



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

November 23, 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: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CALVERT CLIFFS INDEPENDENT SPENT FUEL STORAGE INSTALLATION; JAMES A. FITZPATRICK NUCLEAR POWER PLANT; AND NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2 – ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT REGARDING LICENSE AMENDMENT REQUEST TO CHANGE EMERGENCY PLAN STAFFING (EPID L-2018-LLA-0240)

Dear Mr. Hanson:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendments dated August 31, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18249A096). 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 "B L Purnell".

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

Docket Nos. 50-317, 50-318, 72-8, 50-333,  
72-12, 50-220, 50-410, and  
72-1036

Enclosure:  
Environmental Assessment

cc: Listserv

**ENCLOSURE**

**FEDERAL REGISTER NOTICE**

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. 50-317, 50-318, 72-8, 50-333, 72-12, 50-220, 50-410, 72-1036;**

**NRC-2018-0262]**

**Exelon Generation Company, LLC;**

**Calvert Cliffs Nuclear Power Plant, Units 1 and 2;**

**Calvert Cliffs Independent Spent Fuel Storage Installation;**

**James A. FitzPatrick Nuclear Power Plant;**

**Nine Mile Point Nuclear Station, Units 1 and 2**

**AGENCY:** Nuclear Regulatory Commission.

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

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is considering a request to amend licenses held by Exelon Generation Company, LLC (Exelon, the licensee) for the operation of Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2; James A. FitzPatrick Nuclear Power Plant (FitzPatrick); and Nine Mile Point Nuclear Station (Nine Mile Point), Units 1 and 2 (the facilities). Amending these operating licenses would also affect the independent spent fuel storage installations (ISFSIs) at each facility. The proposed license 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 are available on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**ADDRESSES:** Please refer to Docket ID NRC-2018-0262 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-2018-0262. Address questions about Docket IDs in 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 <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 a request by Exelon to amend the following operating licenses: (1) Renewed Facility Operating License Nos. DPR-53 and DPR-69 for Calvert Cliffs, Units 1 and 2, respectively, located in Calvert County, Maryland; (2) Renewed Facility Operating License No. DPR-59 for FitzPatrick located in Oswego County, New York; and (3) Renewed Facility Operating License Nos. DPR-63 and NPF-69 for Nine Mile Point, Units 1 and 2, respectively, located in Oswego County, New York. Amending these operating licenses would also affect the Calvert Cliffs ISFSI (Renewed License No. SNM-2505) and the generally licensed FitzPatrick and Nine Mile Point ISFSIs, which are co-located with the reactor facilities.

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, including the on-shift, minimum, and full-augmentation ERO staffing requirements. 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 August 31, 2018 (ADAMS Package Accession No. ML18249A096).

### *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, 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 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.

In addition to this EA, the NRC is conducting a safety assessment of Exelon's proposed changes to the emergency plan for each facility. This safety review will be documented in a separate safety evaluation. The safety evaluation of the proposed changes to the emergency plans 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 Calvert Cliffs, FitzPatrick, or Nine Mile Point, 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 the facilities with the NRC's alternative guidance for EROs provided in a June 12, 2018, letter to the Nuclear Energy Institute (ADAMS Accession No. ML18022A352). This alternative guidance is also included in 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. Additionally, this change reflects 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. The application

indicates that Exelon provided the State of New York a draft of the license amendment request for FitzPatrick and Nine Mile Point, and that the State of New York had no concerns. The application also indicates that Exelon provided the State of Maryland a draft of the license amendment request for Calvert Cliffs, and that the State of Maryland found the proposed changes acceptable.

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

The proposed action consists of changes related to staffing positions, position descriptions, duties, and duty locations specified in the emergency plans for Calvert Cliffs, FitzPatrick, and Nine Mile Point. 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 impacts on land use or water resources, including terrestrial and aquatic biota, as they involve 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 plants' National Pollutant Discharge Elimination System permits. The overall staffing levels are not expected to increase; therefore, worker vehicle air emissions are not expected to increase and established threshold emissions set forth in 40 CFR 93.153(b) for designated nonattainment or maintenance areas would not be exceeded. Since the proposed changes will not increase staffing levels and will not involve ground disturbing activities, modification of plant operation systems, or new construction, 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 would be 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 the emergency plans would 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 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 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 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 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, the licensee provided copies of its application to the States of New York and Maryland, and the NRC staff will consult with these states prior to issuance of the amendments.

## **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 Calvert Cliffs, FitzPatrick, and Nine Mile Point 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 are not expected to increase the overall staffing levels and do not involve any construction or modification of the above facilities. This FONSI incorporates by reference the EA in Section II of this notice. Therefore, 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.

Previous considerations regarding the environmental impacts of operating Calvert Cliffs, Units 1 and 2; Calvert Cliffs ISFSI; FitzPatrick; and Nine Mile Point, Units 1 and 2, in accordance with their renewed operating licenses, are described in the documents listed in the table in Section IV below.

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.

| <b>DOCUMENT</b>  | <b>ADAMS ACCESSION NO.</b> |
|--|----------------------------|
| Exelon, License Amendment Request for Approval of Changes to Emergency Plan Staffing Requirements, dated August 31, 2018.            | ML18249A096                |
| NRC letter to the Nuclear Energy Institute, Alternative Guidance for Licensee Emergency Response Organizations, dated June 12, 2018. | ML18022A352                |

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|--|-----------------------------|
| 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 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding the Calvert Cliffs Nuclear Power Plant," Final Report, dated October 1999.  | ML063400277                 |
| NRC, "Environmental Assessment for the Proposed Renewal of U.S. Nuclear Regulatory Commission License No. SNM-2505 for Exelon Generation Corporation [sic], LLC's Calvert Cliffs Independent Spent Fuel Storage Installation," dated October 2014. | ML14282A278                 |
| NUREG-1437, Supplement 31, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding James A. FitzPatrick Nuclear Power Plant," Final Report, dated January 2008.   | ML080170183                 |
| NUREG-1437, Supplement 24, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding James A. FitzPatrick Nuclear Power Plant," Final Report, dated May 2006.   | ML061290310                 |

Dated at Rockville, Maryland, this      day of      , 2018.

For the Nuclear Regulatory Commission.

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

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2; CALVERT CLIFFS INDEPENDENT SPENT FUEL STORAGE INSTALLATION; JAMES A. FITZPATRICK NUCLEAR POWER PLANT; AND NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2 – ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT REGARDING LICENSE AMENDMENT REQUEST TO CHANGE EMERGENCY PLAN STAFFING (EPID L-2018-LLA-0240) DATED NOVEMBER 23, 2018

**DISTRIBUTION:**

|                             |                                 |
|-----------------------------|---------------------------------|
| PUBLIC                      | RidsNrrLALRonewicz Resource     |
| RidsACRS_MailCTR Resource   | RidsNrrPMExelon Resource        |
| RidsNrrDmlrMenb Resource    | RidsNrrPMCalvertCliffs Resource |
| RidsRgn1MailCenter Resource | RidsNrrPMFitzPatrick Resource   |
| RidsNrrDorLpl3 Resource     | RidsNrrPMNineMilePoint Resource |
| RidsNrrDorLpl1 Resource     | RidsNmssDsfmSflb Resource       |
| RidsNrrLASRohrer Resource   | JCNguyen, NMSS                  |

**ADAMS Accession Nos.: LTR: ML18304A309 FRN: ML18304A304 \*by email**

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|--------|------------------|---------------------|--------------------------|--------------------|
| OFFICE | NRR/DORL/LPL3/PM | NRR/DORL/LPL3/LA    | NRR/DMLR/MENB/BC         | NMSS/DSFM/SFLB/BC* |
| NAME   | BPurnell         | SRohrer             | BBeasley (JRikhoff for)* | JMcKirgan          |
| DATE   | 11/23/18         | 11/1/18             | 10/30/18                 | 11/1/18            |
| OFFICE | OGC*             | NRR/DORL/LPL3/BC    | NRR/DORL/LPL3/PM         |                    |
| NAME   | MYoung           | DWrona (RKuntz for) | BPurnell                 |                    |
| DATE   | 11/5/18          | 11/23/18            | 11/23/18                 |                    |

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