



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

June 13, 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: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 1, 2, AND 3; LASALLE COUNTY STATION, UNITS 1 AND 2; AND QUAD CITIES NUCLEAR POWER 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-0045)

Dear Mr. Hanson:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated January 31, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18053A159). 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. STN 50-456, STN 50-457, 72-73,  
STN 50-454, STN 50-455, 72-68,  
50-461, 72-1046, 50-010, 50-237,  
50-249, 72-37, 50-373, 50-374,  
72-70, 50-254, 50-265, and 72-53

Enclosure:  
Environmental Assessment

cc: Listserv

**ENCLOSURE**

**FEDERAL REGISTER NOTICE**

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. STN 50-456, STN 50-457, 72-73, 50-454, 50-455, 72-68, 50-461, 72-1046, 50-010, 50-237, 50-249, 72-37, 50-373, 50-374, 72-70, 50-254, 50-265, and 72-53; NRC-2018-0122]**

**Exelon Generation Company, LLC; Braidwood Station, Units 1 and 2;**

**Byron Station, Units 1 and 2; Clinton Power Station, Unit 1;**

**Dresden Nuclear Power Station, Units 1, 2, and 3;**

**LaSalle County Station, Units 1 and 2; and**

**Quad Cities Nuclear Power 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 issuance of amendments to licenses held by Exelon Generation Company, LLC (Exelon, the licensee) for the operation of Braidwood Station (Braidwood), Unit Nos. 1 and 2; Byron Station (Byron), Unit Nos. 1 and 2; Clinton Power Station (Clinton), Unit No. 1; Dresden Nuclear Power Station (Dresden), Unit Nos. 1, 2, and 3; LaSalle County Station (LaSalle), Unit Nos. 1 and 2; and Quad Cities Nuclear Power Station (Quad Cities), Unit Nos. 1 and 2 (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 referenced in this document is available on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**ADDRESSES:** Please refer to Docket ID NRC-2018-0122 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-2018-0122. 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-72 and NPF-77 for the operation of Braidwood, Unit Nos. 1 and 2, respectively, located in Will County, Illinois; (2) Renewed Facility Operating License Nos. NPF-37 and NPF-66 for the operation of Byron, Unit Nos. 1 and 2, respectively, located in Ogle County, Illinois; (3) Facility Operating License No. NPF-62 for the operation of Clinton located in DeWitt County, Illinois; (4) Facility Operating License No. DPR-2 for the possession and maintenance of Dresden, Unit No. 1, located in Grundy County, Illinois; (5) Renewed Facility Operating License Nos. DPR-19 and DPR-25 for the operation of Dresden, Unit Nos. 2 and 3, respectively, located in Grundy County, Illinois; (6) Renewed Facility Operating License Nos. NPF-11 and NPF-18 for the operation of LaSalle, Unit Nos. 1 and 2, respectively, located in LaSalle County, Illinois; and (7) Renewed Facility Operating License No.

DPR-29 and DPR-30 for the operation of Quad Cities, Unit Nos. 1 and 2, located in Rock Island County, Illinois.

In accordance with section 51.21 of title 10 of the *Code of Federal Regulations* (10 CFR), the NRC performed 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 January 31, 2018 (ADAMS Package Accession No. ML18053A159).

### *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 Braidwood, Byron, Clinton, Dresden, LaSalle, or Quad Cities, 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 Exelon's 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 will 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 was originally issued in 1980. The State of Illinois reviewed a draft of the licensee's application and recommended its approval. The State of Iowa reviewed a draft of the license amendment request for Quad Cities, and had no comments or concerns.

#### *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 Braidwood, Byron, Clinton, Dresden, LaSalle, and Quad Cities. 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 plant's National Pollutant Discharge Elimination System permit are 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 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 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 Braidwood, Byron, Clinton, Dresden, LaSalle, and Quad Cities 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 and 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 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 Braidwood, Unit Nos. 1 and 2; Byron, Unit Nos. 1 and 2; Clinton, Unit No. 1; Dresden, Unit Nos. 2 and 3; LaSalle, Units 1 and 2; and Quad Cities, Unit Nos. 1 and 2, in

accordance with their original or renewed operating licenses, as applicable, are described in the following documents:

- NUREG-1437, Supplement 55, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Braidwood Station, Units 1 and 2," Final Report, dated November 2015 (ADAMS Accession No. ML15314A814).
- NUREG-1437, Supplement 54, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Byron Station, Units 1 and 2," Final Report, dated July 2015 (ADAMS Accession No. ML15196A263).
- NUREG-0854, "Final Environmental Statement Related to the Operation of Clinton Power Station, Unit No. 1," dated May 1982 (ADAMS Accession No. ML15098A042).
- NUREG-1437, Supplement 17, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding the Dresden Nuclear Power Station, Units 2 and 3," Final Report, dated June 2004 (ADAMS Accession No. ML041890266).
- NUREG-1437, Supplement 57, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding LaSalle County Station, Units 1 and 2," Final Report, dated August 2016 (ADAMS Accession No. ML16238A029).
- NUREG-1437, Supplement 16, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding the Quad Cities Nuclear Power Station, Units 1 and 2," Final Report, dated June 2004 (ADAMS Accession No. ML041880213).

Previous considerations regarding the environmental impacts of decommissioning Dresden, Unit 1, are described in the following documents:

- "Environmental Assessment by the Office of Nuclear Reactor Regulation Regarding Order Authorizing Facility Decommissioning and Amendment of License

No. DPR-2, Commonwealth Edison Company, Dresden Nuclear Power Station, Unit 1, Docket No. 50-010," dated August 30, 1993 (ADAMS Accession No. ML17123A156).

- 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 Accession Nos. ML023470304 and ML023500187).

This FONSI and other related environmental documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852. Publicly-available records will be 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 send an e-mail to [hdr.resource@nrc.gov](mailto:hdr.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 January 31, 2018.	ML18053A159 (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 55, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Braidwood Station, Units 1 and 2," Final Report, dated November 2015.	ML15314A814
NUREG-1437, Supplement 54, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Byron Station, Units 1 and 2," Final Report, dated July 2015.	ML15196A263
NUREG-0854, "Final Environmental Statement Related to the Operation of Clinton Power Station, Unit No. 1," dated May 1982.	ML15098A042
NUREG-1437, Supplement 17, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding the Dresden Nuclear Power Station, Units 2 and 3," Final Report, dated June 2004.	ML041890266
NUREG-1437, Supplement 57, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding LaSalle County Station, Units 1 and 2," Final Report, dated August 2016.	ML16238A029
NUREG-1437, Supplement 16, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding the Quad Cities Nuclear Power Station, Units 1 and 2," Final Report, dated June 2004.	ML041880213
NRC, "Environmental Assessment by the Office of Nuclear Reactor Regulation Regarding Order Authorizing Facility Decommissioning and Amendment of License No. DPR-2, Commonwealth Edison Company, Dresden Nuclear Power Station, Unit 1, Docket No. 50-010," dated August 30, 1993.	ML17123A156

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.	ML023470304 and ML023500187
---	-----------------------------

Dated at Rockville, Maryland, this 13<sup>th</sup> day of June, 2018.

For the Nuclear Regulatory Commission.

*/RA/*

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

**SUBJECT:** BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 1, 2, AND 3; LASALLE COUNTY STATION, UNITS 1 AND 2; AND QUAD CITIES NUCLEAR POWER 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-0045) DATED JUNE 13, 2018

**DISTRIBUTION:**

PUBLIC	RidsNrrPMBraidwood Resource
RidsACRS_MailCTR Resource	RidsNrrPMByron Resource
RidsNrrDmlrMenb Resource	RidsNrrPMClinton Resource
RidsRgn3MailCenter Resource	RidsNrrPMDresden Resource
RidsNrrDorlLpl3 Resource	RidsNrrPMLaSalle Resource
RidsNrrLASRohrer Resource	RidsNrrPMQuadCities Resource
RidsAcrcAcnw_MailCTR Resource	RidsNmssDuwpRdb Resource
RidsRgn3MailCenter Resource	ZCruz, NMSS
RidsNrrPMExelon Resource	

**ADAMS Accession Nos.:**

**Letter (NRR-106) ML18135A212**

**EA FRN (ADM-012) ML18135A188**

OFFICE	NRR/DORL/LPL3/PM	NRR/DORL/LPL3/LA	NRR/DMLR/MENB/BC	NMSS/DUWP/RDB/BC
NAME	BPurnell	SRohrer	BBeasley	BWatson
DATE	06/12/18	05/16/18	06/13/18	06/13/18
OFFICE	OGC /NLO	NRR/DORL/LPL3/BC	NRR/DORL/LPL3/PM	
NAME	STurk	DWrona	BPurnell	
DATE	05/29/18	06/13/18	06/13/18	

**OFFICIAL RECORD COPY**