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U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

On behalf of the Union of Concerned Scientists, I appreciate the opportunity provided by the Nuclear Regulatory Commission (NRC) to review and comment on DG-5033, "Security Performance (Adversary) Characteristics for Physical Security Programs for 10 CFR Part 72 Licensees." UCS submitted non-public comments on October 25, 2011. However, we would also like to supplement those comments with a public statement.

I have reviewed the public comments of the Nuclear Energy Institute and the Decommissioning Plant Coalition and strongly disagree with some aspects of their characterization of DG-5033. Contrary to their assertions, in my view DG-5033 is clearly bounded by the adversary characteristics for the design basis threat of radiological sabotage at power reactors as described in Regulatory Guide 5.69 and consequently is fully consistent with the Commission's direction in SRM-SECY-07-0148, "Independent Spent Fuel Storage Installation Security Requirements for Radiological Sabotage."

Given the delays in the U.S. geologic repository program, it is likely that a large quantity of spent fuel will remain in interim storage, much of it in dry casks, for many decades to come. While UCS believes that the safety and security risks of dry cask storage are generally far smaller than the risks posed by dense-packed pool storage, this will depend on the development of stringent regulatory standards for ISFSI safety and security that will apply over extended time periods. The institution of a security regime for ISFSIs that is based on conservative and forward-thinking threat assumptions is a prudent action that will help to avoid the need to repeatedly upgrade ISFSI security features to cope with the steady increase in adversary capabilities over time. To this end, I believe that the Commission's requirement that DG-5033 be bounded by the current DBT for radiological sabotage of power reactors inappropriately limits the threats that should be considered in developing a protective strategy for ISFSIs. However, the staff has done a commendable job of identifying the plausible threats against ISFSIs that are contained within the power reactor sabotage DBT:

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As I have stated in previous remarks, UCS supports a regulatory approach that would require ISFSIs to be protected against the design basis threat of radiological sabotage, defined as “fuel damage,” and does not support an approach that would allow adversaries to cause some fuel damage provided that doses to the public remain below regulatory limits. I note that DG-5033 would be compatible with either a DBT-based or dose-based approach. In order to make DG-5033 relevant to a dose-based approach, however, NRC needs to document technically well-founded relationships between the methods of attack described in DG-5033 and the potential radiological releases that could result. Any analysis used to justify a defensive strategy other than “denial of access” will have to be based on well-validated methods.

Sincerely,

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