



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

November 17, 2020

Craig Fiore, Chief
Radiological Emergency Preparedness
Branch Technological Hazards Division
Federal Emergency Management Agency – Area
8 400 C Street, South West
Washington, DC 20024

SUBJECT: FEDERAL EMERGENCY MANAGEMENT AGENCY REVIEW REQUESTED OF REVISION TO THE BYRON STATION EMERGENCY PLAN FOR POST-SHUTDOWN AND PERMANENTLY DEFUELED CONDITION

Dear Mr. Fiore:

By letter dated September 2, 2020 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML20246G613), Exelon Generation Company, LLC (Exelon) provided formal notification to the U.S. Nuclear Regulatory Commission (NRC), pursuant to sections 50.4(b)(8) and 50.82(a)(1)(i) of Title 10 to the *Code of Federal Regulations* (10 CFR), that it would permanently cease operations at Byron Station, Units 1 and 2, on or before September 30, 2021. In preparation for the permanent cessation of operations of Byron Units 1 and 2, by letter dated November 2, 2020 (ADAMS Accession No. ML20307A333), Exelon submitted for prior NRC approval, a license amendment request (LAR) to the Site Emergency Plan (SEP) for the planned post-shutdown and permanently defueled condition. Refer to URL below to access the LAR submittal.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20307A333>

The proposed SEP changes would revise the on-shift staffing and the emergency response organization (ERO) staffing commensurate with the reduced spectrum of credible accidents in the post-shutdown and permanently defueled condition. These proposed changes are not associated with any requests for exemption to NRC regulations and must continue to meet the standards of 10 CFR 50.47, "Emergency plans," and the requirements of Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities."

The proposed changes to the Byron SEP, if approved by the NRC, would be implemented once the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessels are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii). At that time, pursuant to 10 CFR 50.82(a)(2), the 10 CFR 50 licenses will no longer authorize operation of the Byron, Units 1 and 2 reactors or emplacement or retention of fuel in the reactor vessels.

In accordance with 10 CFR 50.91 "Notice for public comment; State consultation," paragraph (b), Exelon notified the State of Illinois of this application for license amendment by transmitting a copy of the November 2, 2020 letter and its attachments to the designated State Official.

Attachment 1, "Description and Evaluation of the Proposed Changes," to Exelon's November 2, 2020 letter provides a description and evaluation of the proposed SEP changes. In Sections 5.4.5, "Emergency Operations Center [Facility] (EOF)," and 5.4.6, "Joint Information Center (JIC)," to Attachment 1, Exelon states that the proposed changes do not affect minimum staffing levels for the existing EOF and JIC, located in the Exelon Nuclear Cantera facility in Warrenville, IL, and do not involve any physical modifications or layout/configuration changes to these facilities.

Section 5.5, "Assessment of Staff Changes on Offsite Emergency Response Organizational Interfaces," to Attachment 1 provides Exelon's evaluation of the impact of the proposed licensee ERO staffing changes on the ability of State and local response organizations to effectively implement their Federal Emergency Management Agency (FEMA) approved radiological emergency preparedness (REP) plans.

In their letter, Exelon stated that on October 12, 2020, they provided the Illinois Emergency Management Agency (IEMA) and Ogle County a draft copy of the Byron Post-Shutdown Emergency Plan (PSEP) for comment. Subsequently, on October 27, 2020 Exelon conducted a call with IEMA to discuss questions and comments on the proposed LAR, which were subsequently addressed. Attachment 6, "Correspondence With the State of Illinois," contains a letter from IEMA dated October 29, 2020, stating that they do not anticipate submitting concerns to the NRC as part of the review process. Exelon indicated that no comments were received from Ogle County.

Exelon is requesting NRC review and approval of the proposed license amendment by October 15, 2021, to support the current schedule for the Byron, Units 1 and 2, transition to a permanently defueled condition. As such, Exelon states that the amendment would become effective following the submittal of the certifications required by 10 CFR 50.82(a)(1) that Byron, Units 1 and 2, have been permanently defueled. According to Exelon, once approved, the amendment would be implemented within 90 days from the effective date but will not exceed February 28, 2022.

Due to the extent of proposed changes to the licensee's ERO staffing, the NRC is requesting FEMA's review of the proposed licensee ERO staffing changes to verify that no potential adverse impacts exist that would preclude the effective implementation of State and local REP plans. Based on the significant number of on-going and projected licensing actions, I am requesting that FEMA provide its assessment to the NRC by no later than December 18, 2020, to support any further request for additional information to Exelon, as needed, as part of the NRC's continued technical review and final determination.

In addition, Section 5.6, "Validation and Training," to Attachment 1, states the following:

Training and procedures will be developed and in place prior to performing the post-shutdown ERO drill. The drill scenario will include SFP [spent fuel pool] events and will be designed to test the major elements of the Byron Post-Shutdown Emergency Plan. Major elements to be tested will include communcations and coordination with offsite response organizations, including the JIC. ***State, local, and Federal response organizations will be provided the opportunity to participate in or observe the drills***, as specified in the commitment in Attachment 5. [emphasis added]

Attachment 5, "Summary of Regulatory Commitments," identified the following license commitment to be performed prior to implementation of the proposed Byron PSEP:

Byron will perform a drill to confirm the ability of the post-shutdown ERO to perform the necessary functions of each emergency response facility and to utilize the post-shutdown procedures being developed depicting the revised assignment of duties. State and local response organizations will be offered the opportunity to participate, and the NRC and FEMA will be provided advance notice and the opportunity to observe drill activities. In addition, other training drills will be conducted to train post-shutdown station ERO members.

As always, thank you for your assistance. If you have any questions regarding the specifics of the changes requested to the Byron SEP; the NRC's evaluation of these proposed changes, or if FEMA will be unable to meet the requested due date of December 18, 2020, please contact Kenneth Mott at 301-287-3242.

Sincerely,

Jessie Quichocho, Chief
Reactor Licensing Branch
Division of Preparedness and Response
Office of Nuclear Security and Incident Response

cc: T. Harris, FEMA HQ

SUBJECT: FEDERAL EMERGENCY MANAGEMENT AGENCY REVIEW REQUESTED OF REVISION TO THE BYRON STATION EMERGENCY PLAN FOR POST-SHUTDOWN AND PERMANENTLY DEFUELED CONDITION

DATED November 17, 2020

DISTRIBUTION:

J. Quichocho, NSIR
J.D. Anderson, NSIR

A. Barker, Region III
H. Logaras, Region III

ADAMS Accession Number: ML20321A244

***via email**

OFFICE	NSIR/DPR/RLB*	NSIR/DPR/RLB:BC*
NAME	JAnderson	JQuichoco
DATE	11/16/20	11/17/20

OFFICIAL RECORD COPY