



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

December 21, 2017

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

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 – REQUEST  
FOR ADDITIONAL INFORMATION REGARDING RISK-INFORMED  
TECHNICAL SPECIFICATION COMPLETION TIMES (CAC NOS. MF7415 AND  
MF7416; EPID L-2016-LLA-0001)

Dear Mr. Hanson:

By letter dated February 25, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16060A223), as supplemented by letter dated April 3, 2017 (ADAMS Accession No. ML17094A591), Exelon Generation Company, LLC (the licensee) submitted a license amendment request proposing to modify the Calvert Cliffs Nuclear Power Plant, Units 1 and 2, Technical Specification requirements to permit the use of risk-informed completion times in accordance with Technical Specifications Task Force (TSTF) Traveler TSTF-505, Revision 1, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" (ADAMS Accession No. ML111650552).

The U.S. Nuclear Regulatory Commission staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information. The request for additional information was discussed with your staff on December 20, 2017, and it was agreed that your response would be provided within 30 days from the date of this letter.

If you have any questions regarding this matter, please contact me at (301) 415-2871 or [Michael.Marshall@nrc.gov](mailto:Michael.Marshall@nrc.gov).

Sincerely,

A handwritten signature in black ink, reading "Michael L. Marshall, Jr.", is positioned below the word "Sincerely,".

Michael L. Marshall, Jr., Senior Project Manager  
Plant Licensing Branch I  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure:  
Request for Additional Information

cc w/Enclosure: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING RISK-INFORMED TECHNICAL SPECIFICATION COMPLETION TIMES  
EXELON GENERATION COMPANY, LLC  
CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-317 AND 50-318

By letter dated February 25, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16060A223), as supplemented by letter dated April 3, 2017 (ADAMS Accession No. ML17094A591), Exelon Generation Company, LLC (the licensee) submitted a license amendment request (LAR) proposing to modify the Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2, Technical Specification (TS) requirements to permit the use of risk-informed completion times in accordance with Technical Specifications Task Force Traveler 505, Revision 1, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" (ADAMS Accession No. ML111650552).

The U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is needed to complete its review of the LAR. The request for additional information (RAI) listed below is not a complete listing of the additional information needed to complete the NRC staff's review. Additional RAIs were provided by separate correspondence dated November 13, 2017 (ADAMS Accession No. ML17304A941).

**RAI**

19. The LAR is a risk-informed request to modify Calvert Cliffs, Units 1 and 2, TSs. Regulatory guidance on risk-informed changes to the licensing basis is provided in Regulatory Guide (RG) 1.174, Revision 2, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," May 2011 (ADAMS Accession No. ML100910006), and regulatory guidance on risk-informed changes to TSs is provided in RG 1.177, Revision 1, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," May 2011 (ADAMS Accession No. ML100910008). Both RGs describe an acceptable risk-informed approach for assessing the nature and impact of proposed, permanent licensing basis changes by considering engineering issues and applying risk insights. Additionally, both RGs describe the regulatory positions and requirements with respect to the traditional engineering considerations of the defense-in-depth attributes. The NRC staff is requesting additional information to determine the consistency of the proposed changes to Section 3.3, "Instrumentation," of the Calvert Cliffs TSs with the defense-in-depth attribute concerning maintaining redundancy and diversity.

Please verify that there is at least one diverse means to mitigate each condition/accident for which each identified instrumentation and control function defined in TS 3.3, "Instrumentation," is designed to prevent in accordance with the defense-in-depth philosophy. For example, provide a summary table of the diverse means that exist to initiate the safety function for each plant accident condition that each TS 3.3 function is currently designed to address.

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MF7416; EPID L-2016-LLA-0001) DATED DECEMBER 21, 2017

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**ADAMS Accession No.: ML17346A909**

\*by e-mail

OFFICE	DORL/LPL1/PM	DORL/LPL1/LA	DE/EICB/BC*	DORL/LPL1/BC
NAME	MMarshall	LRonewicz	MWaters	JDanna
DATE	12/15/17	12/13/17	12/11/17	12/20/17
OFFICE	DORL/LPL1/PM			
NAME	MMarshall			
DATE	12/21/17			

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