

# Fuel Facility Structures as Items Relied on for Safety

June 27, 2024

Public Meeting with Nuclear Energy Institute (NEI)  
and Members from the Nuclear Fuel Facility Industry

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# Meeting Category and Public Participation

This is an Observation Meeting. This is a meeting in which attendees will have an opportunity to observe the NRC performing its regulatory function or discussing regulatory issues. Attendees will have an opportunity to ask questions of the NRC staff or make comments about the issues discussed following the business portion of the meeting; however, the NRC is not actively soliciting comments toward regulatory decisions at this meeting.

# Agenda

Topic	Speaker/Participant
Summary of NEI letter dated May 23, 2024	NEI and/or industry representatives
Key messages from NRC staff regarding structures as items relied on for safety (IROFS)	NRC staff
Questions and comments	All attendees – including members of the public
Closed portion of meeting – facility specific discussion containing sensitive information	NEI and/or industry representatives and NRC staff

**Summary of NEI letter dated May 23, 2024  
ML24159A731  
(NEI and/or industry representatives)**

# Key Messages from NRC Staff Regarding Structures as IROFS

- The regulations in 10 CFR Part 70, Subpart H, require an applicant/licensee to establish and maintain a safety program that, in part, demonstrates compliance with the performance requirements of 10 CFR 70.61 by performing an integrated safety analysis (ISA) to demonstrate that the risk of each credible, intermediate- and high-consequence event is limited, in accordance with 10 CFR 70.61(b) & (c).
- The NRC staff's stated position is that engineered or administrative controls (e.g., structures, systems, equipment, components, and activities of personnel) used to prevent or mitigate events and their consequences (i.e., meet the performance requirements of 10 CFR 70.61) may not be considered in the determination of consequences unless those controls are designated as IROFS, in accordance with 10 CFR 70.61(e).

# Key Messages from NRC Staff Regarding Structures as IROFS (continued)

- The regulations do not specifically require structures (or any specific system, equipment, component, or activity) to be designated as IROFS. However, to develop the safety basis for a facility, the requirements of 10 CFR 70.62(c)(iv) & (vi) state that an applicant/licensee must identify potential accident sequences caused by process deviations or other events internal to the facility and credible external events, including natural phenomena hazards (NPH), and identify each IROFS, the characteristics of its preventive, mitigative, or other safety function, and the assumptions and conditions under which the item is relied upon to support compliance with the performance requirements of 10 CFR 70.61.
- Since the 2000 issuance of 10 CFR Part 70, Subpart H, the NRC staff has maintained its position on the requirements for **new structures/processes** for special nuclear material (SNM). In license applications and amendment requests having new structures/processes for SNM, fuel cycle facilities have typically credited the design of the structure/process and its capacity to prevent or mitigate the consequences from credible external events (e.g., high winds, tornado, intense precipitation, snow loading, seismic events) to demonstrate compliance with the performance requirements of 10 CFR 70.61 for NPH.

# Key Messages from NRC Staff Regarding Structures as IROFS (continued)

- The NRC staff has identified inconsistencies in the designation as IROFS for NPH events of some existing structures/processes at facilities that were licensed prior to 2000 (i.e., before 10 CFR Part 70, Subpart H was issued). Because the NRC staff remains confident that those existing structures are safe based on actions taken to address Generic Letter 2015-01, “Treatment of Natural Phenomena Hazards in Fuel Cycle Facilities,” the staff has not explored potentially backfitting the requirements of 10 CFR Part 70, Subpart H, for designation of structures/processes as IROFS for NPH.

# Questions and Comments (All attendees – including members of the public)



# Closed Portion