



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

July 20, 2018

LICENSEE: Exelon Generation Company, LLC

FACILITY: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2

SUBJECT: SUMMARY OF JUNE 21, 2018 MEETING WITH EXELON GENERATION COMPANY, LLC, ON PLANNED SUBMITTAL OF RISK-INFORMED LICENSE AMENDMENT AND EXEMPTION REQUESTS CONCERNING RESOLUTION OF GENERIC ISSUE 191 (CAC NOS. MF8521 AND MF8522; EPID L-2016-LRM-0001)

On June 21, 2018, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Exelon Generation Company, LLC (Exelon, the licensee) by telephone conference. The purpose of the meeting was for Exelon to explicitly describe its consideration of risk metrics, if the NRC were to approve its planned license amendment and exemption requests (submittal) concerning the risk-informed resolution of Generic Issue (GI) 191, "Assessment of Debris Accumulation on PWR [Pressurized Water Reactor] Sump Performance," for Calvert Cliffs Nuclear Power Plant, Units 1 and 2 (Calvert Cliffs). The licensee plans to submit the requests to the NRC in July 2018. The meeting notice and agenda, dated June 6, 2018, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML18170A204. The presentation material used by the licensee is available in ADAMS at Accession No. ML18171A084. A list of attendees is enclosed.

Assuming the NRC would approve the risk-informed design basis accident analysis that will be described in the planned submittal, the licensee described how it would consider risk metrics in determining whether a new limiting condition operation (LCO) for the potential effects of loss-of-coolant accident generated and transported debris amounts that exceeds analyzed amounts (see Slide 1) is or is not met. The Exelon representatives stated that risk metrics (see Slide 2) would be added to the Calvert Cliffs Updated Final Safety Analysis Report, if the NRC were to approve the planned submittal. Those risk metrics would be used to avoid entering the required action for analyzed debris amounts, and would be used to exit the required action for unanalyzed debris amounts.

Prior to the meeting, the NRC staff sent the following questions to the licensee and the licensee provided responses to the questions (ADAMS Accession No. ML18201A406):

1. Is Exelon proposing to use risk metrics to decide whether CONDITION A of LCO 3.6.9 (see Slide 1) is met or satisfy REQUIRED ACTION A.3 of LCO 3.6.9?

Yes, Exelon is proposing to use risk metrics to decide whether CONDITION A of LCO 3.6.9 is met.

What are the analyzed limits mentioned in CONDITION A of LCO 3.6.9 (see Slide 1), and are the analyzed limits risk metrics or deterministic parameters?

For this proposal the analyzed limits are risk metrics, Δ CDF [delta core damage frequency] and Δ LERF [delta large early release frequency] based on deterministic parameters.

2. How is the use of risk metrics risk-informed (i.e., is the use risk-based or risk-informed)?

The use of the risk metrics is risk-informed. It is a combination of risk-based metrics (CDF and LERF from the PRA [probabilistic risk assessment]) and deterministic considerations (debris quantities and Δ debris quantities to determine Δ CDF and Δ LERF from the GSI-191 NARWHAL model).

3. Does Exelon consider its planned use of risk consistent with the guidance in IMC [inspection manual chapter] 0326 on use of PRA and operability determinations.

The operability of the containment emergency recirculation sump at Calvert Cliffs will be based on a risk-informed assessment after the Risk-Informed GSI-191 license amendment is granted, consistent with the STP Pilot Project. This same risk-informed assessment will be used as the basis for deciding whether CONDITION A of LCO 3.6.9 is met. The quantitative evaluation is not performed using the plant-specific PRA. Therefore, Exelon considers the planned use of risk consistent with the guidance in IMC 0326 on use of PRA and operability determinations.

The NRC staff informed the licensee that the NRC staff would treat the planned submittal as a first-of-kind complex review, because of the direct use of risk metrics in determining whether a limiting condition of operation is or is not met. The treatment of the planned submittal as first-of-kind review would:

- Involve review by additional NRC staff.
- Require greater scrutiny of the risk portion of the planned submittal.
- Require additional person hours to complete the review.
- Require addressing current NRC practices involving operability determinations.

Members of the public were in attendance. NRC staff did not receive any questions or comments from members of the public. No Public Meeting Feedback forms were received. No regulatory decisions were made during the public meeting. Please direct any inquiries to me at (301) 415-2871 or Michael.Marshall@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Michael L. Marshall, Jr." in a cursive style.

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:
List of Attendees

cc: via Listserv

LIST OF ATTENDEES

MAY 21, 2018, MEETING WITH EXELON GENERATION COMPANY, LLC, ON PLANNED
SUBMITTAL OF RISK-INFORMED LICENSE AMENDMENT AND EXEMPTION REQUESTS
FOR CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2, CONCERNING
RESOLUTION OF GENERIC ISSUE 191

Name	Organization
Ron Holloway	Wolf Creek Nuclear Operating Corporation
Craig Sellers	Exelon Generation Company, LLC (Exelon)
Enrique Villar	Exelon
John Tsao	U.S. Nuclear Regulatory Commission (NRC)
Steve Smith	NRC
Kenneth Greene	Exelon
Craig Sellers	Exelon
Candace de Messieres	NRC
Michael Marshall	NRC
Vic Cusumano	NRC
Mehdi Reisi Fard	NRC
Andrea Russell	NRC
James Danna	NRC
Shavon Morris	NRC

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- MReisiFard, NRR
- ARussell, NRR
- JDanna, NRR
- SMorris, NRR

ADAMS Accession No. Meeting Notice: ML18170A204
Handouts: ML18171A084

Meeting Summary: ML18197A229
Package: ML18197A239

OFFICE	NRR/DORL/LPL1/PM	NRR/DORL/LPL1/BC	NRR/DORL/LPL1/PM
NAME	MMarshall	JDanna	MMarshall
DATE	07/16/2018	07/18/2018	07/20/2018

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