



[7590-01-P]

## NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-289 and 50-320; NRC-2018-0115]

Exelon Generation Company, LLC

Three Mile Island Nuclear Station, Units 1 and 2

Suspension of Security Measures in an Emergency or During Severe Weather

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption from regulatory requirements in response to an August 1, 2017, request from Exelon Generation Company, LLC (Exelon or the licensee). The exemption allows a certified fuel handler (CFH), besides a licensed senior operator, to approve the emergency suspension of security measures for Three Mile Island Nuclear Station (TMI), Units 1 and 2, during certain emergency conditions or during severe weather. Although the exemption is effective upon receipt, the actions permitted by the exemption may not be implemented until both the “Certification of Permanent Cessation of Operations” and the “Certification of Permanent Fuel Removal” have been submitted. While Exelon submitted a Certification of Permanent Cessation of Operations for TMI, Unit 1, the Certification of Permanent Fuel Removal has not yet been submitted. Since the TMI, Unit 2, license had already been modified to allow possession but not operation before the effective date of the rule requiring these certifications; the certifications have been deemed submitted.

**DATE:** The exemption was issued on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Please refer to Docket ID **NRC-2018-0115** 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-2018-0115**. Address questions about NRC dockets to Jennifer Borges; telephone: 301-287-9127; e-mail: [Jennifer.Borges@nrc.gov](mailto:Jennifer.Borges@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 [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document. In addition, for the convenience of the reader, the ADAMS accession numbers are provided in a table in the "Availability of Documents" section of this document.

- **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:** Justin C. Poole, Office of Nuclear Reactor Regulation; U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-2048; e-mail: Justin.Poole@nrc.gov.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

Exelon is the holder of Renewed Facility Operating License No. DPR-50 for TMI, Unit 1. 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. Exelon maintains the security planning responsibilities for TMI, Unit 2, through a service agreement with Unit 2's owner, First Energy Corporation. The TMI facility consists of pressurized-water reactors located in Dauphin County, Pennsylvania.

By letter dated June 20, 2017 (ADAMS Accession No. ML17171A151), the licensee submitted a Certification of Permanent Cessation of Operations for TMI, Unit 1. In this letter, Exelon provided notification to the NRC of its intent to permanently cease power operation at TMI, Unit 1, no later than September 30, 2019.

TMI, Unit 2, has a possession-only license. Unit 2 is currently maintained in accordance with the NRC-approved SAFSTOR condition known as post-defueling

monitored storage. This is a method in which a nuclear facility is placed and maintained in a condition that allows it to be safely stored and subsequently decontaminated.

In accordance with title 10 of the *Code of Federal Regulations* (10 CFR) 50.82(a)(1)(i) through (iii), and 10 CFR 50.82(a)(2), 10 CFR part 50 licenses for TMI will no longer authorize reactor operation, placement, or retention of fuel in the respective reactor vessel after certifications of permanent cessation of operations and permanent removal of fuel from the reactor vessel are docketed. It is expected that fuel will be permanently removed from TMI, Unit 1, by September 30, 2019.

By letter dated July 10, 2017 (ADAMS Accession No. ML17191A451), TMI requested NRC approval of its Certified Fuel Handler Training and Retraining Program. By letter dated December 29, 2017 (ADAMS Accession No. ML17228A729), the NRC approved the Certified Fuel Handler Training and Retraining Program for TMI.

## **II. Request/Action**

On August 1, 2017 (ADAMS Accession No. ML17213A097), Exelon requested an exemption from 10 CFR 73.55(p)(1)(i) and (ii) pursuant to 10 CFR 73.5. The proposed exemption would authorize that the suspension of security measures must be approved, as a minimum, by either a licensed senior operator or a CFH at TMI only after the certifications required under 10 CFR 50.82(a)(1) have been submitted.

The regulations in 10 CFR 73.55(p)(1)(i) and (ii) require, in part, that the suspension of security measures during emergencies or severe weather be approved by a licensed senior operator. Exelon requested an exemption from these rules to allow either a licensed senior operator or a CFH to approve the suspension of security measures during emergencies or severe weather.

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 10 CFR 73.55(a), stating in part:

In accordance with Section 50.54 (x) and (y) of Part 50, the licensee may suspend any safeguards measures pursuant to Section 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 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 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 Sec. 50.82(a) and consistent with the proposed definition of "Certified Fuel Handler" specified in Sec. 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.

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, so the suspension of security measures in accordance with 10 CFR 73.55(p) continue to require approval, as a minimum, by a licensed senior operator, even for a site that otherwise no longer operates.

### **III. Discussion**

Under 10 CFR 73.5, the Commission may, upon application by any interested person or upon its own initiative, grant an exemption from the requirements of 10 CFR part 73, when 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. As explained below, the proposed exemption is lawful, will not endanger life or property or the common defense and security, and is otherwise in the public interest.

A. *Authorized by Law*

The exemption would permit a CFH at TMI, besides a licensed senior operator, to approve the suspension of security measures during emergencies or severe weather. Although the exemption is effective upon receipt, the actions permitted by the exemption may not be implemented 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). While Exelon submitted a Certification of Permanent Cessation of Operations for TMI, Unit 1, the Certification of Permanent Fuel Removal has not yet been submitted. Per 10 CFR 50.82(a)(1)(iii), since TMI, Unit 2, had already modified its license to allow possession but not operation before the effective date of the rule, the certifications have been deemed submitted. The licensee intends to align these regulations with 10 CFR 50.54(y) by authorizing a CFH, in addition to a licensed senior operator, to approve the suspension of security measures during emergencies or severe weather.

Per 10 CFR 73.5, the NRC is authorized to grant specific exemptions from the requirements of 10 CFR part 73. Issuance of this 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. *Will Not Endanger Life or Property or the Common Defense and Security*

The NRC staff determined that the requested exemption would not endanger life or property, or the common defense and security. The requested exemption would permit a CFH, besides a licensed senior operator, to approve suspension of security measures during emergencies or severe weather. The NRC staff finds that the

exemption does not endanger life or property, or the common defense and security for the reasons discussed 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 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 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 29, 2017, the NRC approved Exelon’s Certified Fuel Handler Training and Retraining Program for TMI. 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 a 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, since the exemption request 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 physical security plan and would not adversely impact Exelon's ability to physically secure the site or protect special nuclear material at TMI, and thus, would not have an effect on the common defense and security. The NRC staff has concluded that the exemption does not reduce security measures currently in place to protect against radiological sabotage. Therefore, allowing a CFH, besides a licensed senior operator, to approve the suspension of security measures during an emergency or severe weather, will not endanger life, property, or the common defense and security.

*C. Otherwise in the Public Interest*

Exelon's proposed exemption would allow a CFH, besides a licensed senior operator, to approve suspension of security measures during an emergency when "immediately needed to protect the public health and safety" or 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 comparable to the authority given to the CFH under 10 CFR 50.54(y), which authorizes a CFH to approve the temporary suspension of security measures during an emergency or severe weather. If the exemption is not granted, TMI will be

required to have a licensed senior operator available to approve suspension of security measures during severe weather and emergencies for a permanently shutdown plant, even though TMI would no longer require a licensed senior operator after the certifications required by 10 CFR 50.82(a)(1)(i) and (ii) were submitted.

This exemption is in the public interest for two reasons. First, without the exemption, there is uncertainty regarding how the licensee will invoke temporary suspension of security measures that may be needed for protecting public health and safety or the safety of the security force during emergencies and severe weather given the inconsistencies 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. 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 10 CFR 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 a CFH with qualifications appropriate for a permanently shutdown and defueled reactor, to approve the suspension of security measures during an emergency. This role of the CFH to protect the public health and safety, and during severe weather to protect the safety of the security force, 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 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), the granting of an exemption from the requirements of any regulation of chapter 10 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 Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation, has determined that the granting 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 is viewed as involving safeguards, materials control, and managerial 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 this exemption request.

#### **IV. Conclusions**

The NRC has determined that, pursuant to 10 CFR 73.5, this 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 certified fuel

handler at TMI during emergency or severe weather, once the certifications required under 10 CFR 50.82(a)(1) have been submitted.

The exemption is effective upon receipt.

**V. Availability of Documents**

The documents identified in the following table are available to interested persons.

Title	Date	ADAMS Accession No.
Exelon letter to NRC, "Certification of Permanent Cessation of Power Operations for Three Mile Island Nuclear Station, Unit 1"	6/20/2017	ML17171A151
Exelon letter to NRC, Three Mile Island Nuclear Station, Unit 1, "Request for Approval of Certified Fuel Handler Training Program"	7/10/2017	ML17191A451
Exelon letter to NRC, Three Mile Island Nuclear Station, Units 1 and 2, "Request for Exemption from Specific Provisions in 10 CFR 73.55(p)(1)(i) and (p)(1)(ii) Related to the Suspension of Security Measures in an Emergency or During Severe Weather"	8/01/2017	ML17213A097
NRC letter to Exelon, "Three Mile Island Nuclear Station, Unit 1 – Approval of Certified Fuel Handler Training and Retraining Program"	12/29/2017	ML17228A729

Dated at Rockville, Maryland, this 7<sup>th</sup> day of June, 2018.

For the Nuclear Regulatory Commission.

Joseph G. Giitter, Director,  
 Division of Operating Reactor Licensing,  
 Office of Nuclear Reactor Regulation.

[FR Doc. 2018-12652 Filed: 6/12/2018 8:45 am; Publication Date: 6/13/2018]