

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 50-271; NRC-2015-0034]**

**Entergy Nuclear Operations, Inc.**

**Vermont Yankee Nuclear Power Station**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a October 31, 2013, request from Entergy Nuclear Operations, Inc. (Entergy or the licensee), from certain regulatory requirements. The exemption would remove the requirement that a licensed senior operator approve the emergency suspension of security measures for Vermont Yankee Nuclear Power Station (VY) during certain emergency conditions or during severe weather.

**ADDRESSES:** Please refer to Docket ID **NRC-2015-0034** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2015-0034**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

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- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** James Kim, Office of Nuclear Reactor Regulation; U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-4125; e-mail: [James.Kim@nrc.gov](mailto:James.Kim@nrc.gov).

## I. Background.

Entergy is the holder of Renewed Facility Operating License No. DPR-28. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the NRC now or hereafter in effect. The facility consists of a boiling-water reactor located in Windham County, Vermont.

By letter dated January 12, 2015, (ADAMS Accession No. ML15013A426), Entergy submitted to the NRC the certification, in accordance with Section 50.82(a)(1)(i) and 50.82(a)(1)(ii) of Title 10 of the *Code of Federal Regulations* (10 CFR), indicating it

permanently ceased power operations and that the VY reactor vessel was permanently defueled.

## **II. Request/Action.**

On October 31, 2013 (ADAMS Accession No. ML13317A077), the licensee requested an exemption from 10 CFR 73.55(p)(1)(i) and 73.55(p)(1)(ii), pursuant to 10 CFR 73.5, "Specific exemptions." Section 73.55(p)(1)(i) and 73.55(p)(1)(ii) require, in part, that the suspension of security measures during certain emergency conditions or during severe weather be approved by a licensed senior operator. The exemption request relates solely to the licensing requirements specified in the regulations for the staff directing suspension of security measures in accordance with 10 CFR 73.55(p)(1)(i) and 73.55(p)(1)(ii), and would remove the requirement for a licensed senior operator to provide this approval. Instead, the exemption would allow the suspension of security measures during certain emergency conditions or during severe weather by a certified fuel handler (CFH). Portions of the letter dated October 31, 2013, contain sensitive unclassified nonsafeguards information (security-related) and, accordingly, have been withheld from public disclosure.

## **III. Discussion.**

Historically, the Commission's security rules have long recognized the potential to suspend security or safeguards measures under certain conditions. Accordingly, 10 CFR 50.54(x) and (y), first promulgated in 1983, allow a licensee to take reasonable steps in an emergency that deviate from license conditions when those steps are "needed to protect the public health and safety" and there are no conforming comparable measures. (48 FR 13970; April 1, 1983). As originally promulgated, the deviation from license conditions must be

approved by, as a minimum, a licensed senior operator. In 1986, in its final rule, “Miscellaneous Amendments Concerning the Physical Protection of Nuclear Power Plants” (51 FR 27817; August 4, 1986), the Commission promulgated 10 CFR 73.55(a), stating in part:

In accordance with § 50.54 (x) and (y) of Part 50, the licensee may suspend any safeguards measures pursuant to § 73.55 in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specification that can provide adequate or equivalent protection is immediately apparent. This suspension must be approved as a minimum by a licensed senior operator prior to taking the action.

In 1995, the Commission made a number of proposed rule changes to address decommissioning. Among the changes were new regulations that affected § 50.54 (x) and (y) by allowing a non-licensed operator called a “Certified Fuel Handler,” in addition to a licensed senior operator, to authorize protective steps. Specifically, in addressing the role of the CFH during emergencies, the Commission stated in the proposed rule, “Decommissioning of Nuclear Power Reactors” (60 FR 37379; July 20, 1995):

The Commission is proposing to amend 10 CFR 50.54(y) to permit a certified fuel handler at nuclear power reactors that have permanently ceased operations and permanently removed fuel from the reactor vessel, subject to the requirements of § 50.82(a) and consistent with the proposed definition of “Certified Fuel Handler” specified in § 50.2, to make these evaluations and judgments. A nuclear power reactor that has permanently ceased operations and no longer has fuel in the reactor vessel does not require a licensed individual to monitor core conditions. A certified fuel handler at a permanently shutdown and defueled nuclear power reactor undergoing decommissioning is an individual who has the requisite knowledge and experience to evaluate plant conditions and make these judgments.

In the final rule (61 FR 39298; July 29, 1996), the Commission added the following definition to 10 CFR 50.2: “*Certified fuel handler* means, for a nuclear power reactor facility, a non-licensed operator who has qualified in accordance with a fuel handler training program approved by the Commission.” However, the Decommissioning Rule did not propose or make

parallel changes to 10 CFR 73.55(a), and did not discuss the role of a non-licensed certified fuel handler.

In the final rule, "Power Reactor Security Requirements" (74 FR 13926; March 27, 2009), the NRC relocated and split the security suspension requirements from 10 CFR 73.55(a) to 10 CFR 73.55(p)(1)(i) and (p)(1)(ii). The CFHs were not discussed in the rulemaking, so the requirements of 10 CFR 73.55(p) to use a licensed senior operator remain, even for a site that otherwise no longer operates.

However, pursuant to 10 CFR 73.5, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 73, as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.

**A. The Exemption is Authorized by Law.**

The exemption from 10 CFR 73.55(p)(1)(i) and 10 CFR 73.55(p)(1)(ii) would remove the requirement that a licensed senior operator approve the suspension of security measures, under certain emergency conditions or severe weather. The licensee intends to align these regulations with 10 CFR 50.54(y) by using the authority of a non-licensed CFH in place of a licensed senior operator to approve the suspension of security measures during certain emergency conditions or during severe weather.

Per 10 CFR 73.5, the Commission is allowed to grant exemptions from the regulations in 10 CFR Part 73, as authorized by law. The NRC staff has determined that granting of the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or other laws. Therefore, the exemption is authorized by law.

**B. Will Not Endanger Life or Property or the Common Defense and Security.**

Removing the requirement to have a licensed senior operator approve suspension of

security measures during emergencies or severe weather will not endanger life or property or the common defense and security for the reasons described below.

First, 10 CFR 73.55(p)(2) continues to require that “[s]uspended security measures must be reinstated as soon as conditions permit.”

Second, the suspension for nonweather emergency conditions under 10 CFR 73.55(p)(1)(i) will continue to be invoked only “when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent.” Thus, the underlying purpose of 10 CFR 73.55(p)(1)(i) will continue to be to protect public health and safety even after the exemption is granted.

Third, the suspension for severe weather under 10 CFR 73.55(p)(1)(ii) will continue to be used only when “the suspension of affected security measures is immediately needed to protect the personal health and safety of security force personnel and no other immediately apparent action consistent with the license conditions and technical specifications can provide adequate or equivalent protection.” The requirement to receive input from the security supervisor or manager will remain. The underlying purpose of 10 CFR 73.55(p)(1)(ii) will continue to be to protect the health and safety of the security force.

Additionally, by letter dated October 1, 2014 (ADAMS Accession No. ML14162A209), the NRC approved Entergy’s CFH training and retraining program for the VY facility. The NRC staff found that, among other things, the program addresses the safe conduct of decommissioning activities, safe handling and storage of spent fuel, and the appropriate response to plant emergencies. Because the CFH is sufficiently trained and qualified under an NRC-approved program, the NRC staff considers a CFH to have sufficient knowledge of operational and safety concerns, such that allowing a CFH to suspend security measures during the emergencies or severe weather will not result in undue risk to public health and safety.

In addition, the exemption does not reduce the overall effectiveness of the physical security plan and has no adverse impacts to Entergy's ability to physically secure the site or protect special nuclear material at VY, and thus would not have an effect on the common defense and security. The NRC staff has concluded that the exemption would not reduce security measures currently in place to protect against radiological sabotage. Therefore, removing the requirement for a licensed senior operator to approve the suspension of security measures in an emergency or during severe weather, to allow suspension of security measures to be authorized by a CFH, does not adversely affect public health and safety issues or the assurance of the common defense and security.

**C. Is Otherwise in the Public Interest.**

Entergy's proposed exemption would remove the requirement that a licensed senior operator approve suspension of security measures in an emergency when "immediately needed to protect the public health and safety" or during severe weather when "immediately needed to protect the personal health and safety of security force personnel." Without the exemption, the licensee cannot implement changes to its security plan to authorize a CFH to approve the temporary suspension of security regulations during an emergency or severe weather, comparable to the authority given to the CFH by the Commission when it promulgated 10 CFR 50.54(y). Instead, the regulations would continue to require that a licensed senior operator be available to make decisions for a permanently shutdown plant, even though VY no longer requires a licensed senior operator. However, it is unclear how the licensee would implement emergency or severe weather suspensions of security measures without a licensed senior operator. This exemption is in the public interest for two reasons. First, without the exemption, there is uncertainty on how the licensee will invoke temporary suspension of security matters that may be needed for protecting public health and safety or the safety of the security forces during emergencies and severe weather. The exemption would allow the licensee to make

decisions pursuant to 73.55(p)(1)(i) & (ii) without having to maintain a staff of licensed senior operators. The exemption would also allow the licensee to have an established procedure in place to allow a trained CFH to suspend security measures in the event of an emergency or severe weather. Second, the consistent and efficient regulation of nuclear power plants serves the public interest. This exemption would assure consistency between the security regulations in 10 CFR Part 73 and the operating reactor regulations in 10 CFR Part 50, and the requirements concerning licensed operators in 10 CFR Part 55. The NRC staff has determined that granting of the licensee's proposed exemption would allow the licensee to designate an alternative position, with qualifications appropriate for a permanently shutdown and defueled reactor, to approve the suspension of security measures during an emergency to protect the public health and safety, and during severe weather to protect the safety of the security force, consistent with the similar authority provided by 10 CFR 50.54(y). Therefore, the exemption is in the public interest.

#### **D. Environmental Considerations.**

The NRC approval of the exemption to security requirements belongs to a category of actions that the Commission, by rule or regulation, has declared to be a categorical exclusion, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment. Specifically, the exemption is categorically excluded from further analysis under 10 CFR 51.22(c)(25).

Under 10 CFR 51.22(c)(25), granting of an exemption from the requirements of any regulation of Chapter I to 10 CFR is a categorical exclusion provided that (i) there is no significant hazards consideration; (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or



consequences from radiological accidents; and (vi) the requirements from which an exemption is sought involve: safeguard plans, and materials control and accounting inventory scheduling requirements; or involve other requirements of an administrative, managerial, or organizational nature.

The Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation, has determined that approval of the exemption request involves no significant hazards consideration because removing the requirement to have a licensed senior operator approve the security suspension at a defueled shutdown power plant does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. The exempted security regulation is unrelated to any operational restriction. Accordingly, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; and no significant increase in individual or cumulative public or occupational radiation exposure. The exempted regulation is not associated with construction, so there is no significant construction impact. The exempted regulation does not concern the source term (i.e., potential amount of radiation in an accident), nor mitigation. Thus, there is no significant increase in the potential for, or consequences of, a radiological accident. The requirement to have a licensed senior operator approve departure from security actions may be viewed as involving either safeguards, materials control, or managerial matters.

Therefore, pursuant to 10 CFR 51.22(b) and 51.22(c)(25), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request.

#### **IV. Conclusions.**

Accordingly, the Commission has determined that, pursuant to 10 CFR 73.5, the exemption is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, the Commission hereby grants the licensee's request for an exemption from the requirements of 10 CFR 73.55(p)(1)(i) and 73.55(p)(1)(ii), which otherwise would require suspension of security measures during emergencies and severe weather, respectively, to be approved by a licensed senior operator. The exemption is effective upon issuance.

Dated at Rockville, Maryland, this 12<sup>th</sup> day of February 2015.

For the Nuclear Regulatory Commission.

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Michele G. Evans, Director,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.