft Technical Basis does not discuss imposition of a § 50.54(f) information collection, rather it discusses imposition of new regulatory requirements that would, in part, require changes to licensee operation and radiation protection programs. Thus, based on the information contained in the document, the requirements 10 C.F.R. § 50.54(f) are simply not applicable and, thus, are irrelevant. Instead, the relevant question with respect to backfitting is whether the new or amended regulations would result in the "modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility."⁹ The draft Technical Basis misses the point by completely failing to consider the definition of backfitting. Further, we note that the NRC has performed a detailed backfit analysis for previous substantive revisions to 10 C.F.R. Part 20.¹⁰

Further, characterizing an entire element of the potential rule as a mere information collection defies credulity. In fact, the Commission recently rejected a similar "information collection" argument in the Material Control and Accounting (MC&A) rulemaking. In that rulemaking, the staff took the position that a portion of the new rule was merely an "information collection" in order to avoid application of the backfit rule. The Commission unanimously rejected the staff's "information collection" argument, and disapproved the publication of the final rule without an adequate backfit analysis.¹¹ Here, the staff attempts to use an analogous "information collection" argument to inappropriately avoid application of the backfit rule.

⁹ 10 C.F.R. § 50.109.

¹⁰ See Proposed Rule, "Standards for Protection Against Radiation; Availability of Supplemental Information," 51 Fed. Reg. 30870 (August 29, 1986); see also, Final Rule, "Standards for Protection Against Radiation," 56 Fed. Reg. 23360, 23389 (May 21, 1991).

¹¹ The Commission afforded an alternative, and that was to strike from the MC&A rule package the relevant elements of the proposed rule on which a backfitting evaluation was required, allowing for publication at a later time following performance of the backfitting evaluation. See the Commissioners' comments in their vote sheets on the proposed Material Control and Accounting (MC&A) Regulations, COMSECY-12-0026 (ML13133A024); see also Staff Requirements Memorandum – COMSECY-12-0026 – *Revisions to Proposed Rule: Amendments to Material Control and Accounting Regulations* (RIN 3150-A161), May 10, 2013.

Arguments regarding information collections aside, the draft Technical Basis flatly declines to perform, or even attempt, a backfit analysis on the other provisions of the contemplated rulemaking. The NRC staff takes this position, despite the Commission's explicit direction in SRM-SECY-12-0046 to prepare a notation vote paper that "include[s] the pros and cons of moving forward with a proposed prompt remediation rulemaking including the staff's initial analysis of whether the cost/benefit analysis satisfies the backfit requirements" (emphasis added). Consistent with the Commission's direction, it is far more appropriate – both from a resource and policy perspective - for the staff to meaningfully examine the backfitting implications of the preferred option before expending considerable resources to "fully" develop a proposed rule package.

(4) Given the Lack of Basis and Absent Any Meaningful Consideration of the Backfit Rule, Development of a Proposed Rule is Unjustified and Would Be Inconsistent with Recent Efforts to Ensure that Cumulative Effects of Regulation are Appropriately Managed.

The importance of giving thorough consideration to the cumulative effects of regulation as an inherent part of the regulatory process has been recognized on a broad federal level,¹² by the Commission,¹³ and by industry.¹⁴ Each party continues to work toward implementation of a framework within which to consider such effects, and to appropriately prioritize regulatory actions. While much work remains to fully establish such a framework, there are certain elements of these efforts that reflect the underlying purposes of the examination of the cumulative effects. These elements are fundamentally aimed at prioritizing proposed new regulatory requirements and actions based on safety and security significance of each proposal. Such prioritization may result in acceleration of certain activities, the deferment of others, or the cancellation of some activities where no clear safety benefit would be achieved.

NEI has previously submitted to the NRC an initial assessment of proposals for addressing the cumulative impacts of regulatory actions.¹⁵ In that letter, NEI identified many considerations to be factored into

¹² See "Memorandum for the Heads of Executive Departments and Agencies," from the Office of Management and Budget, March 20, 2012, "Cumulative Effects of Regulation."
<http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/cumulative-effects-guidance.pdf>

¹³ See "Implementation of the Cumulative Effects of Regulation Process Changes," SECY-12-0137, October 5, 2012; see also Staff Requirements Memorandum on SECY-12-0137, March 12, 2013.

¹⁴ See, e.g., NEI (A. Heymer) Letter to NRC (R. Borchardt), "Industry Paper on Addressing Cumulative Impact through Generic Prioritization and Plant-Level Integrated Schedules," July 3, 2013.

¹⁵ See NEI (T. Pietrangelo) Letter to NRC (M. Johnson, and M. Weber), "Initial Industry Proposals to Address the Cumulative Impact of Regulatory Actions," April 16, 2013.

cumulative effects assessments, and supported the Commission's ongoing efforts in this area. Notably, in that letter NEI also recommended withdrawal of the prompt remediation initiative.¹⁶ Based on the discussion above, we continue to support that recommendation.

We also observe that the NRC's own proposals for addressing cumulative effects suggests that the "regulatory basis stage may be the optimal point in the rulemaking process to apply a [Cumulative Effects of Regulation] template, to assist in evaluating whether issuing a proposed rule is the appropriate action."¹⁷ Fundamentally, that is what the Commission was asking here when it requested a cost/benefit analysis, a pros and cons evaluation, and a backfit evaluation. It remains NEI's position that performance of those evaluations and analyses, consistent with the proper framing of the issue, would reveal that this effort would not result in a substantial safety increase, and would, in fact, unjustifiably burden both industry and the NRC at a time when resources are better spent on efforts that will result in more substantial safety benefit.

Based on the above discussion, NEI recommends that the NRC forgo developing a proposed rule requiring remediation during operation. As stated in the draft Technical Basis, the agency's current regulations provide adequate protection of public health and safety and ensure that adequate resources will be available for decommissioning. If the NRC decides to continue its consideration of additional requirements in this area, a technical or regulatory basis that meaningfully evaluates the need for such a rulemaking and the backfitting implications of developing such a rule should be published for public comment. The draft Technical Basis documents published to date, as well as the public interactions on those documents,¹⁸ have fallen far short of this mark.

In the *Federal Register* notice published with the draft Technical Basis, the NRC also requested responses to nine specific questions. Given our extensive comments in response to similar specific questions on the previous iteration of the draft Technical Basis document, and the continued lack of a basis for the rulemaking being considered, we do not believe that it is possible to offer meaningful additional responses to the nine questions presented in the *Federal Register* notice at this time. If the staff develops a more robust and

¹⁶ *Id.* at Attachment, pg. 4.

¹⁷ See SECY-12-0137, at 4.

¹⁸ For example, the most recent webinar on the draft Technical Basis was held on June 4, 2013. Although the notice for the webinar is dated May 23, 2013, it was not available on the NRC's website until June 3, 2013, approximately 24 hours before the webinar occurred. Moreover, the format of the webinar was generally unproductive and technical difficulties prevented robust stakeholder participation. While we do not recommend development of a proposed rule, if the NRC decides to seek additional stakeholder input on regulatory changes that would require remediation during operation, NEI strongly encourages the staff to conduct a properly-noticed, public meeting.

Ms. Cindy Bladey

August 2, 2013

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cohesive technical or regulatory basis in the future, NEI would welcome the opportunity to offer more extensive comments on the relevant technical issues.

If you have any questions or concerns regarding these comments, please feel free to contact me at (202) 739-8111; rla@nei.org.

Sincerely,

A handwritten signature in black ink that reads "Ralph Andersen". The signature is written in a cursive style with a large initial "R".

Ralph L. Andersen

c: NRC Document Control Desk