

DRAFT RULE LANGUAGE – ACCESS AUTHORIZATION AND PHYSICAL PROTECTION FOR NUCLEAR POWER PLANT CONSTRUCTION

The Nuclear Regulatory Commission (NRC) is making available draft proposed rule language to amend its regulations. The proposal would amend requirements in §§ 50.34, 50.54, 52.79, 73.1, 73.52, and 73.58 of Title 10 of the *Code of Federal Regulations* (10 CFR) related to access authorization and physical protection for nuclear power plant construction activities under a construction permit or a combined license. Specifically, the NRC is proposing new provisions that apply during nuclear power plant construction. The new provisions would require (1) physical protection measures; (2) access authorization controls; (3) physical inspections; (4) performance of high-quality security sweeps; and (5) lockdown measures and procedures for securing the security- and safety-related structures, systems, and components before entering operation. The rule focuses on deterring and detecting malicious acts prior to the arrival of licensed material and the plant's transition into its operational phase.

The availability of the draft proposed rule language is intended to inform stakeholders of the current status of the NRC staff's rulemaking activities for access authorization and physical protection for nuclear power plant construction and solicit public comments on the provided information in preparation for a public workshop on this topic on August 27, 2010. The NRC will review and consider any comments received for information only; the NRC will not respond to any comments received at this pre-rulemaking stage. As appropriate, the Section-by-Section analysis for the proposed rule will briefly discuss any substantive changes made to the proposed rule language as a result of comments received. Once published as a proposed rule, stakeholders will have an opportunity to comment on the proposed rule language, and the NRC will respond to any such comments in the Section-by-Section analysis for the final rule. Point of contact for further information is R. Frederick Schofer, Office of New Reactors, telephone (301) 415-5682, e-mail: Fred.Schofer@nrc.gov or Brad Baxter, Office of Nuclear Security and Incident Response, telephone 301-415-6742, e-mail: Brad.Baxter@nrc.gov.

§ 50.34 Contents of applications; technical information.

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(j) Construction security plan.

(1) The requirements of paragraphs (j)(1)(i) through (j)(1)(iii) of this section apply to applicants for construction permits for nuclear power plants and the requirements of paragraph (j)(1)(iv) of this section apply to applicants who request the reinstatement of a construction permit for nuclear power plants in either a deferred or terminated plant status as follows:

(i) Applicants for a construction permit for a nuclear power plant under this part that do not have a docketed application after [INSERT EFFECTIVE DATE OF THE FINAL RULE] shall submit the written construction security plan required by § 73.52 of this chapter with the proposed implementation schedule and proposed milestones in their application.

(ii) Applicants for a construction permit for a nuclear power plant under this part that have a docketed application before [INSERT EFFECTIVE DATE OF THE FINAL RULE] shall amend their application to include a written construction security plan required by § 73.52 of this chapter with the proposed implementation schedule and proposed milestones no later than 6

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months after [INSERT EFFECTIVE DATE OF THE FINAL RULE].

(iii) Holders of a construction permit for a nuclear power plant under this part that have not received an operating license under this part before [INSERT EFFECTIVE DATE OF THE FINAL RULE] and do not meet the security boundary requirements contained within § 73.52(a)(3) of this chapter shall submit the written construction security plan and the proposed implementation schedule with proposed milestones as a separate submittal in accordance with 10 CFR 50.90 no later than 6 months after [INSERT EFFECTIVE DATE OF THE FINAL RULE].

(iv) Holders of a construction permit for a nuclear power plant which is in either deferred or terminated plant status before [INSERT EFFECTIVE DATE OF THE FINAL RULE] and does not meet the security boundary requirements contained within § 73.52(a)(3) of this chapter shall submit the written construction security plan required by § 73.52 of this chapter and the proposed implementation schedule with proposed milestones no later than 120 days before reactivating construction.

(2) Applicants who cannot meet the deadline identified in paragraph (j)(1) of this section must submit by the deadline date a request for an extension to the Director of the Office of Nuclear Reactor Regulation and demonstrate good cause for the request.

(3) The written construction security plan must describe:

(i) How the applicant will meet the requirements of 10 CFR 73.52;

(ii) A description of the implementation of the construction security plan; and

(iii) A description of the plan to transition from the construction security plan to the physical security plan required in 10 CFR 73.55.

§ 50.54 Conditions of licenses.

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(ii)(1) The licensee shall implement and maintain its written construction security plan in accordance with § 73.52 of this chapter. The licensee may not make a change which would decrease the effectiveness of the construction security plan without prior approval of the Commission. A licensee desiring to make this type of change shall submit an application for amendment to the license under § 50.90 of this part.

(2) The licensee may make changes to the plans referenced in paragraph (ii)(1) of this section without prior Commission approval if the changes do not decrease the effectiveness of the plan. The licensee shall maintain records of changes to the plans made without prior Commission approval and shall submit, as specified in § 50.4 of this part or § 52.3 of this chapter, a report containing a description of each change within 60 calendar days after the change is made.

(3) The licensee shall provide for the development, revision, implementation, and maintenance of its written construction security plan. The licensee shall ensure that all plan elements are reviewed by individuals independent of both security plant management and

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personnel who have direct responsibility for implementation of the construction security plan at intervals not to exceed 12 months.

(4) The results and recommendations of construction security plan reviews, management's findings regarding plan effectiveness, and any actions taken as a result of recommendations from prior plan reviews, must be documented in a report to the licensee's construction manager and to corporate management at least one level higher than that having responsibility for plan implementation. These reports must be maintained in an auditable form, available for inspection.

(5) The licensee shall track, trend, correct, and prevent recurrence of failures and deficiencies in the construction access authorization and physical protection program.

(6) Upon implementation of the physical security plan required by §73.55 of this chapter, the licensee shall transition from the construction security plan required by §73.52 of this chapter, to the physical security plan required by §73.55 of this chapter without prior NRC approval. The licensee must maintain a copy of the written construction security plan enforced when the construction security plan is terminated for no less than 3 years from the date of termination.

PART 52 - LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

§ 52.79 Contents of applications; technical information in final safety analysis report.

(a) * * *

(48)(i) A construction security plan describing how the applicant for a nuclear power plant will meet the requirements of 10 CFR 73.52.

(ii) A description of the implementation of the construction security plan.

(iii) A description of the plan to transition from the construction security plan to the physical security plan required in 10 CFR 73.55.

Part 73—PHYSICAL PROTECTION OF PLANTS AND MATERIALS

§ 73.1 Purpose and Scope.

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(b) * * *

(1) * * *

(i) The physical protection of production and utilization facilities licensed under parts 50 or 52 of this chapter including protection of nuclear power plants during construction,

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§ 73.52 Construction site access authorization and physical protection.

(a) *Scope and implementation.* (1) Applicants for an operating license for a nuclear power plant under part 50 of this chapter shall comply with the requirements of this section. Applicants for a combined license under part 52 of this chapter, and holders of a combined license issued before [INSERT EFFECTIVE DATE OF FINAL RULE] until the date that the Commission makes the finding under § 52.103(g) of this chapter shall comply with the requirements of this section as described below:

(i) Applicants for a combined license under part 52 of this chapter who do not have a docketed application before [INSERT EFFECTIVE DATE OF THE FINAL RULE] shall submit the construction security plan and the proposed implementation schedule with proposed milestones in their application.

(ii) Applicants for a combined license under part 52 of this chapter who have a docketed application before [INSERT EFFECTIVE DATE OF THE FINAL RULE] shall amend their application to include a construction security plan and the proposed implementation schedule with proposed milestones no later than 6 months after [INSERT EFFECTIVE DATE OF THE FINAL RULE].

(iii) Holders of a combined license issued before [INSERT EFFECTIVE DATE OF THE FINAL RULE] until the date that the Commission makes the finding under § 52.103(g) of this chapter that do not meet the security boundary requirements contained within § 73.52(a)(3) of this chapter shall submit the construction security plan and the proposed implementation schedule with proposed milestones in accordance with 10 CFR 50.90 no later than 6 months after [INSERT EFFECTIVE DATE OF THE FINAL RULE].

(iv) Applicants who cannot meet the deadline must submit by the deadline date a request for an extension to the Director of the Office of New Reactors and demonstrate good cause for the request.

(2) Assembly, modular fabrication, or other manufacturing facilities located outside of the owner-designated construction area are excluded from the requirements of this section.

(3) Licensees constructing security- or safety-related SSCs within an existing protected area of a nuclear power facility subject to the requirements of 10 CFR 73.55, are considered to have met the requirements of this section.

(4) Before the written construction security plan becomes effective, the licensee shall have:

(i) Access authorization and physical security capabilities specified in the written construction security plan implemented;

(ii) Detailed site specific security procedures developed and available at the licensee's construction site;

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(iii) All appropriate security and badged personnel in place, trained, and performing the functions as outlined in the written construction security plan and specified in the detailed site specific security procedures; and

(iv) A process for assessing and managing the safety / security interface requirements under § 73.58 of this section between a construction site co-located or adjacent to an operating nuclear power facility.

(b) *Construction Security Plan.* (1) The licensee's written construction security plan shall identify, describe, and account for site specific conditions that affect the capability to satisfy the requirements of this section.

(2) The licensee is responsible for maintaining the written construction security plan through the implementation of written construction security procedures.

(3) Upon the request of an authorized representative of the NRC, the licensee shall demonstrate the ability to meet NRC requirements through the implementation of the construction security plan, including the ability of personnel to perform assigned duties and responsibilities required by the construction security plan and licensee procedures.

(c) *General performance objectives.* (1) The objective of this section is to provide reasonable assurance that malicious acts during nuclear power plant construction cannot later reasonably result directly or indirectly in radiological sabotage as defined by 10 CFR 73.2.

(2) To achieve this performance objective the written construction security plan must be designed to:

(i) Deter malicious acts to security- and safety-related SSCs during construction; and

(ii) Detect malicious acts to security- and safety-related SSCs after the implementation of lockdown procedures required under paragraph (e)(2) of this section.

(3) To achieve these objectives the written construction security plan must provide:

(i) Implementation of physical security and access authorization measures before the placement of security- and safety-related SSCs in their final installed location within the controlled access construction area; and

(ii) Implementation of physical security measures and access authorization measures for transitioning to the security requirements under § 73.55 of this part,

(d) *Specific Security Requirements.* The licensee's construction site access authorization and physical protection programs must provide measures as specified in this subsection.

(1) *Personnel Access:* The licensee shall implement the following access security requirements consistent with paragraph (c)(3)(i) of this section:

(i) Reviewing Official(s).

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(A) The licensee shall designate a reviewing official who shall certify, grant, deny, unfavorably terminate, or maintain an individual's unescorted access based on an evaluation of all relevant information required by this section.

(B) The licensee shall determine that the reviewing official is trustworthy and reliable as defined in § 26.5 of this chapter to perform duties related to granting unescorted access.

(C) The reviewing official shall demonstrate knowledge of all aspects of the Personnel Access Policy and applicable fitness-for-duty program requirements impacting an individual's access authorization.

(D) The reviewing official shall review and evaluate all relevant information collected about an individual to determine whether the individual is trustworthy and reliable.

(ii) Access Requirements

(A) Pre-Access Screening Checks. The licensee shall perform pre-access screening checks of personnel and shall ensure that a trustworthiness and reliability determination of such individuals have been completed before granting access to areas with security and safety-related SSCs.

(1) Initial access. Before granting access to the areas with security and safety-related SSCs, the Reviewing Official shall ensure that the following measures are completed for each individual:

(i) Verify the identity of an individual to ensure that the applicant is the person that he or she has claimed to be through the compilation of information presented by the individual and other developed data. At a minimum, verify the individual's identity by comparing official photo identification (e.g., State-issued driver's license; a United States issued passport; identification card issued by a State or outlying possession of the United States if it contains a photograph; or a comparable foreign government identification card) with the physical characteristics of the individual.

(ii) Complete an NRC demographic data check. Demographic data shall be electronically submitted to the NRC and the results reviewed.

(iii) Personnel verified to have unescorted access for an operating plant may be granted access without completing the items listed in paragraphs (i) and (ii) of this section.

(iv) A visitor register shall be maintained. Visitors shall register their name, date, time, purpose of visit, employment affiliation, citizenship, and name of the individual to be visited. Visitors shall be escorted into all areas with security and safety-related SSCs.

(B) Maintaining construction site access.

(1) The licensee shall conduct a semiannual NRC demographic data check for all personnel that had access to areas with security and safety-related SSCs within the last 365 days. Demographic data shall be compiled by January 15 and July 15 of each calendar year and electronically submitted to the NRC within 10 calendar days.

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(2) Construction Worker Observation Policy. The licensee shall establish, implement, and provide all construction personnel a copy of the construction worker observation policy.

(i) Management and oversight personnel that are responsible for observing individuals who are subject to the policy shall report any concerns or violations to the reviewing official.

(ii) Observed aberrant behavior and events shall be reported to construction supervision and security for investigation. Reports and investigations shall be maintained for three years after transitioning to the security requirements under § 73.55 of this part.

(C) Site Badge Program. The licensee shall establish, implement, and provide a badge program. Identification badges with photographs shall be required to gain access to the areas with security- and safety-related SSCs. Badges must be visibly displayed at all times.

(1) Records shall be maintained for three years after transitioning to the security requirements under § 73.55 of this part. Records shall include at a minimum the name, date, and areas allowed access and which contained security- and safety-related SSCs.

(2) Badges shall be issued to visitors who are allowed access to areas with security and safety related SSCs. Visitor badges must clearly identify that the person is a visitor. The licensee shall use only authorized personnel to escort visitors within the controlled access construction area to provide visitor oversight.

(2) Physical security.

(i) Consistent with the requirements presented under paragraph (c)(3)(i) of this section, the licensee shall implement the following physical security requirements for the deterrence of the malicious acts stipulated in the general performance objectives under paragraph (c) of this section:

(A) Onsite surveillance at the nuclear reactor construction site;

(B) Assessment and reporting procedures for incidences of malicious acts during construction;

(C) A barrier to implement the access control requirements in paragraph (d)(2)(ii) of this section; and

(D) A construction site security force composed of personnel to implement measures in accordance with the construction security plan.

(ii) Access control requirements. The licensee shall have physical security measures in place to control access and channel personnel, vehicles, and materials to planned access portals into the controlled access construction area.

(iii) Search program requirements. The licensee shall establish a personnel, vehicle, and material search and inspection process to deter the introduction of unauthorized firearms, explosives, and incendiary devices and will meet the general performance objectives of

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paragraph (c) of this section.

(e) Transition. Consistent with the requirements presented under paragraph (c)(3)(ii) of this section, Licensees shall discontinue implementation of the requirements under 10 CFR 73.52 after implementation of the security requirements under § 73.55(a)(4) of this part. Before transitioning to the requirements under 10 CFR 73.55, the licensee shall perform the following actions:

(1) Security sweeps of controlled access construction area. The licensee shall, before implementing the requirements under § 73.55 of this part and before lockdown in accordance with paragraph (2) of this section, conduct security sweeps of safety and security-related SSCs to detect, at a minimum, unauthorized firearms, explosives, and incendiary devices and will meet the general performance objectives of paragraph (c) of this section.

(2) Lockdown of the controlled access construction area. The licensee shall ensure that controlled access construction areas are locked down after completion of security sweeps required by paragraph (1) of this section and before the implementation of the requirements under § 73.55 of this part. The lockdown shall assure the level of security achieved after completion of the security sweeps is maintained until the implementation of security requirements under § 73.55 of this part.

(f) Licensee notifications and documentation.

(1) The licensee shall notify the NRC by letter at least 60 days before:

(i) The scheduled onsite in-place setting, installing, or erecting of security- and safety-related systems or components where they will be operated and

(ii) The scheduled implementation of lockdown procedures including the commencement of security sweeps.

(2) The Commission may inspect, copy, retain, and remove all reports, records, and documents required to be kept by Commission regulations, orders, or license conditions, whether the reports, records, and documents are kept by the licensee or a contractor.

(3) The licensee shall maintain all records required to be kept by Commission regulations, orders, or license conditions, until the Commission terminates the license for which the records were developed, and shall maintain superseded portions of these records for at least three years after the transition to § 73.55 of this section, unless otherwise specified by the Commission.

(4) The licensee shall notify NRC of any detected malicious acts. The notification shall be by e-mail to hoo.hoc@nrc.gov, which is the preferred method of notification, by facsimile to the NRC Operations Center at 301-816-5151, or by telephone at 301-816-5100 within 24 hours following licensee determination that any person knowingly or willingly:

(i) Destroys, tampers with, or causes physical damage to nuclear plant structures, systems, or components during construction;

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(ii) Attempts or succeeds in bringing unauthorized firearms, explosives, incendiary devices or construction site restricted items onto the construction site, or

(iii) Trespasses; alters or criminally damages barriers required under §73.52(d)(2).

(5) Verification that the e-mail or facsimile was received should be made by calling the NRC Operations Center.

(6) Review and audit reports must be maintained and available for inspection, for a period of three years.

§ 73.58 Safety/Security Interface Requirements for Nuclear Power Reactors.

(a) Each nuclear power reactor licensee with a license issued under part 50 or 52 of this chapter shall comply with the requirements of this section.

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(c) The scope of changes to be assessed and managed must include planned and emergent activities (such as, but not limited to, physical modifications, procedural changes, changes to operator actions or security assignments, maintenance activities, construction, system reconfiguration, access modification or restrictions, and changes to the security plan and its implementation).

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