



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

July 12, 2018

Mr. Bryan C. Hanson  
Senior Vice President  
Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO)  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2, AND PEACH BOTTOM  
ATOMIC POWER STATION, UNITS 1, 2, AND 3 – ENVIRONMENTAL  
ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT REGARDING  
LICENSE AMENDMENT REQUEST TO CHANGE EMERGENCY PLAN  
STAFFING (EPID L-2018-LLA-0150)

Dear Mr. Hanson:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated May 10, 2018 (Agencywide Documents Access and Management System Accession No. ML18149A290). The proposed amendments would revise the emergency response organization positions identified in the emergency plan for each site.

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

Sincerely,

A handwritten signature in black ink, appearing to read "BL Purnell".

Blake Purnell, Project Manager  
Plant Licensing Branch III  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-352, 50-353, 72-65, 50-171,  
50-277, 50-278, and 72-79

Enclosure:  
Environmental Assessment

cc: via Listserv

**ENCLOSURE**

**FEDERAL REGISTER NOTICE**

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. 50-352, 50-353, 72-65, 50-171, 50-277, 50-278, 72-79; NRC-2018-0148]**

**Exelon Generation Company, LLC**

**Limerick Generating Station, Units 1 and 2**

**Peach Bottom Atomic Power Station, Units 1, 2, and 3**

**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 Exelon Generation Company, LLC (Exelon, the licensee) for the operation of Limerick Generating Station (Limerick), Units 1 and 2, and Peach Bottom Atomic Power Station (Peach Bottom), Units 1, 2, and 3 (the facilities). The proposed amendments would revise the emergency response organization (ERO) positions identified in the emergency plan for each facility. 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 is available on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**ADDRESSES:** Please refer to Docket ID **NRC-2018-0148** 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-2018-0148**. 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:** Blake A. Purnell, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-1380; e-mail: [Blake.Purnell@nrc.gov](mailto:Blake.Purnell@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering issuance of amendments to the following licenses held by Exelon: (1) Renewed Facility Operating License Nos. NPF-39 and NPF-85 for the operation of Limerick, Units 1 and 2, respectively, located in Montgomery County, Pennsylvania; (2) Facility Operating License No. DPR-12 for the possession of Peach Bottom, Unit 1, located in York and Lancaster Counties, Pennsylvania; and (3) Renewed Facility Operating License Nos. DPR-44 and DPR-56 for the operation of Peach Bottom, Units 2 and 3, respectively, located in York and Lancaster Counties, Pennsylvania.

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 the ERO positions identified in the emergency plan for each facility. The on-shift, minimum, and full-augmentation ERO staffing requirements listed in the emergency plan would be revised. The proposed revisions include eliminating ERO positions; adding 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 proposed action is in accordance with the licensee's application dated May 10, 2018 (ADAMS Package Accession No. ML18149A290).

### *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 cannot 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. The emergency plan, in part, 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 plan to ensure that it provides 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 performing a safety assessment of Exelon's proposed changes to the emergency plan for each facility. This safety review will be documented in a safety evaluation. The safety evaluation will determine whether, with the proposed changes to the emergency plan for each facility, there continues to be reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Limerick or Peach Bottom, 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 is needed to align the emergency plans for the facilities with draft Revision 2 to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (ADAMS Accession Nos. ML14163A605 and ML17083A815). This change would provide Exelon with greater flexibility in staffing ERO positions, and reflects changes in NRC regulations and guidance and advances in technologies and best practices that have occurred since NUREG-0654/FEMA-REP-1, Revision 1, was published in 1980. The Commonwealth of Pennsylvania reviewed a draft of the licensee's application and had no concerns. The State of Maryland reviewed a draft of the license amendment request for Peach Bottom and found the proposed changes acceptable.

#### *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 Limerick and Peach Bottom. The on-shift, minimum, and full-augmentation ERO staffing requirements listed in the emergency plan would be revised. The revisions include eliminating ERO positions; adding 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.

With regard to potential nonradiological environmental impacts, the proposed changes would have no direct impacts on land use or water resources, including terrestrial and aquatic biota, as they involve no new construction or modification of plant operational systems. There would be no changes to the quality or quantity of nonradiological effluents and no changes to the plants' National Pollutant Discharge Elimination System permits would be needed. Changes in staffing levels could result in minor changes in 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 conditions in the region, no environment justice impacts, and no impacts to historic and cultural resources from the proposed changes. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

With regard to potential radiological environmental impacts, if the NRC staff's safety review of the proposed changes to the licensee's emergency plans determines that, with the proposed changes, the emergency plans continue 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 NRC staff has concluded that 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, no change in occupational or public radiation exposure from the proposed changes. Moreover, no changes would be made to plant buildings or the site property from the proposed changes. Therefore, there are 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 denial of the license amendment request (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 are 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.

### 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 Limerick and Peach Bottom by eliminating ERO positions; adding 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 NRC is considering issuing the requested amendments. The proposed action would not significantly affect plant safety, would not have a significant adverse effect on the probability of an accident occurring, and would not have any significant radiological or nonradiological impacts. The reason the environment would not be significantly affected is because the proposed changes would only result in minor changes in staffing levels and a small change in air pollutant emissions associated with vehicular traffic. This FONSI incorporates by reference the EA in Section II of this notice. Therefore, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

Previous considerations regarding the environmental impacts of operating Limerick, Units 1 and 2, and Peach Bottom, Units 2 and 3, in accordance with their renewed operating licenses, are described in the following documents:

- NUREG-1437, Supplement 49, Volumes 1 and 2, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Limerick Generating Station, Units 1 and 2," Final Report, dated August 2014 (ADAMS Accession Nos. ML14238A284 and ML14238A290 (package)).

- NUREG-1437, Supplement 10, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Peach Bottom Atomic Power Station, Units 2 and 3," Final Report, dated January 2003 (ADAMS Package Accession No. ML030270059).

Previous considerations regarding the environmental impacts of decommissioning Peach Bottom, Unit 1, are described in NUREG-0586, Supplement 1, Volumes 1 and 2, "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Regarding the Decommissioning of Nuclear Power Reactors," Final Report, dated November 2002 (ADAMS Package Accession Nos. ML023470327 and ML023500228).

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 <http://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.
Exelon, License Amendment Request for Approval of Changes to Emergency Plan Staffing Requirements, dated May 10, 2018.	ML18149A290 (package)
NUREG-0654/FEMA-REP-1, draft Revision 2, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."	ML14163A605 and ML17083A815
NUREG-1437, Supplement 49, Volumes 1 and 2, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Limerick Generating Station, Units 1 and 2," Final Report, dated August 2014.	ML14238A284 and ML14238A290 (package)
NUREG-1437, Supplement 10, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Peach Bottom Atomic Power Station, Units 2 and 3," Final Report, dated January 2003.	ML030270059 (package)
NUREG-0586, Supplement 1, Volumes 1 and 2, "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Regarding the Decommissioning of Nuclear Power Reactors," Final Report, dated November 2002.	ML023470327 (package) and ML023500228 (package)

Dated at Rockville, Maryland, this 12<sup>th</sup> day of July, 2018.

For the Nuclear Regulatory Commission.

/RA/

Blake A. Purnell, Project Manager,  
Plant Licensing Branch III,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2, AND PEACH BOTTOM ATOMIC POWER STATION, UNITS 1, 2, AND 3 – ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT REGARDING LICENSE AMENDMENT REQUEST TO CHANGE EMERGENCY PLAN STAFFING (EPID L-2018-LLA-0150) DATED JULY 12, 2018

**DISTRIBUTION:**

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PM R/F	RidsNrrLABClayton Resource
RidsACRS_MailCTR Resource	RidsNrrPMExelon Resource
RidsNrrDmlrMenb Resource	RidsNrrPMLimerick Resource
RidsRgn1MailCenter Resource	RidsNrrPMPeachBottom Resource
RidsNrrDorlLpl3 Resource	RidsNmssDuwpRdb Resource
RidsNrrDorlLpl1 Resource	ZCruz, NMSS

**ADAMS Accession Nos.: Letter: ML18172A215                      FRN: ML18172A216    \*via email**

OFFICE	NRR/DORL/LPL3/PM	NRR/DORL/LPL3/LA	NRR/DMLR/MENB/BC	NMSS/DUWP/RDB/BC
NAME	BPurnell	SRohrer	BBeasley*	BWatson*
DATE	7/12/18	6/25/18	7/2/18	7/5/18
OFFICE	OGC - NLO	NRR/DORL/LPL3/BC	NRR/DORL/LPL3/PM	
NAME	JWachutka*	DWrona (RKuntz for)	BPurnell	
DATE	7/12/18	7/12/18	7/12/18	

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