[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket Nos. STN 50-456, STN 50-457, STN 50-454 and STN 50-455; NRC-2012-0203]

Issuance; Exelon Generation Company, LLC

AGENCY: Nuclear Regulatory Commission.

ACTION: Director's decision under 10 CFR 2.206; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has issued a director's decision with regard to a petition dated April 29, 2012, filed by Mr. Barry Quigley (the petitioner), requesting that the NRC take action with regard to Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2. The petitioner's requests and the director's decision are included in the SUPPLEMENTARY INFORMATION section of this document.

ADDRESSES: Please refer to Docket ID **NRC-2012-0203** 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-2012-0203**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: Carol.Gallagher@nrc.gov.

- **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. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **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.

SUPPLEMENTARY INFORMATION:

Notice is hereby given that the Director, Office of Nuclear Reactor Regulation, has issued a director's decision (ADAMS Accession No. ML14239A313), on a petition filed by the petitioner on April 20, 2012 (ADAMS Accession No. ML12130A318).

The petitioner requested that the NRC immediately shutdown Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, until all turbine building (TB) high-energy line break (HELB) concerns were identified and those important to safety were corrected.

As the basis of the request, the petitioner asserted:

- An adequate supply of combustion air for the emergency diesel generators (EDGs) is threatened because the combustion air can be diluted with steam. Although the combustion air is drawn from an air shaft (not the TB), it is also the same air shaft that supplies ventilation for the EDG room. Under certain conditions, the ventilation damper alignment is such that steam that enters the EDG room from the ventilation exhaust can back flow into the inlet air shaft. From there it can be drawn into the engine, potentially starving the engine of air.

- The effects of high temperature in the engineered safeguards features (ESF) switchgear (SWGR) rooms on the protective relaying setpoints have not been evaluated. The

concern is that high temperatures could alter the setpoints such that protective actions occur under normal loading conditions.

- The current method of analysis for TB HELB uses a “lumped volume” approach wherein the mass and energy (M&E) of the ruptured line mixes instantly with the entire volume before flowing into the areas of concern. Because this substantially reduces the energy flow, it does not always give conservative results. For example, the petitioner's preliminary assessment using the subdivided volume feature in GOTHIC showed that the structural limits on the block wall between the ESF SWGR rooms would be substantially exceeded.

- There has been no structured and detailed review of the licensing requirements for HELB.

On May 14, 2012, the petitioner and the licensee met with the NRC’s Petition Review Board. The meeting provided the petitioner and the licensee an opportunity to provide additional information and to clarify issues cited in the petition. On November 15, 2012, the petitioner and the licensee again met with the NRC’s Petition Review Board at the request of the Petition Review Board. The transcripts of these meetings were treated as supplements to the petition and are available in the ADAMS (Accession Nos. ML 12145A633 and ML 12347A354, respectively).

The NRC sent a copy of the proposed director’s decision to the petitioner and the licensee for comment on June 18, 2014. The petitioner and the licensee were asked to provide comments within 30 days on any part of the proposed director’s decision that was considered to be erroneous or any issues in the petition that were not addressed. The staff did not receive any comments on the proposed director’s decision.

The Director of Nuclear Reactor Regulation has determined that the request, to require immediate shutdown of Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, until all turbine building (TB) high-energy line break (HELB) concerns were identified and those important to safety were corrected be denied. The Director of Nuclear Reactor Regulation has determined to partially grant the petition in that the licensing basis requirements for high energy line break were reviewed during the review of the application for the Braidwood/Byron

measurement uncertainty recapture uprate, which was completed in the February 7, 2014 (ADAMS accession No. ML13281A000). The reasons for this decision are explained in the director's decision NRC-2012-0203 pursuant to Section 2.206 of Title 10 of the *Code of Federal Regulations* (10 CFR) of the Commission's regulations.

The NRC will file a copy of the director's decision with the Secretary of the Commission for the Commission's review in accordance with 10 CFR 2.206. As provided by this regulation, the director's decision will constitute the final action of the Commission 25 days after the date of the decision unless the Commission, on its own motion, institutes a review of the director's decision in that time.

Dated at Rockville, Maryland, this 22nd day of December, 2014.

For the Nuclear Regulatory Commission.

William Dean, Director
Office of Nuclear Reactor Regulation

[FR Doc. 2015-00369 Filed 01/12/2015 at 8:45 am; Publication Date: 01/13/2015]