

REGULATORY ANALYSIS

REGULATORY GUIDE 5.69

“GUIDANCE FOR THE APPLICATION OF RADIOLOGICAL SABOTAGE DESIGN-BASIS THREAT IN THE DESIGN, DEVELOPMENT AND IMPLEMENTATION OF A PHYSICAL SECURITY PROGRAM THAT MEETS 10 CFR 73.55 REQUIREMENTS”

(Proposed Revision 1 of Regulatory Guide 5.69, dated September 2007)

1. Statement of the Problem

The U.S. Nuclear Regulatory Commission (NRC) published the initial version of Regulatory Guide (RG) 5.69, “Guidance for The Application of Radiological Sabotage Design-Basis Threat in the Design, Development and Implementation of a Physical Security Program that Meets 10 CFR 73.55 Requirements” in September of 2007. RG 5.69 provides specificity with regards to the characteristics and attributes of the design basis threat (DBT), as described in Section 73.1, “Purpose and Scope.” Licensees are required to protect against these attributes through the implementation of an effective physical protection program that meets the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 73, “Physical Protection of Plants and Materials.” Several changes are proposed for RG 5.69, including additional clarifying language regarding technical matters, the application of lessons learned from inspection activities and operating experience, administrative changes, clarification of rules, and current threat data.

2. Objective

The objective of this regulatory action is to update NRC guidance and provide licensees and applicants with a method that the NRC has found to be acceptable to meet appropriate NRC regulations. In accordance with 10 CFR 73.55(b)(2), each licensee must protect against the DBT of radiological sabotage as described in Section 73.1, and further, as stated in 10 CFR 73.55(b)(3), ensure that capabilities to detect, assess, interdict, and neutralize threats up to and including the DBT of radiological sabotage as stated in Section 73.1 are maintained at all times. The guidance in this RG provides licensees and applicants with information that supports the structured development of a physical protection program that protects against the DBT.

- Revisions to this RG include an expanded discussion on the characteristics and capabilities related to the adversary, active insider, vehicles, weapons, cyber, hand-carried equipment, and explosives.
- Additionally, the revision of this RG includes new references and consensus standards consistent with the NRC policy of evaluating the latest versions of national consensus standards to determine their suitability for endorsement by regulatory guides. This approach also will comply with the NRC’s Management Directive 6.5 – “NRC Participation in the Development and Use of Consensus Standards” (ML100600460). This is in accordance with Public Law 104-113, “National Technology Transfer and Advancement Act of 1995.”

Enclosure

3. Alternative Approaches

The NRC staff considered the following alternative approaches in the revision of RG 5.69:

1. Maintain the RG in present form.
2. Withdraw the RG.
3. Revise the RG.

Each of these options is discussed below.

Alternative 1: Maintain RG 5.69 in Present Form

Under this alternative, the NRC would not revise (or issue additional) guidance and the current guidance would be retained. This alternative is considered the “no-action” alternative and provides a baseline condition from which any other alternatives will be assessed. If the NRC does not take action, there would not be any change in cost or benefit to the public, licensees or the NRC. However, the “no-action” alternative would not make available the most current information and clarifications related to the DBT and lessons learned from regulatory oversight.

Alternative 2: Withdraw RG 5.69

Under this alternative, the NRC would withdraw this regulatory guide. Doing so would eliminate existing guidance for licensees and applicants to apply in developing an effective physical protection program that protects against the DBT as described in 10 CFR 73.1. It would also eliminate the only durable DBT guidance stakeholders need to inform the development of their physical protection program. Although this alternative may be less costly than to revise RG 5.69, the effect would be to eliminate a large portion of instrumental guidance that provides information necessary to develop and implement a physical protection program that protects against the DBT at nuclear power reactors.

Alternative 3: Revise RG 5.69

Under this alternative, the NRC would revise RG 5.69. This revision would incorporate the latest approved information, references, language, and supporting guidance since 2007. By doing so, the NRC would ensure that the guidance available is current and accurately reflects the staff's characterization of attributes of the DBT for nuclear power reactors in the current threat environment.

The impact to the NRC would be the costs associated with preparing and issuing the RG revision. The impact to the licensees would be the voluntary costs associated with reviewing and providing comments to the NRC during the stakeholder comment period, and the costs to licensees to evaluate the clarifications and ensure the continued effectiveness of their physical protection program. The value to the NRC staff and its applicants and licensees would be the benefits associated with the application of the clarification of DBT characteristics, which would result in a higher likelihood of adequate license applications and higher quality interactions

between the NRC and its regulated entities. This increase in quality would reduce effort for both staff, licensees and applicants due to the anticipated shortened review times and fewer requests for additional information.

4. Comparison of the Alternatives

For Alternative 1, the benefit would be that no agency resources would be committed to revising the RG. Licensees would continue to use current durable guidance with which many licensees are already familiar. Licensees would not incur costs to evaluate the continued effectiveness of their current physical protection program. However, RG 5.69 would not reflect the most current operating experience, lessons learned, references, and threat data since its issuance in 2007. As a result, staff guidance for licensees and applicants will not be made current until the next revision cycle, which may result in increased costs due to lengthened review times and increased requests for additional information.

For Alternative 2, withdrawing the guide could be done at very modest cost, but at great impact to licensees and applicants because other regulatory guidance on this subject is not available. In addition, the Commission, licensees and applicants (due to a lack of guidance), would be hampered by not having an acceptable description of the attributes of the DBT, to inform the development, implementation, and maintenance of an effective physical protection program that would meet the requirements of 10 CFR 73.55. This alternative would impact the ability of licensee and applicants to implement programs that would account for the attributes of DBT as described in 10 CFR 73.1.

For Alternative 3, the value to NRC staff and its licensees and applicants in revising the guide would be the benefits associated with providing the most current information related to the DBT, as detailed above. The impact on the NRC would be the expense associated with preparing and issuing the RG. The impact on the licensees would be the voluntary costs associated with reviewing and providing comments to the NRC during the stakeholder comment period, if applicable, and the costs to licensees to evaluate the clarifications and ensure the continued effectiveness of their physical protection program.

5. Conclusion

Based on this regulatory analysis, the NRC staff has concluded that RG 5.69 should be revised. The NRC staff concludes that the proposed action will afford clarity to licensees and applicants and provide the most current information available since the guide's original issuance. The NRC staff foresees a potential impact to licensees and applicants based upon a site-specific analysis as stipulated in 10 CFR 73.55(b)(4).