Licensee-conducted FOF Exercises in CY 2021
Use of Regulatory Guide 5.75 During COVID-19 PHE

Public Meeting

December 3, 2020

Office of Nuclear Security and Incident Response

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Exemption Guidance Update

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- CY 2020 – NRC issued guidance on Oct. 13, 2020 (ADAMS Package Accession No. ML20273A058) to facilitate an expedited review for licensee exemption requests from the licensee-conducted annual force-on-force (FOF) exercise requirement in 10 CFR Part 73, Appendix B, Section VI, C.3(l)(1). NRC held a public meeting on October 15, 2020, (ADAMS Package Accession No. ML20293A539) to address questions on the guidance.

- CY 2021 - NRC issued guidance on November 10, 2020 titled, "U.S. Nuclear Regulatory Commission Updated Planned Actions Related to Certain Requirements for Operating and Decommissioning Reactor Licensees During the Coronavirus Disease 2019 Public Health Emergency" (ADAMS ML ML20261H515).
  - Enclosure 4 to the November 10, 2020 letter provides 10 CFR Part 73 informational needs associated with potential exemption requests

Exemption Guidance Update

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- The NRC staff expects that before requesting an exemption, a licensee will make reasonable attempts to meet regulatory requirements, including considering ways to conduct annual exercises with increased drill artificialities and simulations.

- The NRC staff understands that certain COVID-19 mitigation measures may result in increased numbers of drill artificialities and simulations during annual FOF exercises. Licensees may review Regulatory Guide 5.75, “Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities,” for guidance related to FOF exercise conduct specific to artificialities and simulations associated with personnel safety.

- Artificialities or simulations implemented due to COVID-19 should be identified in one of the following documents: planning guide; event matrix; or after-action report or summary reports, which can be provided to the NRC during inspection activities.

Implementation of Annual FOF Exercises during CY 2021

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- The annual FOF exercise (10 CFR Part 73, Appendix B, Section VI, C.3(l)(1)) enables the security force to gain experience in tactics, protective strategy, and assigned duties within the contingency response plan.

- Part 73, Appendix B, Section VI, Subsection A.7
  - Annual requirements may be completed up to three (3) months before or three (3) months after the scheduled date.

- Regulatory Guide 5.75, "Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities", provides guidance on exercise conduct. RG is one acceptable approach and not the only means of performing evolutions.
  - Simulations and Artificialities (Section 5.7)
  - Cautions and Restrictions (Section 5.8)

Case Study

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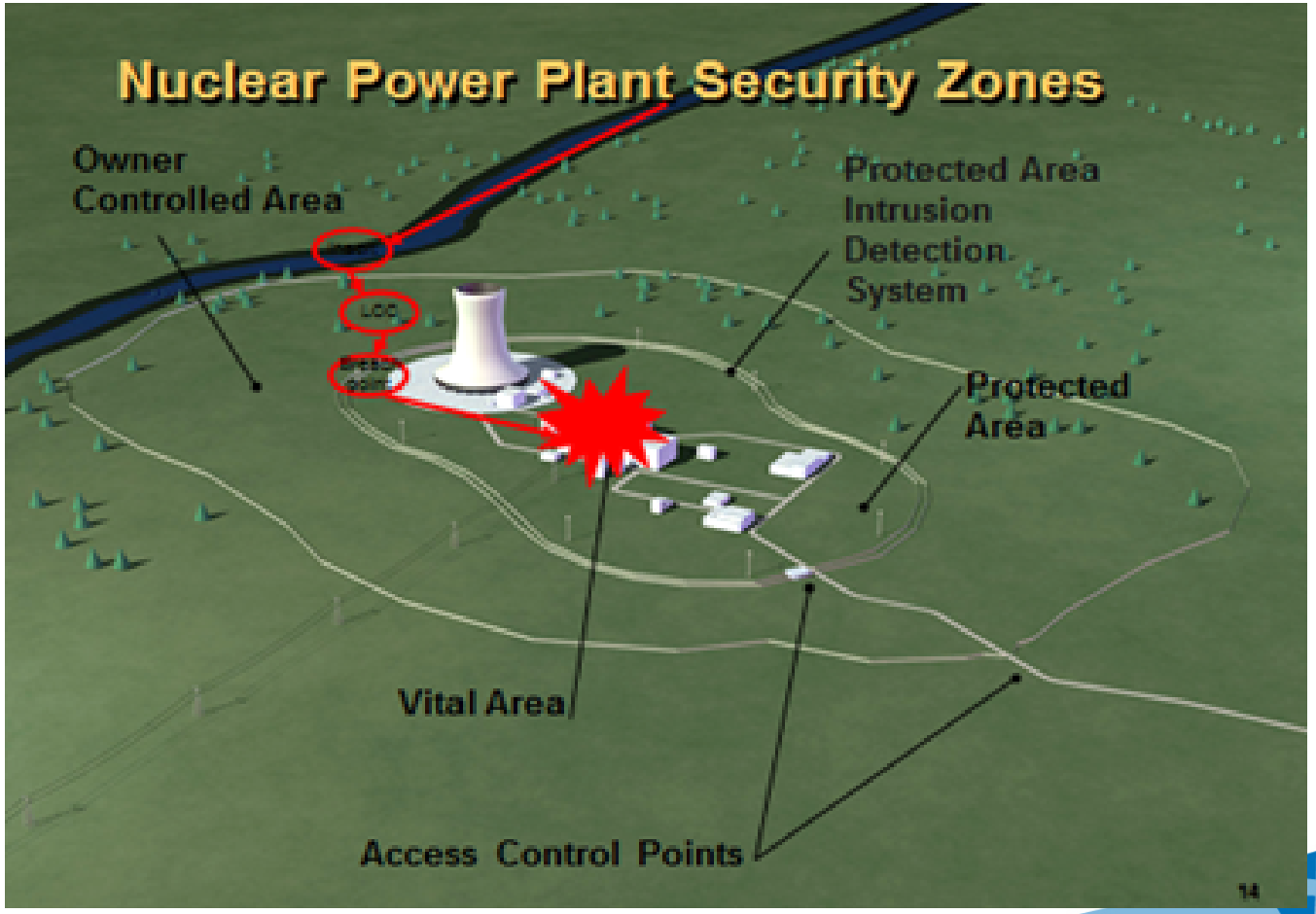

Implementation of Annual FOF Exercises during CY 2021

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- Recognize that circumstances associated with COVID-19 are dynamic
- Planning for CY 2021 annual exercises will be unique. Considerations may include:
  - Leveraging guidance as a tool for planning
  - Benchmarking with licensees who have conducted annual exercises
    - Compensatory measures for bullet resistant enclosures
    - Continued use of facial coverings where social distancing cannot be achieved
    - Limit time spent in groups (e.g., perform safety briefings via individual study, small-group briefings)
    - Prepositioning of responders
  - Using increased artificialities and simulations as needed to improve margin of safety to protect against spread of COVID-19

Implementation of Annual FOF Exercises during CY 2021

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- NRC understands that during the COVID-19 PHE, licensees may need to implement a FOF exercise program that contains increased simulations and artificialities on a temporary basis.
- NRC further expects that once the PHE has ended that any additional simulations and artificialities added due to COVID-19 will be removed to ensure the licensee's exercise program replicate actual plant conditions and eliminate any unnecessary simulations and artificialities.

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Questions

RG 5.75 Excerpts

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5.2 Types of Tactical Response Drills and Force-on-Force Exercises

(1) ***Fully integrated FOF exercises.*** These exercises consist of a planned response effort across various plant disciplines (e.g., local law enforcement agency (LLEA), security, plant operations, emergency preparedness) to minimize or mitigate the threat.

(2) ***Security response FOF exercises.*** These exercises involve the full security response force and a mock adversary force without a planned response effort across various plant disciplines (e.g., LLEA, plant operations, emergency preparedness) and focus primarily on security response.

(3) ***Limited scope FOF exercises.*** These exercises focus on the security response by using the minimum number of members of the response force and the mock adversary team sufficient to execute the scenario being tested. They should be a credible, realistic and thorough test of a portion of the site protective strategy and evaluate the key security program performance elements bounded by the DBT. The exercise provides scenario controls and exercise controllers and includes a post-exercise critique and required exercise documentation.

RG 5.75 Excerpts

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5.7 Simulations and Artificialities

Drill and exercise scenarios should be developed to challenge the execution of the protective strategy during a variety of environmental and plant conditions. To replicate these conditions, it may be necessary to incorporate certain artificialities into the drill or exercise scenarios. Plant conditions identified in the scenario may range from operating at power to refueling or other major maintenance activities. Environmental conditions identified in the scenarios should include time of day or night, and, if possible, the drill or exercise should be conducted during the time identified to address relative daylight or darkness and various conditions of security readiness. If no acceptable artificialities are available for use or it is unsafe to incorporate the conditions into the drill or exercise scenario, a tabletop method may be used to simulate that condition, consistent with the licensee's site-specific analysis for how that specific condition affects implementation of NRC requirements.

The scenario may also need to include other intricate artificialities to simulate actions and activities that cannot actually be performed for reasons of practicality and the safety of personnel and plant equipment. During scenario development, activities, such as the use of firearms with blank ammunition and the use of mock explosive devices, and the presence of drill or exercise participants in certain areas must be considered to ensure the continued safe operation of the plant and the safety of personnel. Drill and exercise scenarios should be developed to accommodate overall safety through the incorporation of acceptable artificialities to simulate the occurrence of these actions and activities (e.g., the inclusion of task times, timeouts, tabletop exercises). Simulations and artificialities may apply to both armed responders and mock adversaries and should be thoroughly integrated and accounted for during the planning process. To enable controllers to properly inject simulations and artificialities into the scenario and oversee the actions resulting from them, the licensee's drill and exercise scenario matrix should incorporate specific guidance for simulations and artificialities. The licensee should try to minimize the number of simulations and artificialities in the development of scenarios to ensure that each scenario provides an accurate performance standard.

RG 5.75 Excerpts

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5.8 Cautions and Restrictions

Certain areas of the plant, such as the control room and areas where work is ongoing, may be considered off limits to drill or exercise activity. Participants should receive this information at the drill or exercise briefing, along with details of how the activities will be simulated or affected by these areas being off limit to drill or exercise activity. In addition, the following should be treated with caution during drill and exercise planning:

(1) areas with sensitive plant equipment,

(2) personnel safety, and

(3) radiological controls.