



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

April 15, 2015

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

SUBJECT: BRAIDWOOD STATION, UNIT 1 – RELAXATION OF THE SCHEDULE REQUIREMENTS FOR ORDER EA-12-049 “ORDER MODIFYING LICENSES WITH REGARD TO REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS” (TAC NO. MF0895)

Dear Mr. Hanson:

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12054A735), the U.S. Nuclear Regulatory Commission (NRC) ordered Exelon Generation Company, LLC (Exelon, the licensee) to take certain actions at Braidwood Station, Unit 1, associated with the Fukushima Near-Term Task Force Recommendations. Order EA-12-049 directed that actions be taken by licensees to develop and implement strategies to maintain or restore core cooling, reactor coolant system inventory, containment cooling, and spent fuel pool (SFP) cooling capabilities during beyond-design-basis external events.

Section IV of the order states that licensees proposing to deviate from requirements contained in NRC Order EA-12-049 may request that the Director, Office of Nuclear Reactor Regulation, relax or rescind certain requirements. By letter dated February 26, 2015 (ADAMS Accession No. ML15058A745) the licensee informed the NRC of its request for an extension of one additional refueling cycle to carry out the order requirement of Condition IV.A.2, which requires full implementation of the order requirements no later than two refueling cycles after submittal of the overall integrated plan, or by December 31, 2016, whichever comes first. The licensee stated that its mitigation strategies are based on generic Westinghouse reactor coolant pump (RCP) seal leakage rates. Recent Westinghouse evaluations of RCP seal leakage in response to Westinghouse Nuclear Safety Advisory Letter (NSAL) 14-1 indicate that the generic leak rates previously used by the licensee for its mitigation strategy do not envelope calculated leakage rates applicable to the Braidwood Station, Unit 1, design.

Exelon stated that the Pressurized-Water Reactor Owners Group (PWROG) is in the process of performing additional evaluations to refine RCP seal leakage rate projections, which are part of the technical bases for demonstrating Braidwood Station, Unit 1, compliance with the requirements of NRC Order EA-12-049. The licensee requests to delay the order implementation date for Braidwood Station, Unit 1, from the completion of the April 2015 refueling outage to the completion of the fall 2016 refueling outage. This additional time will allow Exelon to complete the engineering analysis associated with the additional information provided by the PWROG regarding the analytical basis for RCP seal leakage. In addition, Exelon stated that the requested relaxation would allow additional time to resolve RCP No. 1 seal leakoff line pressure concerns.

In light of the facts presented in the licensee's February 26, 2015 letter, the NRC staff has determined that the licensee has demonstrated good cause for a relaxation of the order implementation date. Completing the Braidwood Station, Unit 1, specific engineering analysis of revised generic RCP seal leakage is a significant endeavor that requires assessment of additional information that will be provided by the PWROG and the development of a site-specific evaluation. The schedule for completing these additional activities does not support Braidwood Station, Unit 1, compliance with Order EA-12-049 by the restart from the April 2015 refueling outage. The NRC staff also considered that, following the accident at Fukushima Dai-ichi, the NRC concluded that a sequence of events such as the Fukushima Dai-ichi accident is unlikely to occur in the United States based on the current regulatory requirements and existing plant capabilities. Given the plant-specific circumstances at Braidwood Station, Unit 1, and that the proposed compliance date is prior to the December 2016 implementation date of the order, the NRC staff approves the relaxation request.

Accordingly, based upon the authority granted to the Director, Office of Nuclear Reactor Regulation, the requirement of the order for full order implementation for Braidwood Station, Unit 1, is relaxed until the completion of the fall 2016 refueling outage. The licensee did not request relaxation of the requirement for full implementation for Braidwood Station, Unit 2, so that requirement for full implementation by the completion of the Unit 2 Fall 2015 refueling outage is unchanged.

If you have any questions, please contact John Hughey at 301-415-3204.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. M. Dean', written in a cursive style.

William M. Dean, Director
Office of Nuclear Reactor Regulation

Docket No. STN 50-456

cc: Listserv

In light of the facts presented in the licensee's February 26, 2015 letter, the NRC staff has determined that the licensee has demonstrated good cause for a relaxation of the order implementation date. Completing the Braidwood Station, Unit 1, specific engineering analysis of revised generic RCP seal leakage is a significant endeavor that requires assessment of additional information that will be provided by the PWROG and the development of a site-specific evaluation. The schedule for completing these additional activities does not support Braidwood Station, Unit 1, compliance with Order EA-12-049 by the restart from the April 2015 refueling outage. The NRC staff also considered that, following the accident at Fukushima Dai-ichi, the NRC concluded that a sequence of events such as the Fukushima Dai-ichi accident is unlikely to occur in the United States based on the current regulatory requirements and existing plant capabilities. Given the plant-specific circumstances at Braidwood Station, Unit 1, and that the proposed compliance date is prior to the December 2016 implementation date of the order, the NRC staff approves the relaxation request.

Accordingly, based upon the authority granted to the Director, Office of Nuclear Reactor Regulation, the requirement of the order for full order implementation for Braidwood Station, Unit 1, is relaxed until the completion of the fall 2016 refueling outage. The licensee did not request relaxation of the requirement for full implementation for Braidwood Station, Unit 2, so that requirement for full implementation by the completion of the Unit 2 Fall 2015 refueling outage is unchanged.

If you have any questions, please contact John Hughey at 301-415-3204.

Sincerely,

/RA/

William M. Dean, Director
Office of Nuclear Reactor Regulation

Docket No. STN 50-456

cc: Listserv

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