



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

November 26, 2013

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

**SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 - REQUEST FOR ADDITIONAL INFORMATION REGARDING THE OVERALL INTEGRATED PLAN FOR ORDER EA-12-051, RELIABLE SPENT FUEL POOL INSTRUMENTATION (TAC NOS. MF1052 AND MF1053)**

Dear Mr. Pacilio:

By letter<sup>1</sup> dated February 28, 2013, Exelon Generation Company, LLC (the licensee) submitted the overall integrated plan for Quad Cities Nuclear Power Station, Units 1 and 2, to the U.S. Nuclear Regulatory Commission (NRC) in response to the March 12, 2012, Commission Order modifying licenses with regard to requirements for reliable spent fuel pool instrumentation (Order EA-12-051). The licensee provided supplemental information by letters<sup>2</sup> dated July 3, and August 28, 2013. By letter<sup>3</sup> dated October 9, 2013, the NRC staff issued an interim staff evaluation and request for additional information (RAI) regarding the overall integrated plan.

During a teleconference held on October 22, 2013, the NRC staff informed the licensee that it needs additional information regarding the spent fuel pool instrumentation that was not identified as an RAI in the interim staff evaluation. The specific information requested is addressed in the enclosure to this letter.

Please provide a response to this information request in the 6-month status updates, as the information becomes available, but not later than September 30, 2014. This schedule is consistent with what the NRC requested in the October 9, 2013, letter.

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<sup>1</sup> Agencywide Documents Access and Management System (ADAMS) Accession No. ML13060A124.

<sup>2</sup> ADAMS Accession Nos. ML13186A003 and ML13241A243, respectively.

<sup>3</sup> ADAMS Accession No. ML13275A121.

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Should you have any questions, please feel free to contact me at 301-415-1380.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Purnell".

Blake Purnell, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosure:  
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION  
OVERALL INTEGRATED PLAN IN RESPONSE TO  
COMMISSION ORDER EA-12-051 MODIFYING LICENSE REQUIREMENTS  
FOR RELIABLE SPENT FUEL POOL INSTRUMENTATION  
EXELON GENERATION COMPANY, LLC  
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2  
DOCKET NOS. 50-254 AND 50-265

By letter<sup>1</sup> dated February 28, 2013, Exelon Generation Company, LLC (the licensee) submitted the overall integrated plan (OIP) for Quad Cities Nuclear Power Station, Units 1 and 2, to the U.S. Nuclear Regulatory Commission (NRC) in response to the March 12, 2012, Commission Order modifying licenses with regard to requirements for reliable spent fuel pool (SFP) instrumentation (Order EA-12-051). The licensee provided supplemental information by letters<sup>2</sup> dated July 3 and August 28, 2013. By letter<sup>3</sup> dated October 9, 2013, the NRC staff issued an interim staff evaluation and request for additional information (RAI) regarding the OIP. During a teleconference held on October 22, 2013, the NRC staff informed the licensee that it needs additional information regarding the SFP level instrumentation that was not identified as an RAI in the interim staff evaluation.

The licensee's OIP states that the Unit 1 and Unit 2 SFPs are interconnected by a transfer canal, and the gates to the transfer canal are normally open. The OIP also states that the primary SFP level instrument will be located in the Unit 1 SFP and the backup SFP level instrument will be located in the Unit 2 SFP. In its July 3, 2013, letter, the licensee provided a sketch that shows the bottom of the transfer canal is above the elevation the licensee defined for Level 3 (the level where fuel remains covered and actions to implement make-up water should no longer be deferred). Since the bottom of the transfer canal is above Level 3, the staff is concerned about the ability of the instrument in one SFP to measure Level 3 in the other SFP.

Therefore, the NRC staff is revising RAI #1 in the interim staff evaluation as follows:

Please provide the following:

- a) Describe the impact of the installation of the gates between the SFPs and transfer canal on the reliability of the SFP level instrumentation for each SFP. Describe the compensatory measures that would be taken to ensure reliable indication in each SFP when the gates are installed.

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<sup>1</sup> Agencywide Documents Access and Management System (ADAMS) Accession No. ML13060A124.

<sup>2</sup> ADAMS Accession Nos. ML13186A003 and ML13241A243, respectively.

<sup>3</sup> ADAMS Accession No. ML13275A121.

Enclosure

- b) Describe the elevation for the bottom of the gate opening or highest elevation of the bottom of the transfer canal to demonstrate that both the primary and backup SFP level instrument channels can measure the same Level 3 elevation in both SFPs.

M. Pacilio

- 2 -

Should you have any questions, please feel free to contact me at 301-415-1380.

Sincerely,

**/ RA /**

Blake Purnell, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosure:  
Request for Additional Information

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