

Regulatory Guide Number: 5.68, Revision 0

Title: “Protection against Malevolent use of Vehicles at Nuclear Power Plants”

Office/Division/Branch: NSIR/DPCP/MWSB

Technical Lead: Bernard Stapleton

SUBJECT: Bases for Withdrawal

(1) What regulation(s) did the Regulatory Guide support?

Regulatory Guide (RG) 5.68, “Protection against Malevolent use of Vehicles at Nuclear Power Plants,” issued August 1994, describes methods that the U.S. Nuclear Regulatory Commission (NRC) staff considered acceptable for complying with the requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 73, “Physical Protection of Plants and Materials,” Sections 10 CFR 73.1(a)(1), “Radiological sabotage,” and 10 CFR 73.55 (c)(7), (8), (9) and (10).

The requirements in 10 CFR Part 73 with respect to the protection against malevolent use of vehicles at nuclear power reactors aimed to safeguard against sabotage that could cause a radiological release and/or prevent theft and diversion of special nuclear material. Additionally, 10 CFR 73.55 set forth security requirements for power reactors with respect to physical barriers, target sets, access controls, detection and assessment systems, communications, response, testing, compensatory measures and alternative measures that could be applied to vehicles.

(2) What was the purpose of the Regulatory Guide?

The purpose of RG 5.68 was to provide guidance to licensees that the NRC staff found acceptable to meet the requirements of 10 CFR 73.1(a)(1) and 73.55(c)(7), (8), (9), and (10). This regulatory guide was used by licensees in conjunction with separate Safeguards Information that has already been provided to affected licensees.

(3) How was the Regulatory Guide used?

The RG provided guidance for licensees/applicants when developing protective strategies and implementation of physical security measures that was acceptable to the NRC staff for implementing the requirements stated in 10 CFR Part 73, 10 CFR 73(a)(1) and 10 CFR 73.55 (c)(7), (8), (9) and (10) as it pertained to vehicle access controls and protection against malevolent use of vehicles.

(4) Why the Regulatory Guide is no longer needed?

RG 5.68 has been superseded by more recent regulatory guidance and is no longer needed due to the following regulatory and technical issues:

- On March 27, 2009, the NRC issued a revised rule for 10 CFR 73 that enhanced its security requirements pertaining to nuclear power plants. The revision incorporated requirements from Commission orders that were issued as a result of the September

11, 2001, terrorist attacks (74 FR 13925). In addition, the rulemaking added several new requirements consistent with insights gained from implementation of the Commission orders, review of site security plans, implementation of the enhanced baseline inspection program, and NRC evaluation of force-on-force exercises. RG 5.68 does not provide appropriate guidance for the updated requirements of 10 CFR Part 73. Instead, guidance may be found in the documents listed in the response to question (5) below.

- The rulemaking for 10 CFR 73 modified the format, numbering, and subject organization of 10 CFR Part 73. Thus, the requirements referenced in RG 5.68 are inconsistent with the current rule numbering. For example, RG 5.68 states, “10 CFR 73.55(c)(7) requires a licensee to establish vehicle control measures, including vehicle barriers, to protect against the use of a land vehicle, as specified by the Commission...” Paragraph 73.55(c) addresses “Security Plans” and 10 CFR 73.55(c)(7) does not address vehicle control measures, vehicle barriers, or protection against use of a land vehicle. These measures are now addressed in 10 CFR 73.55(e)(10), “Vehicle control measures.”
- RG 5.68 overlaps with the scope of RG 5.66, “Access Authorization Program at Nuclear Power Plants” (October 2011). As part of the power reactor security rule in March 2009, the NRC amended its regulations for access authorization in 10 CFR 73.56, “Personnel access authorization requirements for nuclear power plants.” RG 5.68 describes measures for ensuring authorized access for both vehicles and personnel. RG 5.66 superseded RG 5.68 with respect to access authorization and offers an acceptable approach by which licensees can establish and implement an access authorization program for granting unescorted access to protected and vital areas of a nuclear power plant, consistent with the requirements of 10 CFR 73.56.
- RG 5.68 overlaps with the scope of RG 5.76, “Physical Protection Programs at Nuclear Power Reactors” (July 2009). Specifically, RG 5.68 contains outdated discussions regarding uses of vehicles, protection of security equipment, vital and protected area transients, delays, and barriers. RG 5.76 superseded RG 5.68 with respect to the aforementioned topics.
- RG 5.68 addressed protective measures for protected and vital area structures that contain target sets. RG 5.81 supersedes RG 5.68 and provides additional information on what constitutes a target set and the measures required to protect such features.
- RG 5.68 does not address the interface between safety and security. This important relationship is now addressed within the scope of RG 5.74, “Managing the Safety/Security Interface” (April 2015) on the cross training of roles, responsibilities, and general practices of both organizations as a mechanism to reduce interface problems. RG 5.74 describes acceptable means for licensees to assess and manage changes to safety and security activities so as to prevent or mitigate potential adverse effects that could negatively impact either plant safety or security at power reactors, in addition to the recommendation of training to aid the interface between safety and security with respect to measures designed to protect activities which can include malevolent use of vehicles.

(5) What guidance is available once the Regulatory Guide is withdrawn?

Once RG 5.68 has been withdrawn, the following regulatory guides are available to offer licensees guidance on vehicle protection control measures at nuclear power plants:

- RG 5.54, “Standard Format and Content of Safeguards Contingency Plans for Nuclear Power Plants” (June 2009);
- RG 5.66, “Access Authorization Program at Nuclear Power Plants” (October 2011);
- RG 5.74, “Managing the Safety/Security Interface” (April 2015);
- RG 5.76, “Physical Protection Programs at Nuclear Power Reactors” (July 2009); and
- RG 5.81, “Target Set Identification and Development for Nuclear Power Plants” (November 2010).

Additional technical information can be found in:

- NUREG/CR-4250, “Vehicle Barriers: Emphasis on Natural Features” (July 1985);
- NUREG/CR-6190, “Protection Against Malevolent Use of Vehicles at Nuclear Power Plants,” Volumes 1 & 2 (March 2004);
- NUREG-1959, “Intrusion Detection Systems and Subsystems: Technical Information for NRC Licensees” (March 2011); and
- NUREG-1964, “Access Control Systems” (April 2011).

(6) Is the Regulatory Guide referenced in other documents and what are the “ripple effects” on these documents if it is withdrawn?

RG 5.68 is referenced in the power reactor Standard Review Plan, NUREG-0800, “Review of Safety Analysis Reports for Nuclear Power Plants,” Section 13.6.2, “Physical Security –Review of Physical Security Systems Designs-Standard Design Certification and Operating Reactor Licensing Applications,” and RG 1.206, “Combined License Applications for Nuclear Power Plants.” However, the guidance stated in the response to question (5) is available for use in licensing applications. References to RG 5.68 in other guidance documents will be removed as updates/revisions occur. Therefore, there are no “ripple effects” resulting from the withdrawal of RG 5.68.

(7) What is the basis for believing that no guidance similar to that in the Regulatory Guide will ever be needed?

The NRC is withdrawing the RG because it is outdated and has been superseded by updated guidance that can be found in other regulatory support documents, (i.e., RG 5.54, RG 5.66, RG 5.69, RG 5.74, RG 5.76, RG 5.81 and NUREG/CR-6190,

NUREG/CR-4250, NUREG-1959, and NUREG-1964). These documents provide licensees with acceptable approaches to address vehicle access controls, use of explosives, target set identification and the appropriate use of vehicles. Therefore, RG 5.68 is no longer needed, particularly since the information in the regulatory guide is outdated and no longer acceptable for use.

(8) Will generic guidance still be needed?

Yes. However, RG 5.68 is outdated and no longer considered a method that the NRC staff finds acceptable to meet the requirements stated in 10 CFR Part 73.1(a)(1) and 10 CFR 73.55 as it pertains to type of threat, adversary characteristics, design features, protective measures, and access controls. Instead, the topics addressed in the RG can be found in other guidance documents, as listed in the response to question (5). Additionally, the information contained in RG 5.68 has been superseded by the revised 10 CFR Part 73. The regulation was revised after issuance of RG 5.68 and specifically addresses aspects of malevolent use of vehicles not contained in RG 5.68.

(9) What is the rationale for withdrawing this Regulatory Guide instead of revising it?

The RGs listed in the response to question (5) contain updated information as it pertains to protection against malevolent use of vehicles at nuclear power plants. As a result, the staff has determined that RG 5.68 should be withdrawn rather than revised.

(10) Do other agencies rely upon the Regulatory Guide, e.g., the Agreement States, National Aeronautical and Space Administration, Department of Energy?

The staff is unaware of any other agency that uses or relies on the guidance included in RG 5.68.