



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

September 24, 2018

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 –  
SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF  
REQUESTED LICENSING ACTIONS RE: RISK-INFORMED APPROACH TO  
CLOSURE FOR GENERIC SAFETY ISSUE-191 (EPID L-2018-LLA-0222 AND  
EPID L-2018-LLE-0013)

Dear Mr. Hanson:

By letter dated August 13, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18226A189), Exelon Generation Company, LLC (Exelon) submitted a license amendment and exemption request for Calvert Cliffs Nuclear Power Plant, Units 1 and 2 (Calvert Cliffs). The proposed amendments would change the Calvert Cliffs' licensing bases, including the affected portions of the Technical Specifications and Updated Final Safety Analysis Report. Additionally, Exelon requested exemptions from certain requirements in Section 50.46(a)(1) of Title 10 of the *Code of Federal Regulations* (10 CFR). Specifically, the proposed amendments and exemptions would allow the use of a risk-informed approach to address safety issues discussed in Generic Safety Issue -191, "Assessment of Debris Accumulation on Pressurized-Water Reactor Sump Performance" and close out generic letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors" (ADAMS Accession No. ML042360586).

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 10 CFR, an amendment to the license (including the technical specifications) 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. Exelon's exemption request relies on the technical justification for the risk-informed method described as part of the license amendment request.

In order for the technical information in the request to be sufficient for a detailed review, the NRC staff requests that Exelon supplement the application to address the information described below by October 12, 2018. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

Information Needed to Fully Describe Change

- For in-vessel effects, provide a summary description of methodology for calculating the amount of fiber that transports to the reactor core.
- Provide the following information to show that the in-vessel effects evaluation is consistent with or bounded by methods described in WCAP-16793-NP-A, Revision 2, "Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid," dated July 2013 (ADAMS Accession No. ML13239A114):
  - Hot-leg break driving head available
  - ECCS flow rates
  - Types of fuel and inlet filters
  - How the fiber penetration amounts were determined
  - Cold-leg break fiber amount per fuel assembly.

The information requested and associated timeframe in this letter were discussed with your staff on September 24, 2018. 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,



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

cc: Listserv

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EPID L-2018-LLE-0013) DATED SEPTEMBER 24, 2018

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SSmith, NRR

**ADAMS Accession No.: ML18256A052**

\*by e-mail

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NAME	MMarshall	LRonewicz	VCusumano*
DATE	09/17/2018	09/19/2018	09/17/2018
OFFICE	NRR/DORL/LPL1/BC	NRR/DORL/LPL1/PM	
NAME	JDanna	MMarshall	
DATE	09/18/2018	09/24/2018	

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