Significant Comments

The U.S. Nuclear Regulatory Commission (NRC) received written comments on the draft regulatory (i.e., technical) basis for the rulemaking to revise the security requirements for independent spent fuel storage installations (ISFSIs) from five organizations: the Nuclear Energy Institute (NEI), Union of Concerned Scientists (UCS), U.S. Department of Energy, Greenpeace, and the Prairie Island Indian Community (PIIC). Overall the comments supported the goal of the proposed rulemaking to update the security requirements at an ISFSI authorized to store spent nuclear fuel (SNF) and at a monitored retrievable storage installation (MRS) authorized to store SNF and high-level radioactive waste (HLW) to create logical, clear, and consistent requirements.

Of particular note, some commenters (NEI and UCS) who have demonstrated a significant interest in ISFSI security issues were clearly aligned in their opposition to some of the key technical approaches proposed for this rulemaking. The staff has completed an initial assessment of these comments and the following are two examples of the most significant comments and the staff's initial evaluation:

- **Comment:** NEI and UCS recommended the NRC use an approach involving the Design Basis Threat (DBT) for radiological sabotage at these installations rather than using an approach involving dose-based calculations developed from NRC-specified security scenarios.

  Staff evaluation: Using a DBT-approach without a dose calculation of potential release consequences (when informed by the results of the agency's 2006 security assessments for ISFSIs) may require mandating a denial protective strategy for all general and specific license ISFSIs and MRSs, because of the staff's inability to assess for an individual installation the acceptability of these potential releases upon public health and safety, the common defense and security, and the environment. The staff had additionally proposed a 0.05-Sievert (Sv) (5-rem) dose limit to avoid changes to emergency response program requirements, that would be required if the dose exceeds the May 2, 1992 U.S. Environmental Protection Agency's (EPA's) protective action guidelines (PAGs) dose limit of 0.01 Sv to 0.05 Sv (1 rem to 5 rem). Consequently, the use of a DBT approach without mandating a denial protective strategy may still require a dose calculation.

  Separately, the use of a DBT and a denial protective strategy may require the Commission to reconsider its prior decision in SRM-SECY-07-0148, "Independent Spent Fuel Storage Installation Security Requirements for Radiological Sabotage," dated August 28, 2007, on whether under Section 170D of the *Atomic Energy Act of 1954*, as amended (42 U.S.C. § 2210d), ISFSIs and MRSs are classes of facilities for which the Commission considers it appropriate "to assess the ability of a private guard force of a licensed facility to defend against any applicable design basis threat." These assessments are accomplished under force-on-force (FOF) exercises. The staff would need to evaluate whether ISFSI and MRS licensees implementing a denial protective strategy should also conduct tactical response drills and FOF exercises to ensure that the licensee's implementation of a denial protective strategy is effective. ISFSI licensees are not required to conduct tactical response drills and FOF exercises and therefore,

the NRC does not conduct FOF assessments against ISFSIs. While the NRC's FOF assessment tactics may include attacking an ISFSI co-located with a power reactor as a diversionary tactic during an attack on the reactor or the spent fuel pool, the ISFSI itself is not a target under the FOF assessment process.

The staff expects that ISFSI and MRS licensees implementing a denial protective strategy and potentially tactical response drills and FOF exercises would incur significant increased costs and would also require increased NRC licensing and inspection resources.

- **Comment:** NEI, in addition to the previous comment, also recommended that if the NRC chooses to retain dose calculations as part of the proposed rule, then a higher dose limit should be used for security-based events than the proposed 0.05-Sv (5-rem) dose limit. ISFSI and MRS licensing regulations currently use a 0.05-Sv (5-rem) dose limit for safety-based events and accidents.

  Staff evaluation: Using a dose limit greater than 0.05 Sv (5 rem) would exceed the EPA's PAGs and require ISFSI and MRS licensees to implement a full scope emergency response program (e.g., declaring events up to a general emergency; making protective action recommendations; having an emergency response facility, an emergency planning zone, and an emergency notification system; and implementing local coordination activities and periodic emergency exercises). The staff has not evaluated what would be an appropriate scope or the elements required for a full emergency response program at an ISFSI or MRS (e.g., the size of the ISFSI's emergency planning zone). The staff would expect that an ISFSI or MRS that is co-located with an operating power reactor would be able to implement a full scope emergency response program at a lower cost, through incorporation of the ISFSI or MRS into the reactor's existing emergency response program. However, if that is not the case, then the staff expects that implementing a full scope emergency response program at an ISFSI or MRS would incur significant costs for licensees and would also require increased NRC licensing and inspection resources.

  Furthermore, the staff expects that implementation of a full scope emergency response program at ISFSIs and MRSs would also require discussions with the U. S. Federal Emergency Management Agency (FEMA) regarding possible impacts on FEMA's regulations. Specifically, the NRC would discuss whether FEMA would need to revise its offsite planning regulations under 44 CFR Part 350, "Review and approval of state and local radiological emergency plans and preparedness," if the NRC requires a full scope emergency response program at ISFSIs and MRSs. For example, changes may be required to FEMA's regulations to provide direction to State and local officials for offsite emergency response activities at an ISFSI or MRS that is not co-located with an operating power reactor. Secondly, if FEMA's regulations need to be revised, then FEMA's actions may impact the NRC's schedule for the ISFSI and MRS security rulemaking, because a coordinated rulemaking with FEMA may be necessary.