



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

January 15, 2020

Mr. Eric Carr  
President and Chief Nuclear Officer  
PSEG Nuclear LLC – N09  
P.O. Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2, AND HOPE CREEK GENERATING STATION – ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT RELATED TO CHANGES TO EMERGENCY PLAN STAFFING REQUIREMENTS (EPID L-2019-LLA-0145)

Dear Mr. Carr:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated July 8, 2019, as supplemented on November 4, 2019. The proposed amendments would revise certain Emergency Response Organization (ERO) positions for the facilities listed with the minimum staff ERO guidance specified in the "Alternative Guidance for Licensee Emergency Response Organizations." The proposed revisions include eliminating ERO positions; changing position descriptions, duties, and duty locations; and relocating certain position descriptions to other parts of the emergency plan or to implementing procedures.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

A handwritten signature in black ink, reading "James S. Kim".

James S. Kim, Project Manager  
Plant Licensing Branch I  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-272, 50-311, and 50-354

Enclosure:  
Environmental Assessment

cc: Listserv

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. 50-272, 50-311, and 50-354; NRC-2020-0023]**

**PSEG Nuclear LLC**

**Salem Nuclear Generating Station, Unit Nos. 1 and 2**

**Hope Creek Generating Station**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of amendments to licenses held by PSEG Nuclear LLC (PSEG, the licensee) for the operation of Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), and Hope Creek Generating Station (Hope Creek). The proposed license amendments would revise certain emergency response organization (ERO) positions for these facilities with the minimum staff ERO guidance specified in the "Alternative Guidance for Licensee Emergency Response Organizations." The NRC is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) associated with the proposed license amendments.

**DATES:** The EA and FONSI referenced in this document are available on **[INSERT DATE OF PUBLICATION]**.

**ADDRESSES:** Please refer to Docket ID **NRC-2020-0023** 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 <https://www.regulations.gov> and search for Docket ID **NRC-2020-0023**. Address questions about NRC docket IDs in [Regulations.gov](https://www.regulations.gov) 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 <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, 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). 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:** James Kim, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-4125; e-mail: [James.Kim@nrc.gov](mailto:James.Kim@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering issuance of amendments to Renewed Facility Operating License Nos. NPF-57, DPR-70, and DPR-75 for Hope Creek and Salem, respectively, located in Salem County, New Jersey.

In accordance with section 51.21 of title 10 of the *Code of Federal Regulations* (10 CFR), the NRC prepared the following EA that analyzes the environmental impacts of the proposed licensing action. Based on the results of this EA, and in accordance with 10 CFR 51.31(a), the NRC has determined not to prepare an environmental impact statement for the proposed licensing action and is issuing a FONSI.

## **II. Environmental Assessment**

### *Description of the Proposed Action*

The proposed action would revise certain ERO positions for these facilities with the minimum staff ERO guidance specified in the "Alternative Guidance for Licensee Emergency Response Organizations." The on-shift and minimum ERO staffing requirements listed in the emergency plan would be revised. The proposed revisions include eliminating ERO positions and changing position descriptions. Specifically, the proposed revision would remove chemistry personnel from the on-shift ERO at each facility and revise employee duty descriptions.

The proposed action is in response to the licensee's application dated July 8, 2019, as supplemented by letter dated November 4, 2019.

### *Need for the Proposed Action*

Nuclear power plant owners, Federal agencies, and State and local officials work together to create a system for emergency preparedness and response that will serve the public in the unlikely event of an emergency. An effective emergency preparedness program decreases the likelihood of an initiating event at a nuclear power reactor proceeding to a severe accident. Emergency preparedness does not affect the probability of the initiating event, but a high level of emergency preparedness increases the probability of accident mitigation if the initiating event proceeds beyond the need for initial operator actions.

Each licensee is required to establish an emergency plan to be implemented in the event of an accident, in accordance with 10 CFR 50.47 and appendix E to 10 CFR part 50. The emergency plan covers preparation for evacuation, sheltering, and other actions to protect individuals near plants in the event of an accident.

The NRC, as well as other Federal and State regulatory agencies, reviews the emergency plans to ensure that they provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

Separate from this EA, the NRC staff is reviewing a safety assessment of PSEG's proposed changes to the emergency plans for Hope Creek and Salem. This safety review will be documented in a safety evaluation. The safety evaluation of the proposed changes to the emergency plan will determine whether there continues to be reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Hope Creek and Salem, in accordance with the standards of 10 CFR 50.47(b) and the requirements in appendix E to 10 CFR part 50.

The proposed action would align the emergency plans for Hope Creek and Salem with the NRC's guidance for EROs provided in the "Alternative Guidance for Licensee Emergency Response Organizations." This alternative guidance is also included in NUREG-0654/FEMA-REP-1, Revision 2, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Final Report." This change would provide PSEG with greater flexibility in staffing ERO positions. This change would reflect changes in NRC regulations and guidance, as well as advances in technologies and best practices that have occurred since NUREG-0654/FEMA-REP-1, Revision 1, was published in 1980.

*Environmental Impacts of the Proposed Action*

The NRC staff has completed its evaluation of the environmental impacts of the proposed action.

The proposed action consists mainly of changes related to the staffing levels and positions specified in the emergency plans for Hope Creek and Salem. The on-shift and minimum ERO staffing requirements listed in the emergency plan would be revised. The revisions remove the chemistry personnel from the on-shift ERO.

Regarding potential nonradiological environmental impacts, the proposed action would have no direct impacts on land use or water resources, including terrestrial and aquatic biota, as it involves no new construction, ground disturbing activities, or modification of plant operational systems. There would be no changes to the quality or quantity of nonradiological effluents, and no changes to the plant's National Pollutant Discharge Elimination System permit would be needed. Changes in staffing levels and duty locations could result in minor changes to vehicular traffic and associated air pollutant emissions, but no significant changes in ambient air quality would be expected from the proposed changes. In addition, there would be no noticeable effect on socioeconomic and environmental justice conditions in the region and no potential to affect historical properties as the change in minor vehicle traffic is confined in the protected area. Therefore, there would be no significant nonradiological environmental impacts associated with the proposed action.

Regarding potential radiological environmental impacts, if the NRC staff's safety review of the proposed changes to the licensee's emergency plan determines that it continues to meet the standards of 10 CFR 50.47(b) and the requirements in appendix E to 10 CFR part 50, then the proposed action would not increase the probability or consequences of radiological accidents. Additionally, the proposed changes would have no direct radiological environmental impacts. There would be no change to the types or

amounts of radioactive effluents that may be released and, therefore, there would be no change in occupational or public radiation exposure. Moreover, no changes would be made to plant buildings or the site property. Therefore, there would be no significant radiological environmental impacts associated with the proposed action.

#### *Environmental Impacts of the Alternatives to the Proposed Action*

As an alternative to the proposed action, the NRC staff considered the denial of the proposed action (i.e., the "no-action" alternative). Denial of the license amendment request would result in no change in current environmental impacts. Accordingly, the environmental impacts of the proposed action and the no-action alternative would be similar.

#### *Alternative Use of Resources*

There are no unresolved conflicts concerning alternative uses of available resources under the proposed action.

#### *Agencies and Persons Consulted*

No additional agencies or persons were consulted regarding the environmental impact of the proposed action. However, in accordance with 10 CFR 50.91(b), the licensee provided copies of its application to the State of New Jersey, and the NRC staff will consult with the State prior to issuance of the amendment.

### **III. Finding of No Significant Impact**

The licensee has requested license amendments pursuant to 10 CFR 50.54(q) to revise the ERO positions identified in the emergency plans for Hope Creek and Salem by eliminating ERO positions and changing position descriptions. Specifically, the proposed revision would remove chemistry personnel from the on-shift ERO at each facility and revise employee duty descriptions. The license amendments would allow

PSEG to make changes to the Hope Creek and Salem emergency plans related to staffing levels and positions specified in the emergency plan.

The NRC is considering issuing the requested amendments. The proposed action would not have a significant adverse effect on the probability of an accident occurring and would not have any significant radiological or nonradiological impacts. It would also not result in any changes to the types or amounts of radioactive effluents that may be released and, therefore, there would be no change in occupational or public radiation exposure. The proposed changes would only result in minor changes in staffing levels and a small change in air pollutant emissions associated with vehicular traffic.

In accordance with 10 CFR 51.21, the NRC prepared an EA for the proposed action. This FONSI incorporates by reference the EA in Section II of this document. Based on the results of the EA, the NRC concludes that the proposed action would not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined there is no need to prepare an environmental impact statement for the proposed action.

A previous NRC document that discusses the environmental impacts of operating Hope Creek and Salem in accordance with their renewed facility operating licenses is NUREG-1437, Supplement 45, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Hope Creek Generating Station and Salem Nuclear Generating Station, Units 1 and 2, Final Report," dated March 2011.

This FONSI and other related environmental documents may be examined and/or copied, for a fee, at the NRC's PDR, located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852. Publicly-available records are also accessible online in the ADAMS Public Documents collection at



<https://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC's PDR reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

#### IV. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

DOCUMENT	ADAMS ACCESSION NO.
PSEG, "License Amendment Request for Approval of Changes to Emergency Plan Staffing Requirements," dated July 8, 2019	ML19189A316
PSEG, "Response to Request for Additional Information, Re: License Amendment Request for Approval of Changes to Emergency Plan Staffing Requirements," dated November 4, 2019	ML19308A595
NRC letter to the Nuclear Energy Institute, "Alternative Guidance for Licensee Emergency Response Organizations," dated June 12, 2018	ML18022A352
NUREG-0654/FEMA-REP-1, Revision 2, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Final Report," dated December 2019	ML19347D139
NUREG-1437, Supplement 45, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants." Regarding Hope Creek Generating Station and Salem Nuclear Generating station, Units 1 and 2," Final Report, dated March 2011	ML11089A021

Dated at Rockville, Maryland, this 15<sup>th</sup> day of January, 2020.

For the Nuclear Regulatory Commission.

/RA/

James S. Kim, Project Manager,  
Plant Licensing Branch I,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.