



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 16, 2017

Mr. John A. Dent, Jr.
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION – APPROVAL OF REQUEST FOR
EXEMPTION FROM SPECIFIC PROVISIONS IN 10 CFR 73.55
(CAC NO. MF9274)

Dear Mr. Dent:

The U.S. Nuclear Regulatory Commission (NRC) has approved the enclosed exemption from specific requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 73, Sections 73.55(p)(1)(i) and 73.55(p)(1)(ii), for the Pilgrim Nuclear Power Station (PNPS). This action is in response to your application for an exemption dated February 7, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17045A468), to permit a certified fuel handler (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.

By letter dated November 10, 2015 (ADAMS Accession No. ML15328A053), the licensee submitted a Notification of Permanent Cessation of Power Operations for PNPS. In this letter, Entergy Nuclear Operations, Inc. (Entergy or the licensee), provided notification to the NRC of its intent to permanently cease power operations no later than June 1, 2019. After certifications of permanent cessation of power operations and permanent removal of fuel from the reactor vessel for PNPS are submitted in accordance with 10 CFR, 50.82(a)(1)(i) and (ii), the 10 CFR Part 50 license will no longer authorize reactor operation or placement or retention of fuel in the reactor vessel. As a result, licensed reactor operators will no longer be required to support plant operating activities. Instead, CFHs will perform activities associated with decommissioning and irradiated fuel handling and management.

Although the exemption is effective upon receipt, the actions permitted by the exemption may not be implemented at PNPS until both the "Certification of Permanent Cessation of Operations" and the "Certification of Permanent Fuel Removal" have been submitted in accordance with 10 CFR 50.82(a)(1) for PNPS.

J. Dent

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A copy of the exemption is enclosed. The exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

John G. Lamb, Senior Project Manager
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosure:
Exemption

cc: Listserv

SUBJECT: PILGRIM NUCLEAR POWER STATION – APPROVAL OF REQUEST FOR EXEMPTION FROM SPECIFIC PROVISIONS IN 10 CFR 73.55 (CAC NO. MF9274) DATED MAY 16, 2017

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ADAMS Accession Nos.: LTR: ML17059D763; Exemption FRN: ML17059D767 *via email

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ENCLOSURE

EXEMPTION

ENTERGY NUCLEAR OPERATIONS, INC.

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-293; NRC-2017-0076]

Entergy Nuclear Operations, Inc.; Pilgrim 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 February 7, 2017, request from Entergy Nuclear Operations, Inc. (Entergy or the licensee), from certain regulatory requirements. The exemption would allow a certified fuel handler (CFH), besides a licensed senior operator, to approve the emergency suspension of security measures for Pilgrim Nuclear Power Station (PNPS) during certain emergency conditions or during severe weather.

DATES: The exemption was issued on May 16, 2017.

ADDRESSES: Please refer to Docket ID NRC-2017-0076 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-2017-0076. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: 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):**

You may obtain publicly available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdresource@nrc.gov. The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that a document is referenced.

- **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: John G. Lamb, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-3100, e-mail: John.Lamb@nrc.gov.

I. Background

Entergy is the holder of Renewed Facility Operating License No. DPR-35 for PNPS. 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 PNPS facility consists of a boiling-water reactor located in Plymouth County, Massachusetts.

By letter dated November 10, 2015 (ADAMS Accession No. ML15328A053), the licensee submitted a Notification of Permanent Cessation of Power Operations for PNPS. In

this letter, Entergy provided notification to the NRC of its intent to permanently cease power operations no later than June 1, 2019.

In accordance with § 50.82(a)(1)(i) and (ii), and § 50.82(a)(2) of title 10 of the *Code of Federal Regulations* (10 CFR), the 10 CFR part 50 license for the facility will no longer authorize reactor operation, placement, or retention of fuel in the reactor vessel after certifications of permanent cessation of operations and of permanent removal of fuel from the reactor vessel are docketed for PNPS.

By letter dated April 12, 2017 (ADAMS Accession No. ML17058A325), the NRC approved the Certified Fuel Handler Training and Retraining Program for PNPS.

II. Request/Action

By letter dated February 7, 2017 (ADAMS Accession No. ML17045A468), the licensee requested an exemption from § 73.55(p)(1)(i) and (ii), pursuant to § 73.5, "Specific exemptions." Section 73.55(p)(1)(i) and (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. Entergy requested an exemption from these rules to allow either a licensed senior operator or a CFH to approve the suspension of security measures. There is no need for an exemption from these rules for a licensed senior operator because the current regulation allows the licensed senior operator to approve the suspension of security measures. The exemption request relates solely to the licensing requirements specified in the regulations for the staff directing suspension of security measures in accordance with § 73.55(p)(1)(i) and (ii), and would allow a CFH, besides a licensed senior operator, to provide this approval.

The proposed exemption would authorize that the suspension of security measures during certain emergency conditions or during severe weather must be approved as a minimum by either a licensed senior operator or a CFH, at a nuclear power plant reactor facility for which the certifications required under § 50.82(a)(1) have been submitted.

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 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 issued, 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 issued §73.55(a), which provides that 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 specifications that can provide adequate or equivalent protection is immediately apparent. The regulation further requires that this suspension be approved as a minimum by a senior licensed operator prior to taking action.

In 1996, the NRC made a number of regulatory changes to address decommissioning. One of the changes was to amend § 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 steps in an emergency situation. 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 § 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 § 73.55(a), and did not discuss the role of a non-licensed CFH.

In the final rule, “Power Reactor Security Requirements” (74 FR 13926; March 27, 2009), the NRC relocated the security suspension requirements from § 73.55(a) to § 73.55(p)(1)(i) and (ii). The role of a CFH was not discussed in the rulemaking, so the suspension of security measures in accordance with § 73.55(p) continued to require approval as a minimum by a licensed senior operator, even for a site that otherwise no longer operates.

However, pursuant to § 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 § 73.55(p)(1)(i) and (ii) would allow a CFH, besides a licensed senior operator, to approve the suspension of security measures, under certain emergency conditions or severe weather. The licensee intends to align these regulations with § 50.54(y) by using the authority of a CFH in place of a licensed senior operator to approve the suspension of security measures during certain emergency conditions or during severe weather.

Per § 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

Relaxing the requirement to allow a CFH, besides a licensed senior operator, to 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 in this section.

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

Second, the suspension for non-weather emergency conditions under § 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 § 73.55(p)(1)(i) to protect public health and safety even after the exemption is granted.

Third, the suspension for severe weather under § 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 exemption would not prevent the licensee from meeting the underlying purpose of § 73.55(p)(1)(ii) to protect the health and safety of the security force.

Additionally, by letter dated April 12, 2017, the NRC approved Entergy’s CFH training and retraining program for the PNPS 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 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 sites or protect special nuclear material at PNPS, 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, relaxing the requirement to allow a CFH, besides a licensed senior operator, to approve the suspension of security measures in an emergency or during severe weather, 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 relax the current requirements by allowing a CFH, besides a licensed senior operator, to 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 NRC when it published § 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 PNPS would no longer require a licensed senior operator after the certifications required by 10 CFR 50.82(a)(1)(i) and 10 CFR 50.82(a)(1)(ii) were submitted. This exemption is in the public interest for two reasons. First, the exemption would allow the licensee to make decisions pursuant to § 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 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 § 50.54(y), and the requirements concerning licensed operators in 10 CFR part 55. The NRC staff has determined that granting 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 § 50.54(y). Therefore, the exemption is in the public interest.

D. Environmental Considerations

The NRC's 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 § 51.22(c)(25).

Under § 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: 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 allowing a CFH, besides a licensed senior operator, to 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 § 51.22(b) and (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 (ii), to authorize that the suspension of security measures must be approved as a minimum by

either a licensed senior operator or a certified fuel handler, at a nuclear power plant reactor facility for which the certifications required under 10 CFR 50.82(a)(1) have been submitted. The exemption is effective upon receipt.

Dated at Rockville, Maryland, this 16th day of May 2017.

For the Nuclear Regulatory Commission.

A handwritten signature in black ink, appearing to read "Eric J. Benner". The signature is written in a cursive, flowing style.

Eric J. Benner, Deputy Director,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.