

## **NRR-PMDAPem Resource**

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**From:** Lamb, John  
**Sent:** Wednesday, November 15, 2017 11:40 AM  
**To:** 'david.helker@exeloncorp.com'  
**Cc:** Richard.Gropp@exeloncorp.com; Bonnett, Frederick Paul:(GenCo-Nuc); Anderson, Joseph; Norris, Michael; Arce, Jeannette; Kinard, Richard; Jones, Steve; Curran, Gordon  
**Subject:** OYSTER CREEK NUCLEAR GENERATING STATION - REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR EMERGENCY PLAN EXEMPTION (CAC NO. MG0153; EPID L-2017-LLE-0020)

**Importance:** High

Dear Mr. Helker:

By letter dated January 7, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML 110070507), Exelon Generation Company, LLC (Exelon or the licensee), submitted its Notification of Permanent Cessation of Power Operations for Oyster Creek Nuclear Generating Station (OCNGS). In this letter, Exelon provided notification to the U.S. Nuclear Regulatory Commission (NRC) of its intent to permanently cease power operation no later than December 31, 2019.

By letter dated August 22, 2017 (ADAMS Accession No. ML 17234A082), Exelon submitted an exemption from specific emergency planning requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 for OCNGS. The exemption request has been reviewed against the requirements in 10 CFR 50.47, "Emergency plans," and Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities," using the guidance provided in Interim Staff Guidance (ISG) NSIR/DPR-ISG-02, "Emergency Planning Exemption requests for Decommissioning Nuclear Power Plants" (ADAMS Accession No. ML14106A057). The review considered the storage of the spent nuclear fuel in the spent fuel pool (SFP) and the onsite independent spent fuel storage installation, and the low likelihood of any credible accident resulting in radiological releases requiring offsite protective measures. The NRC staff has determined additional information is required to enable the NRC staff to make an independent assessment regarding its technical review.

The enclosure to this email provides the request for additional information (RAI). On November 8, 2017, the draft RAI questions were sent to Messrs. , Richard Gropp, and Paul Bonnet of your staff to ensure that they were understandable, the regulatory bases for the questions were clear, and to determine if the information was previously docketed. A teleconference was held on November 15, 2017, with Messrs. Paul Bonnett and Richard Gropp of your staff to clarify the RAI questions. Exelon stated they would respond to the RAI within 30 days of the date of this email.

If you have any questions, please contact me at 301-415-3100 or via e-mail at [John.Lamb@nrc.gov](mailto:John.Lamb@nrc.gov).

Sincerely,

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

Docket No. 50-219

Enclosure:

**ENCLOSURE**

REQUEST FOR ADDITIONAL INFORMATION  
EXEMPTION FROM THE REQUIREMENTS OF 10 CFR 50.47  
AND APPENDIX E TO 10 CFR PART 50  
EXELON GENERATION COMPANY, LLC.  
OYSTER CREEK NUCLEAR GENERATING STATION  
DOCKET NO. 50-219

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NOTE: In the following requests for additional information (RAIs), bold strike out text indicates the requested exemption from rule language.

**RAI-OCNGS-1**

Attachment 1, Section 3.0, "Basis for Exemption Request," states, in part, that:

Exelon has performed an analysis indicating that 12 months after permanent cessation of power operations, the spent fuel in the SFP will have decayed to the extent that the requested exemptions can be implemented at OCNGS without any compensatory measures.

Please clarify what is meant by the statement "without any compensatory measures."

**RAI-OCNGS-2**

The exemption of item 1 in Table 1 (Attachment 1) states:

10 CFR 50.47(b) The onsite ~~and, except as provided in paragraph (d) of this section, offsite~~ emergency response plans for nuclear power reactors must meet the following standards:

In the basis for exemption OCNGS states, in part, that:

Several systems will be available to provide makeup water to the SFP, such as Torus water, Firewater, and portable FLEX and B.5.b pumps. These systems provide diversity with electrical driven pumps, installed diesel and portable diesel pumps. Water sources are from various tanks, fire pond, and intake or discharge canal water.

OCNGS maintains procedures and strategies for the movement of any necessary portable equipment that will be relied upon for mitigating the loss of SFP water. These mitigative strategies are maintained in accordance with License Condition 2.C.(8) of the OCNGS Renewed Facility Operating License. These diverse strategies provide defense-in-depth and ample time to provide makeup water or spray to the SFP prior to the onset of zirconium cladding ignition when considering very low probability beyond design basis events affecting the SFP.

Please provide additional details regarding the diverse mitigation strategies, to include the identification of the on-shift personnel designated for carrying out the necessary tasks and the timeframe for implementation of these diverse mitigation strategies.

### RAI-OCNGS-3

The exemption of item 13 in Table 1 (Attachment 1) states:

~~10 CFR 50.47(c)(2) Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.~~

In the basis for exemption OCNGS states, in part, that:

OCNGS is not a gas cooled reactor and is not authorized for power operation.

The staff does not exempt a decommissioning reactor licensee from the following regulation as it is not applicable.

The size of the emergency planning zones (EPZs) also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 megawatt (MW) thermal.

Please clarify why OCNGS is requesting an exemption from regulations that are currently not applicable, or revise accordingly.

### RAI-OCNGS-4

The exemption of item 8 in Table 2 (Attachment 1) states:

#### A. Organization

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It is unclear to the staff whether or not an exemption is requested for Appendix E, Section IV.7.A of 10 CFR Part 50. Please clarify exact regulation wording to be retained and which is being requested for exemption.

## RAI-OCNGS-5

The exemption of item 14 in Table 2 (Attachment 1) states:

A.7. ~~By June 23, 2014, [I]dentification of, and a description of~~ the assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including ~~hostile action at the site. For purposes of this appendix, "hostile action" is defined as~~ an act directed toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.

In the basis for exemption OCNGS states, in part, that:

OCNGS will maintain appropriate actions for the protection of onsite personnel in a security-based event. The scope of protective actions will be appropriate for the defueled plant status, but will not be the same as actions necessary for an operating power plant.

Please provide further discussion on what the scope of protective actions are for onsite personnel in a defueled status versus an operating plant for a security-based event.

## RAI-OCNGS-6

In the basis for exemption of item 23 in Table 2 (Attachment 1), OCNGS states, in part, that:

OCNGS proposes to complete emergency notifications within 60 minutes after the availability of indications to operators that an emergency action level (EAL) threshold has been reached.

New Jersey Emergency Management officials have been able to review and concur with this proposal. The State will provide a letter with the Emergency Plan submittal acknowledging the notification period.

The letter from the State of New Jersey that was provided with the referenced submittal stated in part:

The Bureau of Nuclear Engineering (BNE) provided comments regarding the proposed changes contained in the above documents on August 21, 2017, and met with Exelon on August 25, 2017, to discuss these comments. The Bureau will review the final submittal after it is filed with the NRC and determine if further comments are warranted at that time.

Please provide documentation that the State of New Jersey is in agreement with the 60 minute timeframe for notification.

## RAI-OCNGS-7

The exemption of item 32 in Table 2 (Attachment 1) states:

E.9.a. Provisions for communications with contiguous State/local governments ~~within the plume exposure pathway EPZ~~. Such communication shall be tested monthly.

In the basis for exemption OCNGS states, in part, that:

OCNGS will maintain communications with the State of New Jersey and the NRC. Note, the State and local officials, and agencies for which provisions will be maintained are those which OCNGS is currently committed to.

For clarification purposes, please provide a description of communications that will continue to be performed with State and local government officials/agencies and at what frequency those communications are tested.

**RAI-OCNGS-8**

The exemption of item 34 in Table 2 (Attachment 1) states:

**~~E.9.c Provision for communications among the nuclear power reactor control room, the onsite technical support center, and the emergency operations facility; and among the nuclear facility, the principal State and local emergency operations centers, and the field assessment teams. Such communications systems shall be tested annually.~~**

This is inconsistent with the basis for exemption of item 34 in Table 2 (Attachment 1), in which OCNGS states, in part, that:

OCNGS will also continue to test communication systems used to contact the State Emergency Operations Center (EOC) on an annual basis

- a. Please clarify basis for requesting an exemption for “Provision of communications... among the nuclear facility, the principal State and local emergency operations centers...,” based on intent to maintain provisions for communications with State and local officials and agencies for which OCNGS is currently committed to, as described in basis for exemption of item 32 in Table 2 (Attachment 1).
- b. Please clarify why Exelon is requesting to remove requirement to test communications systems with these officials/agencies annually.

**Hearing Identifier:** NRR\_PMDA  
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**Mail Envelope Properties** (John.Lamb@nrc.gov20171115113900)

**Subject:** OYSTER CREEK NUCLEAR GENERATING STATION - REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR EMERGENCY PLAN EXEMPTION (CAC NO. MG0153; EPID L-2017-LLE-0020)

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