



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

September 26, 2018

OMB Control No. 3150-0231

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 – CLOSEOUT OF GENERIC LETTER 2016-01, "MONITORING OF NEUTRON-ABSORBING MATERIALS IN SPENT FUEL POOLS" (CAC NOS. MF9449 AND MF9450; EPID L-2016-LRC-0001)

Dear Mr. Hanson:

On April 7, 2016, the U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2016-01, "Monitoring of Neutron-Absorbing Materials in Spent Fuel Pools" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16097A169), to address the degradation of neutron-absorbing materials (NAMs) in wet storage systems for reactor fuel at power and non-power reactors.

The generic letter requested that licensees provide information to allow the NRC staff to verify continued compliance through effective monitoring to identify and mitigate any degradation or deformation of NAMs credited for criticality control in spent fuel pools (SFPs).

By letter dated November 3, 2016 (ADAMS Accession No. ML16308A470), as supplemented by letter dated January 25, 2018 (ADAMS Accession No. ML18025A799), Exelon Generation Company, LLC (the licensee), responded to GL 2016-01 for Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2. In the licensee's response to GL 2016-01, as supplemented, the licensee stated that, for Calvert Cliffs, Unit 2, no NAMs are currently credited to meet NRC's subcritically requirements in the SFP. The NRC staff performed a thorough review of the licensee's response, any documents referenced therein, and other applicable licensing basis documents. Based on the review, the NRC staff concludes that the licensee has correctly identified that the Calvert Cliffs, Unit 2, licensing basis is consistent with the criteria for Category 1 as defined in GL 2016-01.

In the licensee's response to GL 2016-01, as supplemented, the licensee stated that, for Calvert Cliffs, Unit 1, the licensee credits Carborundum for criticality control and has an established NAM monitoring program. The NRC staff's review determined that the provided response sufficiently addressed the five areas of information described in Appendix A of GL 2016-01 for

Carborundum. In particular, the described monitoring program for the Carborundum includes the following key features:

- Neutron attenuation testing of coupons.
- Established processes to ensure that the licensee will take the appropriate corrective actions if any potentially non-conforming material is discovered.
- A testing frequency not to exceed 4 years.
- Acceptance criteria to ensure maintenance of the 5-percent subcriticality margin for the SFP.

The NRC staff found that the licensee intends to continue monitoring the condition of its NAMs as described in its response.

For Calvert Cliffs, Units 1 and 2, the NRC staff's review determined that the information provided sufficiently addressed the five areas of information described in Appendix A to GL 2016-01. Based on the review of the information provided, the NRC staff concludes no further information is requested regarding GL 2016-01.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doug A. Broaddus', written in a cursive style.

Douglas A. Broaddus, Chief
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

cc: ListServ

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ADAMS Accession No.: ML18249A049***via email**

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