

POLICY ISSUE
(Notation Vote)

May 31, 2018

SECY-18-0062

FOR: The Commissioners

FROM: Victor M. McCree
Executive Director for Operations

SUBJECT: REQUEST BY THE EXELON GENERATION COMPANY, LLC FOR
EXEMPTIONS FROM CERTAIN EMERGENCY PLANNING
REQUIREMENTS FOR THE OYSTER CREEK NUCLEAR GENERATING
STATION

PURPOSE:

The purpose of this paper is to request Commission approval of Exelon Generation Company, LLC's (Exelon) request for exemptions from certain emergency planning (EP) requirements of Part 50, "Domestic Licensing of Production and Utilization Facilities," to Title 10, "Energy," of the *Code of Federal Regulations* (10 CFR). Exelon's proposed exemptions would reduce the EP requirements placed by the U.S. Nuclear Regulatory Commission (NRC) on the licensee commensurate with the permanent cessation of operations and permanent removal of spent fuel from the reactor vessel to the spent fuel pool (SFP) at the Oyster Creek Nuclear Generating Station (OCNGS) site. The proposed exemption, if approved, would eliminate the requirement for the licensee to maintain formal offsite radiological emergency preparedness plans, but would still require the licensee to maintain certain onsite capabilities to communicate and coordinate with offsite response authorities. This paper does not address any new commitments or resource implications.

BACKGROUND:

The EP requirements of 10 CFR 50.47, "Emergency plans," and Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," to 10 CFR Part 50

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continue to apply to a nuclear power reactor after certification of permanent cessation of operations and removal of fuel from the reactor vessel under 10 CFR 50.82(a)(1).

However, the regulations in 10 CFR 50.12(a)(2)(ii) provide that the NRC may, upon request by a licensee or on its own initiative, grant exemptions from the requirements of the regulations in 10 CFR Part 50 when application of the regulation would not serve or is not necessary to achieve the underlying purpose of the rule. In the staff requirements memorandum to SECY-08-0024, "Delegation of Commission Authority to Staff to Approve or Deny Emergency Plan Changes That Represent a Decrease in Effectiveness," dated May 19, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML081400510), the Commission directed that the staff should request Commission approval for any reduction in effectiveness of a licensee's emergency plan that requires an exemption from the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. Consistent with this Commission direction, this paper seeks Commission approval of Exelon's requested exemptions from certain EP requirements for OCNGS.

DISCUSSION:

By letter dated January 7, 2011 (ADAMS Accession No. ML110070507), Exelon certified to the NRC that it planned to permanently cease power operations at OCNGS no later than December 31, 2019, in accordance with 10 CFR 50.82(a)(1)(i) and 10 CFR 50.4(b)(8). Upon the NRC's docketing of Exelon's certification that all fuel has been permanently removed from the OCNGS reactor vessel and placed into the OCNGS SFP, pursuant to 10 CFR 50.82(a)(2), the 10 CFR Part 50 license for OCNGS will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel.

By letter dated August 22, 2017 (ADAMS Accession No. ML17234A082), as supplemented by letters dated December 6, 2017, March 8, 2018, and March 19, 2018 (ADAMS Accession Nos. ML17340A708, ML18067A087 and ML18078A146, respectively), Exelon requested exemptions from specific portions of 10 CFR 50.47 and Appendix E to 10 CFR Part 50 for OCNGS.

On February 2, 2018, Exelon announced that it now plans to retire OCNGS in 2018 at the end of its current operating cycle. By letter dated February 14, 2018 (ADAMS Accession No. ML18045A084), Exelon notified the NRC of its plans to permanently cease operations at OCNGS no later than October 31, 2018.

To establish a level of EP commensurate with the risk of a radiological emergency at a decommissioning power reactor site, licensees typically request exemptions from certain EP requirements early in the decommissioning process. The NRC reviews each request on a case-by-case basis and grants exemptions only after conducting a thorough analysis of each request. Historically, given the significant reduction in radiological risk as a licensee transitions from an operating reactor site to a decommissioning site, the NRC has approved exemptions from certain EP requirements based on site-specific evaluations and the objectives of the regulations. Between 1987 and 1999, the NRC issued exemptions from certain EP requirements for 10 licensees. More recently, exemptions from certain EP requirements have been granted for the Kewaunee Power Station; Crystal River Nuclear Power Station, Unit 3; San Onofre Nuclear Generating Station, Units 2 and 3; Vermont Yankee Nuclear Power Station; and Fort Calhoun Station, Unit 1.

The staff developed and issued an Office of Nuclear Security and Incident Response (NSIR), Division of Preparedness and Response (DPR) Interim Staff Guidance (ISG) document,

NSIR/DPR-ISG-02, "Emergency Planning Exemption Requests for Decommissioning Nuclear Power Plants" (ADAMS Accession No. ML14106A057) on May 11, 2015. This ISG provides guidance to NRC staff for its technical review of requests for exemptions from certain EP requirements for nuclear power reactors that have been permanently shut down and defueled or are planning to transition to decommissioning.

Evaluation of EP Exemptions

In evaluating Exelon's proposed exemptions, the staff reviewed the recent EP exemptions granted for decommissioning nuclear power reactors, recent SFP studies, SFP mitigation strategies, and hostile action-based event considerations, which are discussed in Enclosure 1, "Historical Perspective and Staff Evaluation Considerations." The staff also performed a technical evaluation of Exelon's requested exemptions using the evaluation criteria specified in Section 5, "Evaluation of Exemptions to EP Regulations," to NSIR/DPR-ISG-02. The outcome of this evaluation, as well as the staff's evaluation of Exelon's requested exemptions against the requirements in 10 CFR 50.47, Appendix E to 10 CFR Part 50, and 10 CFR 72.32, "Emergency Plan," are detailed in Enclosure 2, "Evaluation of Exelon Generation Company, LLC's Request for Exemptions From Certain Emergency Planning Requirements for the Oyster Creek Nuclear Generating Station."

Based on its evaluation, the staff concluded that granting the requested exemption to Exelon would provide reasonable assurance that: (1) an offsite radiological release will not exceed the limits of the U.S. Environmental Protection Agency's early phase protective action guide of one roentgen equivalent man at the site's exclusion area boundary for remaining applicable design-basis accidents (DBA); and (2) in the unlikely event of a beyond-DBA resulting in a loss of all SFP cooling, there would be sufficient time to initiate appropriate SFP mitigating actions and, if a release is projected to occur, there is sufficient time for offsite agencies to take protective actions to protect the health and safety of the public using a comprehensive, "all-hazards," emergency management plan.¹

Federal Emergency Management Agency Consultation

Consistent with the December 7, 2015, "Memorandum of Understanding Between the Department of Homeland Security/Federal Emergency Management Agency and Nuclear Regulatory Commission Regarding Radiological Response, Planning and Preparedness" (ADAMS Accession No. ML15344A371), on March 8, 2018, the staff documented the transmittal to Federal Emergency Management Agency (FEMA), by electronic mail, a draft of this SECY paper and the opportunity to ask questions, obtain clarification, and comment on the paper (ADAMS Accession No. ML18032A656), before the Commission received it for review. Also provided to FEMA by reference in the above letter was the Administrative Consent Order executed between Exelon and the State of New Jersey Department of Environmental Protection, which was provided to the NRC by Exelon in a letter dated January 23, 2018 (ADAMS Accession No. ML18023A138).

¹ A comprehensive emergency management plan in this context, also referred to as an emergency operations plan, is addressed in the Federal Emergency Management Agency's (FEMA) Comprehensive Preparedness Guide 101, "Developing and Maintaining Emergency Operations Plans," Version 2.0, dated November 2010. https://www.fema.gov/media-library-data/20130726-1828-250450014/cpg_101_comprehensive_preparedness_guide_developing_and_maintaining_emergency_operations_plans_2010.pdf.

In a letter dated April 2, 2018 (ADAMS Accession No. ML18093A071), FEMA provided comments on offsite radiological emergency preparedness considerations, which are summarized in Enclosure 1.

CONCLUSION:

The NRC staff concludes that granting the exemption request, as justified in Enclosure 2, would provide: (1) an adequate basis for an acceptable state of emergency preparedness; and (2) assurance that adequate protective measures can and will be taken in the highly unlikely event of a radiological emergency at OCNGS.

The NRC staff has determined that pursuant to 10 CFR 50.12, "Specific exemptions," the exemptions described in the enclosure are authorized by law, will not present an undue risk to the public health and safety, and will be consistent with the common defense and security, and special circumstances are present.

RECOMMENDATION:

The NRC staff recommends that the Commission approve Exelon's requested exemptions from certain EP requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50.

COORDINATION:

The Office of the General Counsel reviewed this paper and has no legal objection.

/RA/

Victor M. McCree
Executive Director for
Operations

Enclosures:

1. Historical Perspective and Staff Evaluation Considerations
2. Evaluation of Exelon Generation Company, LLC's Request for Exemptions from Certain Emergency Planning Requirements for The Oyster Creek Nuclear Generating Station

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ADAMS ACCESSION No.: ML18030B340 (**Package**) ML18030B359 (**SECY Paper**);
 ML18030B362 (**Enclosure 1**) ML18030B363 (**Enclosure 2**)

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