



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

September 19, 2011

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2, AND BYRON STATION, UNIT NOS. 1 AND 2 - ACCEPTANCE REVIEW OF LICENSE AMENDMENT REQUEST (LAR) RE: MEASUREMENT UNCERTAINTY RECAPTURE (MUR) POWER UPRATE (TAC NOS. ME6587, ME6588, ME6589, AND ME6590)

Dear Mr. Pacilio:

By letter dated June 23, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111790026), Exelon Generation Company, LLC (EGC, the licensee) submitted a licensing amendment request (LAR) for Braidwood Station, Units 1 and 2, and Byron Station, Unit Nos. 1 and 2. The proposed amendment would revise the maximum power level specified in each unit's operating license and the technical specifications (TSs) definition of rated thermal power. The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the TSs) must fully describe the changes requested, and following, as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

By letter dated August 22, 2011 (ADAMS Accession No. ML112150563), the NRC staff requested specific supplemental information that needed to be submitted to enable the NRC staff to begin its detailed technical review. By letter dated August 25, 2011 (ADAMS Accession No. ML11255A332), EGC provided the supplemental information.

The NRC staff has reviewed the supplemental information and concluded that it does provide technical information in sufficient detail to enable the NRC staff to proceed with its detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment. In discussions with Joe Bauer of your staff on September 19, 2011, EGC was notified of the NRC staff's acceptance of the proposed amendment for detailed technical review. The NRC staff advised EGC that based on Response 3 of their letter dated

August 25, 2011, future NRC staff review and approval will be based on restoring the current licensing and design basis for the turbine building high-energy line break (HELB) analysis. Satisfactory disposition of the nonconformance will be required prior to implementation, should the NRC staff approve the proposed license amendment request. A license condition may be required to reflect resolution of this issue. Furthermore, completion of the NRC staff review could be delayed if the turbine building HELB analysis requires departure from the current licensing and design basis. Given the lesser scope and depth of the acceptance review as compared to the detailed technical review, there may be instances in which issues that impact the NRC staff's ability to complete the detailed technical review are identified despite completion of an adequate acceptance review. You will be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The NRC intends to complete the staff review of the MUR LAR within one year from the application letter date. The typical MUR LAR review duration goal is six months after NRC acceptance of the application. However, the Braidwood and Byron LAR will require additional time for review based on the complexity of the request which includes bundled analyses for revised steam generator tube rupture margin-to-overfill and dose analyses, and use of VIPRE subchannel analysis code with departure from nucleate boiling correlations ABB-NV and WLOP. The review will be completed consistent with the guidance in NRC Regulatory Issue Summary 2002-03, "Guidance on the Content of Measurement Uncertainty Recapture Power Uprate Applications," dated January 31, 2002.

If you have any questions, please contact me at (301) 415-1115.

Sincerely,

A handwritten signature in black ink, appearing to read "Nicholas J. DiFrancesco", with a long horizontal flourish extending to the right.

Nicholas J. DiFrancesco, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN-456, STN-457,
STN 50-454, and STN 50-455

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M. Pacilio

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Sincerely,
/RA/

Nicholas J. DiFrancesco, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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STN 50-454, and STN 50-455

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NAME	NDiFrancesco	TAlexion	SRohrer	AUises (SMiranda for)	MKhanna	RMathew (A)	TTate	
DATE	9/15/11	9/9/11	9/15/11	9/13/11	9/12/11	9/12/11	9/12/11	
OFFICE	DSS/SBPB/BC	DPR/PGCB/BC	DORL/LPL1-2/BC	DSS/D	DRA/D	DPR/D	OGC (NLO)	DORL/D
NAME	GCasto	SRosenberg	JZimmerman	WRuland (SBahadur for)	MCheok (SLee for)	TMcGinty(RNelson for)	LSubin	JGitter
DATE	9/12/11	9/12/11	9/16/11	9/15/11	9/12/11	9/16/11	9/15/11	9/19/11

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