

NUCLEAR REGULATORY COMMISSION

Docket Nos. 50-247 and 50-286

Entergy Nuclear Operations, Inc.

Indian Point Nuclear Generating Unit Nos. 2 and 3

**Exemption Related to the Approval Authority for Suspension of Security Measures
in an Emergency or During Severe Weather**

I. Background.

Entergy Nuclear Operations, Inc. (Entergy, the licensee) is the holder of Renewed Facility Operating License Nos. DPR-26 and DPR-64 for Indian Point Nuclear Generating Units Nos. 2 and 3 (Indian Point 2 and 3). The licenses provide, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission), now or hereafter in effect. The Indian Point 2 and 3 facility consists of two pressurized-water reactors located in Buchanan, New York.

By letter dated February 8, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17044A004), the licensee submitted a Notification of Permanent Cessation of Power Operations for Indian Point 2 and 3. In this letter, Entergy provided notification to the NRC of its intent to permanently cease power operations at Indian Point 2 and 3 no later than April 30, 2020, and April 30, 2021, respectively, subject to operating extensions through, but not beyond, 2024 and 2025, respectively.

In accordance with title 10 of the *Code of Federal Regulations* (10 CFR) Sections 50.82(a)(1)(i) and (ii) and 50.82(a)(2), upon the docketing of the certifications for

permanent cessation of operations and the permanent removal of fuel from the reactor vessel, the 10 CFR Part 50 license no longer authorizes reactor operation or emplacement or retention of fuel in the reactor vessel. As a result, licensed senior operators (i.e., individuals licensed under 10 CFR Part 55 to manipulate the controls of a facility and to direct the licensed activities of licensed operators) will no longer be required to support plant operating activities. Instead, certified fuel handlers (CFHs) (i.e., non-licensed operators who have qualified in accordance with a fuel handler training program approved by the Commission) will perform activities associated with decommissioning and irradiated fuel handling and management. Commission approval of a fuel handler training program is needed to facilitate these activities.

By letter dated April 15, 2019 (ADAMS Accession No. ML19105A632), Entergy submitted a request for Commission approval of the CFH Training and Retraining Program for Indian Point 2 and 3. By letter dated December 18, 2019 (ADAMS Accession No. ML19333B868), the Commission approved the CFH Training and Retraining Program for Indian Point 2 and 3. The CFH Training and Retraining Program is to be used to satisfy training requirements for the plant personnel responsible for supervising and directing the monitoring, storage, handling, and cooling of irradiated fuel in a manner consistent with ensuring the health and safety of the public. As stated in 10 CFR 50.2, "Definitions," CFHs are qualified in accordance with a Commission-approved training program.

II. Request/Action.

The Commission's regulations at 10 CFR 73.55(p)(1) address the suspension of security measures in an emergency (10 CFR 73.55(p)(1)(i)) or during severe weather (10 CFR 73.55(p)(1)(ii)):

The licensee may suspend implementation of affected requirements of this section under the following conditions:

- (i) In accordance with §§ 50.54(x) and 50.54(y) of this chapter, the licensee may suspend any security measures under this section 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 specifications that can provide adequate or equivalent protection is immediately apparent. This suspension of security measures must be approved as a minimum by a licensed senior operator before taking this action.
- (ii) During severe weather 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. This suspension of security measures must be approved, as a minimum, by a licensed senior operator, with input from the security supervisor or manager, before taking this action.

By letter dated April 15, 2019 (ADAMS Accession No. ML19105B237), the licensee requested an exemption from 10 CFR 73.55(p)(1)(i) and (ii), pursuant to 10 CFR 73.5, "Specific exemptions." Consistent with 10 CFR 50.54(y), Entergy intends to have a CFH, in addition to a licensed senior operator, approve the suspension of security measures in an emergency or during severe weather at Indian Point 2 and 3.

III. Discussion.

The NRC's security rules have long recognized the potential need to suspend security or safeguards measures under certain conditions. Accordingly, 10 CFR 50.54(x) and (y), first published in 1983, allow a licensee to take reasonable actions in an emergency that depart from license conditions or technical specifications when those actions are immediately "needed to protect the public health and safety," and no actions consistent with license conditions and technical specifications that can provide adequate or equivalent protection are immediately apparent (48 FR 13970; April 1, 1983). As originally issued, the departure from license conditions or technical specifications must be approved, as a minimum, by a licensed senior operator. In 1986, in its final rule, "Miscellaneous Amendments Concerning the Physical Protection of

Nuclear Power Plants” (51 FR 27821; August 4, 1986), the Commission issued 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 1996, the NRC made a number of regulatory changes to address decommissioning. One of the changes was to amend 10 CFR 50.54(x) and (y) to authorize a non-licensed operator called a “certified fuel handler,” in addition to a licensed senior operator, to approve such protective actions in an emergency situation at a permanently shutdown facility. 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 NRC 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 CFH at a permanently shutdown facility.

In the final rule, “Power Reactor Security Requirements” (74 FR 13926; March 27, 2009), the NRC relocated the security suspension requirements from 10 CFR 73.55(a) to 10 CFR 73.55(p)(1)(i) and (ii). The role of a CFH was not discussed in the rulemaking; therefore, the suspension of security measures in accordance with 10 CFR 73.55(p) continues to require approval, as a minimum, by a licensed senior operator, even for a permanently shutdown facility.

Under 10 CFR 73.5, the Commission may, upon application of 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, will not endanger life or property or the common defense and security, and are otherwise in the public interest. As explained below, the proposed exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

A. The Exemption is Authorized by Law.

The proposed exemption from 10 CFR 73.55(p)(1)(i) and (ii) would remove the requirement that a licensed senior operator at Indian Point 2 and 3 approve the suspension of security measures under certain emergency conditions or severe weather. The licensee intends to use the authority of a non-licensed CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather. Although the exemption is effective upon receipt, the exemption may not be implemented at Indian Point 2 and 3 until the respective 10 CFR Part 50 license no longer authorizes operation of the reactor or the emplacement or retention of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2).

Per 10 CFR 73.5, the NRC may grant specific exemptions from the requirements of 10 CFR Part 73. Granting the proposed exemption is consistent with the Atomic

Energy Act of 1954, as amended, and not otherwise inconsistent with NRC regulations or other applicable laws. Therefore, the exemption is authorized by law.

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

The requested exemption would permit a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather at Indian Point 2 and 3 only when that respective reactor is permanently shut down and defueled. The NRC staff finds that the exemption will not endanger life or property or the common defense and security for the reasons discussed below.

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

Second, the suspension of security measures for emergencies 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 exemption would not prevent the licensee from meeting the underlying purpose of 10 CFR 73.55(p)(1)(i) to protect the public health and safety.

Third, the suspension of security measures 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 in 10 CFR 73.55(p)(1)(ii) to receive input from the security supervisor or manager will remain. Therefore, the exemption would not prevent the

licensee from meeting the underlying purpose of 10 CFR 73.55(p)(1)(ii) to protect the health and safety of the security force.

Additionally, by letter dated December 18, 2019 (ADAMS Accession No. ML19333B868), the NRC approved the Indian Point 2 and 3 CFH Training and Retraining Program. The NRC staff found that, among other things, the program addresses the safe conduct of decommissioning activities, the safe handling and storage of spent fuel, and the appropriate response to plant emergencies. Because a CFH at Indian Point 2 and 3 will be sufficiently trained and qualified under an NRC-approved program, the NRC staff considers the CFH to have sufficient knowledge of operational and safety concerns, such that allowing the CFH to suspend security measures in emergencies or during severe weather will not result in undue risk to the public health and safety.

In addition, since the exemption allows a CFH the same authority currently given to the licensed senior operator under 10 CFR 73.55(p)(1)(i) and (ii), no change is required to physical security. Since no change is required to physical security, the exemption would not reduce the overall effectiveness of the Indian Point 2 and 3 physical security plan and would not adversely impact the licensee's ability to physically secure the site or protect special nuclear material at Indian Point 2 and 3, and thus, would not have an adverse effect on the common defense and security. The NRC staff has determined that the exemption would not reduce security measures currently in place to protect against radiological sabotage. Instead, the exemption would align the requirements of 10 CFR 73.55(p)(1)(i) and (ii) with the existing requirements of 10 CFR 50.54(y).

For these reasons, granting the exemption from the requirements in 10 CFR 73.55(p)(1)(i) and (ii) and permitting a CFH, in addition to a licensed senior operator, to

approve the suspension of security measures in an emergency or during severe weather at Indian Point 2 and 3 when that respective reactor is permanently shut down and defueled will not endanger life or property or the common defense and security.

C. The Exemption is Otherwise in the Public Interest.

The proposed exemption would allow a CFH, in addition to a licensed senior operator, to approve the suspension of security measures in an emergency when “immediately needed to protect the public health and safety,” or during severe weather events when “immediately needed to protect the personal health and safety of security force personnel” at Indian Point 2 and 3 when that respective reactor is permanently shut down. If the exemption is not granted, Indian Point 2 and 3 will be required to have a licensed senior operator available to approve the suspension of security measures in an emergency or during severe weather for a permanently shutdown plant, even though there would no longer be an NRC requirement for Entergy to maintain a licensed senior operator at Indian Point 2 and 3 after the certifications required by 10 CFR 50.82(a)(1)(i) and (ii) are submitted respective to each reactor.

This exemption is in the public interest for the following reasons. Without the exemption, there would be uncertainty regarding how the licensee will invoke the temporary suspension of security measures that may be needed for protecting the public health and safety or the personal health and safety of the security force personnel in emergencies or during severe weather, given the differences between the requirements in 10 CFR 73.55(p)(1)(i) and (ii), and 10 CFR 50.54(y). The exemption would allow the licensee to make decisions pursuant to 10 CFR 73.55(p)(1)(i) and (ii) without having to maintain a staff of licensed senior operators at a nuclear power reactor that has permanently ceased operations and permanently removed fuel from the reactor vessel. The exemption would also allow the licensee to have an established procedure in place

to allow a CFH to suspend security measures in an emergency or during severe weather after the certifications required by 10 CFR 50.82(a)(1)(i) and (ii) have been submitted. Finally, the consistent and efficient regulation of nuclear power plants serves the public interest, and this exemption would ensure consistency between the regulations in 10 CFR Part 73 and 10 CFR 50.54(y) and the requirements concerning licensed operators in 10 CFR Part 55.

The NRC staff has determined that granting the proposed exemption would allow the licensee to designate a CFH with qualifications appropriate for a permanently shutdown and defueled reactor to approve the suspension of security measures in an emergency to protect the public health and safety and during severe weather to protect the personal health and safety of the security force personnel. The actions permitted by the exemption may be implemented at each Indian Point 2 and 3 unit separately when both the "Certification of Permanent Cessation of Operations" and the "Certification of Permanent Fuel Removal" for that respective reactor is submitted in accordance with 10 CFR 50.82(a)(1)(i) and (ii), which is consistent with the similar authority provided by 10 CFR 50.54(y). Therefore, the exemption is in the public interest.

D. Environmental Consideration.

The NRC's approval of the proposed exemption 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. Pursuant to 10 CFR 51.22(b), as determined by the Commission, an environmental assessment or an environmental impact statement is not required for any action within a category of actions included in the list of categorical exclusions set out in paragraph (c) of Section 51.22. Specifically,

the NRC's approval of the exemption is categorically excluded from further environmental analysis under 10 CFR 51.22(c)(25).

Under 10 CFR 51.22(c)(25), the 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: recordkeeping requirements; reporting requirements; inspection or surveillance requirements; equipment servicing or maintenance scheduling requirements; education, training, experience, qualification, requalification or other employment suitability requirements; safeguard plans, and materials control and accounting inventory scheduling requirements; scheduling requirements; surety, insurance or indemnity requirements; or other requirements of an administrative, managerial, or organizational nature.

The NRC staff has determined that granting the proposed exemption involves no significant hazards consideration because allowing a CFH, in addition to a licensed senior operator, to approve the security suspension at a permanently shutdown and defueled 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 proposed exemption 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 proposed exemption is not associated with construction, so there is no significant construction impact. The proposed exemption does not concern the source term (i.e., potential amount of radiation in an accident) or mitigation. Thus, there is no significant increase in the potential for or consequences from radiological accidents. Finally, the requirement regarding suspensions of security measures involves either safeguards, materials control, or managerial/organizational matters.

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

IV. Conclusion.

Accordingly, the Commission has determined that, pursuant to 10 CFR 73.5, the exemption is authorized by law, 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 (ii) to authorize that the suspension of security measures must be approved, as a minimum, by either a licensed senior operator or a CFH at Indian Point 2 and 3 during emergency or severe weather, once the respective unit's certifications required under 10 CFR 50.82(a)(1) have been submitted.

Dated at Rockville, Maryland, this 28th day of February, 2020.

For the Nuclear Regulatory Commission.

/RA/

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