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Mr. John W. Lubinski
Director, Office of Nuclear Material Safety and Safeguards

Ms. Laura Dudes
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Industry Comments on New Staff Position Regarding Buildings as Items Relied on for Safety at Fuel Cycle Facilities Licensed Under 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material"

Project Number: 689

Dear Mr. Lubinski and Ms. Dudes,

The Nuclear Energy Institute (NEI)[1], on behalf of its fuel cycle facility members, writes to express its signficant concern with the current staff position regarding the designation of buildings or structures as Items Relied on for Safety (IROFS) as defined in 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," and implemented by facilities performing uranium enrichment, conversion and fuel fabrication. *Specifically, based on recent public meeting discussions primarily in the context of NRC's construction oversight program, it has become clear that NRC staff now believe that buildings which house licensed special nuclear material must be declared as IROFS by the licensee or applicant regardless of whether this declaration is supported by the facility-specific Integrated Safety Analysis (ISA) required by Part 70.*

Further, the staff stated during the April 23, 2024, business line Commission briefing that any new building erected after the effective date of 10 CFR Part 70 in 2000 is required to be designated an IROFS. This current staff position was also reiterated during the May 1, 2024, NRC stakeholders' meeting. However,

[1] 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.

this position is not supported by historical evidence or the current rule[2], is not risk-informed, represents a change in staff position, and is not consistent with NRC's Principles of Good Regulation. Such a reversal in staff position could unnecessarily erode public confidence in the facility-specific ISAs in place today which are each based on a proven methodology approved and routinely inspected by the NRC for as long as 20-25 years. As such, we trust you will find the facts and concerns below informative, and they could be further illuminated with specifics by industry representatives during a future NRC meeting.

Our positon is based on the following key fundamental facts and concerns:

1. **Stable Regulatory Framework:** The current 10 CFR Part 70 has been in effect since 2000 and there have not been any events, significant safety concerns or issues that warranted a revision. Subpart H requires the licensee or applicant to perform an ISA to demonstrate compliance with 10 CFR 70.61, "Performance Requirements." NRC has reviewed and approved facility-specific ISA methodologies for almost 25 years. Also, licensees are required to submit annual ISA summary updates for NRC review. The industry ensures the facilities' ISAs provide reasonable assurance of adequate protection for the health and safety of the public, workers and environment and has been doing so even before the rule was issued.

2. **Facility-Specific ISAs:** The ISA is an appropriate analytical tool used by the licensee/applicant to identify postulated initiating events and accident sequences that could result in a high or intermediate consequence event which necessitate the application of IROFS to prevent or mitigate the event. Declaring the building as an IROFS is appropriate if the building is providing a defined safety function such as containment. Designation of items as IROFS that provide no safety function detracts both the NRC and licensees from focusing on risk significant activities and results in programmatic impacts and resource expenditures, e.g., personnel training. The industry is very concerned that the current staff position undermines the fundamental licensing basis of Part 70 facilities. For example, if the ISA is no longer the basis for a licensee to designate IROFS, where does application of this much broader concept stop? Would it include Uranium Hexaflouride cylinders? If so, the ISA boundary is essentially meaningless since all equipment or features could be designated as IROFS.

3. **Compliance with Building Codes:** Another fundamental industry concern is the apparent change in staff position that Building Code compliance can no longer support a determination that the initiating event frequency--even in Natural Phenomena Hazards (NPH) scenarios--results in a no or low consequence event. This NRC staff position: 1) contradicts existing examples in NUREG-1520, "Standard Review Plan for Fuel Cycle Facilities License Applications," Chapter 3, Annex to Appendix D; and 2) is not consistent with the staff position documented in the October 2003

[2] 65 FR 56211; September 18, 2000; 10 CFR Part 70 Final Rule Statement of Considerations; Pages 56213 and 56222 regarding baseline design criteria and when engineered and administration controls are not needed to prevent a high consequence event under 70.61(b). 64 FR 41341; July 30, 1999; 10 CFR Part 70 Proposed Rule Statements of Consideration; Page 41347 and the discussion of baseline design criteria.

internal memorandum, “Meeting Summary of the NEI/NRC Sponsored Workshop on Integrated Safety Analysis September 23 and 24, 2003.” [ADAMS ML032880841].

4. **Configuration Management Programs:** The current staff position indicates that designation of a building as an IROFS places it under configuration management, whereas the industry is required by paragraph (a) of 10 CFR 70.72, “Facility Changes and Change Process,” to establish configuration management programs to evaluate the impact of plant changes, including changes to the site, structures, processes, systems, equipment, components, computer programs, and activities of personnel. Thus, the application of configuration management is required to be much broader than IROFS.

5. **Baseline Design Criteria:** Section 10 CFR 70.64, “Requirements for New Facilities or New Processes at Existing Facilities,” includes the baseline design criterion (a)(2) which requires that, “the design must provide for adequate protection against natural phenomena with consideration of the most severe documented historical events for the site.” Since the building design must withstand the most severe documented historical NPH event, accidents with high or intermediate consequences will not be initiated by building damage caused by NPH. As a result, designation of the building as an IROFS should not be required when considering the initial conditions (i.e., normal operations mode) of the building design under the Process Hazards Analysis methodology outlined in Section 1.3 (Page 20, paragraph 2) of “Guidelines for Hazard Evaluation Procedures” 3rd Edition. Section 1.4 (Page 24) of this reference also states that the primary containment is not to be considered a safeguard, and safeguards are identified if the initiating event leads to a loss event. The use of “Guidelines for Hazard Evaluation Procedures” is endorsed by NRC in NUREG-1513.

6. **NRC’s Generic Letter, “Treatment of Natural Phenomena Hazards at Fuel Cycle Facilities” (GL-15-01):** In response to NRC’s Generic Letter issued post-Fukushima, licensees evaluated their sites and buildings in the context of preventing or mitigating an NPH-related initiating event. Some licensees made facility modifications voluntarily. NRC evaluated and found all licensee responses and actions adequate. There is no reason to believe that additional licensee action is warranted.

7. **10 CFR 70.72, “Facility Changes and Change Process”:** Section 10 CFR 70.72 allows licensees to make certain modifications to their facilities, including constructing a new building in some cases, without prior NRC approval. Under the current NRC inspection program, NRC routinely inspects such changes and modifications (e.g., buildings, process changes, etc.) and licensee determinations under 10 CFR 70.72. There is no evidence to suggest that this process is no longer adequate.

In closing, the industry is concerned with the apparent direction of this fundamental licensing, inspection and oversight program element. We trust this letter helps clarify the points industry representatives have

raised in several NRC public meetings and we welcome further dialogue on this important matter. Please do not hesitate to contact me to offer additional clarity or arrange such a discussion.

Sincerely,

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