



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

November 9, 2011

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

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2 - REQUEST FOR  
ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT  
REQUEST FOR REACTOR ANOMALIES SURVEILLANCE REQUIREMENT  
(TAC NOS. ME6348 AND ME6349)

Dear Mr. Pacilio:

By letter to the Nuclear Regulatory Commission (NRC) dated June 2, 2011,<sup>1</sup> Exelon Generation Company, LLC, submitted a license amendment request for Limerick Generating Station (LGS), Units 1 and 2. The proposed change would revise the Technical Specifications for each unit by changing the method of calculating core reactivity for the purpose of performing the reactivity anomaly surveillance at LGS, Units 1 and 2. The NRC staff has reviewed the request submitted by the licensee and determined that additional information is needed as set forth in the Enclosure.

The draft questions were sent to Mr. Thomas Loomis, of your staff, to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. On November 3, 2011, Mr. Loomis indicated that the licensee will submit a response by December 9, 2011. Please note that if you do not respond to this letter by the agreed-upon date or provide an acceptable alternate date in writing, we may reject your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108.

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

Sincerely,

A handwritten signature in black ink that reads "John D. Hughey".

John D. Hughey, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-352 and 50-353

Enclosure:  
Request for Additional Information

cc: Distribution via ListServ

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<sup>1</sup> Agencywide Documents Access and Management System Accession No. ML111540120.

REQUEST FOR ADDITIONAL INFORMATION RELATED TO  
LICENSE AMENDMENT REQUEST FOR TECHNICAL SPECIFICATION  
CHANGES TO SECTION 3/4.1.2, "REACTOR ANOMALIES"  
LIMERICK GENERATING STATION – UNITS 1 AND 2  
DOCKET NOS. 50-352 AND 50-353

By letter to the Nuclear Regulatory Commission (NRC) dated June 2, 2011,<sup>1</sup> Exelon Generation Company, LLC, (Exelon) submitted a license amendment request for Limerick Generating Station (LGS), Units 1 and 2. The proposed change would revise the Technical Specifications for each unit by changing the method of calculating core reactivity for the purpose of performing the reactivity anomaly surveillance at LGS, Units 1 and 2. The proposed change would allow performance of the surveillance based on a comparison of predicted to actual (or monitored) core reactivity. The reactivity anomaly verification is currently determined by a comparison of predicted versus actual control rod density. The NRC staff has reviewed Exelon's submittal and determined that additional information, as described below, is needed to complete the review.

- RAI-01: It is implied (but not directly stated) in the licensee's amendment request that PANAC11 is the 3D core simulator code currently used in determination of the predicted core k-effective value. The k-effective value is used to generate the predicted reactivity anomaly curves. Please confirm that PANAC11 is the 3D core simulator code currently used to perform this calculation.
- RAI-02: In Attachment 2, "Markup of Technical Specifications and Bases Pages," of the licensee's amendment request, the suggested change to Surveillance Requirement (SR) 4.1.2 does not retain the 1% delta-k/k comparison criterion that is present in the original version of the SR. Comparison criterion is important in determining whether or not the SR is met. Please explain why the 1% delta-k/k comparison criterion was omitted from the SR markup.

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Sincerely,

*/ra/*

John D. Hughey, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
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**ADAMS Accession No.: ML113070652**

\*via e-mail

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DATE	11/08/2011	11/08/2011	11/08/2011	11/09/2011

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<sup>1</sup> Agencywide Documents Access and Management System Accession No. ML111540120.