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Mr. Frederick D. Brown
U.S. Nuclear Regulatory Commission
One White Flint North, MS O16E15
11555 Rockville Pike
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Subject: Fuel Cycle Program Efficiency Gains and Industry Recommendations for Project AIM 2020
Prioritization and Re-baselining Initiatives

Project Number: 689

Dear Mr. Brown:

On behalf of its fuel cycle industry members, the Nuclear Energy Institute (NEI)¹ offers the following information in three parts: I) current efforts by industry and the U.S. Nuclear Regulatory Commission (NRC) staff to identify regulatory program efficiencies; II) industry's categorization of the regulatory initiatives currently tracked on NRC's publically-available integrated schedule; and III) benefits to NRC and industry from adopting our suggestions. We believe you will find this input useful as you complete agency re-baselining activities as part of Project AIM 2020. In that regard, the information contained in this letter is consistent with and supplements NEI's September 15, 2015, letter to you in response to the NRC's solicitation for input on Project AIM.

Part I: Regulatory Program Efficiency Gains Currently Underway

NEI and fuel cycle industry representatives have been working together to identify areas for increased efficiency in NRC's current licensing and inspection programs. We appreciate the staff's willingness to tackle this challenge, consider stakeholder suggestions, and to do so in a transparent manner. These current efforts include but are not necessarily limited to the following:

1. **Integrated Schedule of Major Regulatory Activities** – In 2013, the then Division of Fuel Cycle Safety and Safeguards developed a regulatory initiatives integrated schedule, now holds quarterly

¹ NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities 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.

public meetings, adjusts the milestones and initiative scope based on resource availability and other factors; and maintains the updated schedule on NRC's public website. To date, the schedule has been an effective inventory of ongoing regulatory initiatives that cross several NRC program offices, and has allowed both NRC and industry to allocate their resources accordingly. As an input to the Project AIM 2020 re-baselining initiative, we see the natural next step as a categorization of the ongoing initiatives based on several factors such as cost/benefit, safety or security, current status, and resource availability. Therefore, we provide our perspective on categorizing the current set of tracked regulatory initiatives in Part II of this letter for your consideration.

2. **NRC Endorsement of NEI 14-14 re: Resolution Process for Regulatory Issues** – In December 2014, NRC endorsed NEI 14-14, "Regulatory Issue Resolution Protocol" for fuel cycle facilities to ensure a more efficient and timely resolution of regulatory issues that fall outside rulemaking or guidance options for resolution. In July 2015, NEI submitted its first two draft problem statements on regulatory issues for consideration under this process. Industry engagement with NRC has begun and we look forward to applying this new protocol and identifying lessons-learned that would be applied in the future.
3. **Licensing and Inspection Program Improvements Underway** – As a result of NRC's 2015 Fuel Cycle Information Exchange, industry and NRC identified process improvements for the NRC's existing licensing and inspection programs and industry's role in ensuring success in these areas. Examples include better communication to reduce unnecessary requests for additional information and the routine use of team leaders during inspections. The first follow up public meeting was held in September 2015 and others will be held until NRC and industry determine they are no longer needed. Further, the NRC has agreed to conduct a Licensing Workshop in 2016 that will focus on topic areas identified by industry and NRC.
4. **Industry Input on the Oversight Process** - NRC staff requested industry input on which inspection modules could potentially be: 1) bundled for efficiency (beyond those that already are); 2) eliminated due to little or no safety benefit and in the absence of documented violations; and 3) whether the frequency of certain core inspections could be reduced based on performance or other factors. Industry is pleased to offer such input and work with NRC staff on this issue in the coming months. That being said, these risk informed decisions and efficiency gains could certainly be pursued regardless of whether the overly complex Revised Fuel Cycle Oversight Process (RFCOP) initiative continues.

Part II: Industry Categorization of Currently Tracked Regulatory Initiatives

To help inform the NRC's Project AIM re-baselining initiative and consistent with industry's message to NRC on the need to relative rank or categorize the current set of regulatory initiatives impacting fuel facilities, we offer the categories below. This information is generally not new to the cognizant NRC staff and management. Also, Categories 1-4 described below should not, in any way, be interpreted to imply a level of safety significance associated with the category.

Category I – Initiative Should be Completed.

- **Generic Letter on Natural Phenomena Hazards (Docket ID NRC-2015-0035):** This initiative has been underway since the 2012 Temporary Inspection Instruction. Licensees responded to a Generic Letter in September 2015 and, according to NRC staff, the initiative is scheduled to be closed out in 2016. Therefore, our mutual resources should continue to be expended.

Category II – Scope of Initiative Should be Narrowed or Initiative Terminated.

- **Cyber Security Rulemaking (Docket ID NRC-2015-0179):** This initiative has been underway since the 2011 site visits. Most recently, a draft Regulatory Basis was issued in September 2015 for comment in October 2015². Industry has fundamental concerns with the staff's current regulatory approach, offered extensive comments, and does not believe the rulemaking should proceed as described in the draft Regulatory Basis document. That being said, we offered specific recommendations on how the staff might proceed should it decide to do so. Industry appreciated the October 22, 2015 public meeting and was encouraged by the staff's description of the proposed digital asset screening methodology to meet the intent of the rule. We look forward to additional public meetings and a "go-no/go" decision on a proposed rule by the Commission which is scheduled for submittal in mid-2016.
- **Part 73, Enhanced security for Special Nuclear Material (Docket ID NRC-2014-0118):** This rulemaking was ranked HIGH in the FY 2016/2017 rulemaking plan and is being promulgated, according to NRC, to "improve consistency; make generically applicable security requirements imposed in Security Orders; update regulations using risk insights and operating experience; and use a risk-informed and performance-based structure."³ As discussed in our October 17, 2014⁴ and September 15, 2015⁵ letters, we believe NRC should pursue alternatives to the current rulemaking. For example, the NRC security orders in place today recognize the diversity of the small fleet of fuel cycle facilities and allow for a facility-specific, risk-informed and performance-based approach to meet the intent of the requirements. This is also true for research and test reactors. Industry is concerned that detailed, prescriptive, one-size-fits-all new or revised requirements that modify the intent or go beyond the orders could create unintended conflicts or gaps with existing, NRC-approved security programs. The programs put in place to conform to the Orders/Additional Security Measures have been inspected against on numerous occasions and determined to be adequate. Change for change's sake or codifying "best practices" and "lessons-learned" in and of itself is not a

² J Pollock, NEI letter to Annette Vietti-Cook dated October 5, 2015 Providing Industry Input on Draft Regulatory Basis for Cyber Security Rulemaking; Docket ID NRC-2015-0179.

³ Description from NRC Rulemaking Priorities webpage; <http://pbadupws.nrc.gov/docs/ML1502/ML15022A521.pdf>

⁴ October 17, 2014, Janet Schlueter (NEI) to Cindy Bladley (NRC); Industry Comments on Draft Regulatory Basis for 10 CFR Parts 26 and 73, "Enhanced Security at Fuel Cycle Facilities; Special Nuclear Material Transportation"

⁵ September 15, 2015, John Butler (NEI) to Fred Brown (NRC); Industry Recommendations for NRC Project AIM 2020 Prioritization and Re-baselining Initiatives

sound or justifiable regulatory basis for new or modified requirements. These types of changes are insufficient to satisfy the Backfit Rule's "substantial increase in overall protection" requirement, and the cost of implementing such changes would not be justified in view of any increased protection.

Therefore, we recommend that NRC either narrow the scope of the rulemaking or terminate the current rulemaking and consider an alternate approach. For example, NRC could issue a license condition for impacted licenses which requires adherence to the current set of requirements and, in accordance with 10 CFR 70.32(e), prohibits a program change that would result in a decrease in the effectiveness of the current security programs. Such a performance-based approach would be widely accepted by industry.

Category III – Initiative Should be Terminated.

- **Acute Chemical Exposure Standard (Docket ID NRC-2015-0044):** This initiative should be terminated since it is unnecessary, impractical, and constitutes an unanalyzed backfit⁶. Licensees currently utilize an all-pathways approach to addressing acute chemical exposures to workers in their facility-specific Integrated Safety Analyses. Industry has thoroughly researched and provided a detailed basis for its conclusion that development of the standard is unnecessary from a safety perspective based on licensee chemical safety programs, is impractical in that an industry standard does not exist and cannot be developed for a variety of reasons, and it constitutes an unanalyzed backfit. As such, developing quantitative standards will yield no discernable safety benefit. Developing and implementing such standards will, however, divert limited facility resources away from day-to-day safe operations. Industry's position on this matter remains unchanged since it arose in 2008. We appreciated the opportunity to brief NRC's Advisory Committee on Reactor Safeguards on this matter in October 2015, and we eagerly await the January 2016 staff paper to the Commission and final agency decision on this controversial and long-standing issue.
- **Part 21, Reporting of Defects and Noncompliance (Docket ID NRC 2012-0012):** The stated goal of this rulemaking is to improve the clarity of Part 21 while maintaining the original intent of the rule and minimizing changes to currently compliant programs. There are no deficiencies in the Part 21 requirements and NRC has not identified a safety issue at fuel cycle facilities. As discussed in our May 5, 2015⁷ and June 19, 2015⁸ letters, the draft Regulatory Basis document and proposed rule fail to demonstrate any safety benefit and, in fact, could be detrimental to safety by diverting limited resources. Therefore, our mutual resources should not be expended to modify the

⁶ March 26, 2014, Janet Schlueter (NEI) to Marissa Bailey (NRC), Current Industry Programs Adequate and NRC Proposed Approach is Unnecessary, Impractical and An Unanalyzed Backfit; November 7, 2014, Ellen Ginsberg (NEI) to Margaret Doane (NRC) re: Staff's Response to March letter; June 30, 2015, Janet Schlueter (NEI) to Cindy Bladey, (NRC), Industry Comments on Draft Interim Staff Guidance on Acute Chemical Exposure Standard.

⁷ May 5, 2015, Doug Walters (NEI) to Glenn Tracy (NRC), Industry Comments on NRC's Revision 1 of the Draft Regulatory Basis to Clarify 10 CFR Part 21, "Reporting of Defects and Noncompliance" (ML15131A366)

⁸ June 19, 2015, Janet Schlueter (NEI) to Marissa Bailey (NRC), "Additional Fuel Cycle Industry Input on Potential Rulemaking to Amend 10 CFR Part 21" (ML15194A153)

rule or generate new or revised regulatory guidance applicable to fuel facilities. With regard to the operating power plants, there is a lack of clear guidance which has resulted in a few minor issues, none of which have been shown to have an impact on safety or security. The more effective and efficient path forward would be discontinuance of the rulemaking and NRC endorsement of industry-generated guidance⁹ on behalf of the operating power plants that was submitted to NRC in 2014 and is awaiting NRC action. In that regard, we appreciate the progress made most recently in our October 16, 2015 public meeting on NEI-14-09 and look forward to the November 5th public meeting.

- **Part 74, Material Control and Accounting (Docket ID NRC-2009-0096):** The stated goal of this rulemaking is to revise and consolidate regulations for material control and accounting of special nuclear material in order to update, clarify, and strengthen them. As discussed in our April 15, 2015 letter¹⁰, this rulemaking activity, which ranked relatively low in the scoring for FY2016/FY2017, is of significant industry concern due to its incomplete and inconclusive regulatory analysis and regulatory basis, ambiguous rule language and its potential to impose significant burden with little to no improvement to safety or security. Therefore, our mutual resources should no longer be expended on finalizing and implementing a final rule.
- **Revised Fuel Cycle Oversight Process (Docket ID NRC 2015-0149):** As noted in our July 13, 2015 letter,¹¹ as well as other NEI letters, the current oversight process is adequate. No safety or security issue has been identified to warrant the large program overhaul envisioned with the Revised Fuel Cycle Oversight Process (RFCOP).

NRC should also recognize that implementing the RFCOP will likely result in this small, yet diverse set of fuel facilities operating under two different NRC oversight processes. Specifically, the RFCOP envisioned requires that licensees submit their Corrective Action Programs for NRC approval to allow NRC disposition of Severity Level IV violations into the CAP. At present, few fuel cycle facilities have opted to submit their CAPs, in part, because the NRC has not "right-sized" the inspection program based on facility risk and operational performance. Therefore, industry's position on this matter remains essentially unchanged since 2008, and we continue to recommend that our mutual resources no longer be expended on the RFCOP.

Further, in its 2012 Staff Requirements Memorandum on enhancements to the fuel cycle oversight process (SRM SECY-11-0140), the Commission wrote:

⁹ August 28, 2014, Chris Earls (NEI) to Michael Mayfield (NRC) and Michael Cheok (NRC), Submittal of NEI 14-09, Guidelines for Implementation of 10 CFR Part 21 Reporting of Defects and Noncompliance, Revision 0 (ML14245A415)

¹⁰ April 15, 2015, Janet Schlueter (NEI) to Marissa Bailey (NRC), Industry Comments on Proposed Part 74, "Amendments to Material Control and Accounting Regulations Based on Discussions between NRC Industry during a March 5, 2015 Public Meeting"

¹¹ July 13, 2015, Janet Schlueter (NEI) to Cindy Bladey (NRC), "Industry Comments on the Draft Fuel Cycle Oversight Process Cornerstone Technical Document" (ML15195A422)

"[T]he existing [fuel cycle] oversight process is effective and ensures safety and security. Consequently, the activities undertaken to enhance the NRC's fuel cycle oversight process are truly that – enhancements – and are a lower funding priority...as the staff prepares funding adjustments...it should keep this prioritization in mind."

- **Part 20 (Docket ID NRC-2009-0279):** This rulemaking to make various changes and updates to Part 20, which impacts all NRC and Agreement State Licensees, should be terminated as outlined in the NEI letter to NRC dated March 24, 2015¹².
- **Annual Fuel Cycle Information Exchange:** Given the resource investment by NRC managers and staff, other Federal agency representatives, NRC's international partners, and industry who participates in and attends it, NRC should consider discontinuing this annual two-day meeting or at least holding it once every two years. Instead, our mutual resources would be more efficiently and effectively expended by pursuing program specific efficiency improvements such as those described in Part I of this letter and others yet to be identified by NRC and industry.

Category IV – Initiatives Warranting Minimal Resources

- **NUREG-1520:** Resources to update NUREG-1520, the standard review plan for fuel cycle facilities, should only be expended when several significant updates are needed rather than a scheduled update on a pre-determined periodicity. NUREG-1520 was updated in 2010 and 2015 and is not in need of an update, particularly since no license applications for new facilities are on the horizon.
- **Regulatory Guides:** In general, industry firmly believes that existing Regulatory Guides (RG) should be reviewed every 5-10 years and a decision made on whether the RG should be retained as is, updated, merged with an existing RG or terminated. Such decisions should be based primarily on industry input as to the usefulness of the Regulatory Guide since it is licensee fees that fund the development and maintenance of RGs and licensees are the end users of RGs. NRC should not make these resource decisions in isolation.

Part III: Benefits to NRC and Industry of Suggested Approach

We firmly believe that redirecting our mutual resources as discussed in Parts I and II of this letter, combined with industry's commitment to operational safety, has the potential to increase safe operations far beyond any improvement envisioned with any one or all of the regulatory initiatives currently underway. Specifically, consistent with the NEI letter of April 3, 2013 on the Cumulative Effects of Regulation, we offer the following.

Over time, it has become apparent that some self-identified/self-initiated facility operational improvements have been deferred or protracted due to the diversion of limited industry senior experts and management resources to address regulatory initiatives, e.g., acute chemical exposure standards. Specific examples of

¹² March 24, 2015, Ellen Anderson (NEI) to Annette Vietti-Cook (NRC), "Industry Comments on the NRC ANPR for 10 CFR Part 20, Radiation Protection" (ML15083A063)

facility operational improvements that have been deferred or protracted include but are not limited to the following:

- Increase the periodicity of station-specific worker training
- Improve the timeliness of field labeling of certain Items Relied On For Safety
- Improve the pace of systematic elimination of administrative controls - where engineered controls could be used
- Improve on meeting the goal of conducting a systematic re-review of the ISA at a specified periodicity
- Improve the periodicity of the conduct of self-assessments and efforts to implement best practices
- Increase the amount of time that managers and senior experts spend on the facility floor
- Improve the time to develop new processes to recover special nuclear material
- Improve the time to develop new or improved low-level waste minimization efforts

In Summary

Industry appreciates the staff's effort to coordinate with stakeholders to identify program areas that can yield efficiency gains, and we believe that slow but steady progress is being made in that regard. We also trust that our categorization of the existing regulatory initiatives impacting fuel facilities provided in this letter is carefully considered by NRC, at all levels within the agency, as part of the agency's current Project AIM re-baselining initiatives.

We are available and would be pleased to discuss any of the input contained in this letter at your convenience.

Sincerely,



Janet R. Schlueter

C: Mr. Michael Weber, NRC/EDO/DEDMRS, NRC
Mr. Michael Johnson, NRC/EDO/DRPP, NRC
Ms. Catherine Haney, NRC/NMSS, NRC
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