

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

September 11, 2014

LICENSEE: Exelon Generation Company, LLC

- FACILITY: Dresden Nuclear Power Station, Units 2 and 3 Quad Cities Nuclear Power Station, Units 1 and 2
- SUBJECT: SUMMARY OF AUGUST 23, 2013, MEETING WITH EXELON GENERATION COMPANY, LLC REGARDING AREVA XM FUEL TRANSITION REQUEST FOR DRESDEN AND QUAD CITIES NUCLEAR STATIONS (TAC NOS. MF2422, MF2423, MF2424, and MF2425)

On August 23, 2013, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Exelon Generation Company, LLC (Exelon) and AREVA at the NRC Headquarters in Rockville, Maryland. The purpose of the meeting was to discuss a planned license amendment to transition from Westinghouse Optima2 to AREVA XM nuclear fuel for Dresden Nuclear Power Station (DNPS), Units 2 and 3, and Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. The meeting notice, dated August 23, 2013, is available in the Agencywide Documents Access and Management System (ADAMS) Accession No. ML13238A188. The meeting presentation slides can be found in ADAMS Accession No. ML13225A749. A list of attendees is provided as an enclosure.

The following items are key points from the discussion.

- Exelon plans to transition to AREVA ATRIUM 10XM fuel design in DNPS and QCNPS units. Currently, they use Westinghouse Optima2 fuel design.
- The core operating limit report (COLR) and technical specification (TS) should list all of the latest applicable NRC-approved AREVA generic methodologies that support the licensing analyses for the ATRIUM 10XM fuel design.
- Exelon agreed to revise TS 5.6.5 to reflect the current methods of evaluation licensed to the facility including approval date and revision. Legacy methods will be identified for removal. Westinghouse methods will be retained as long as they are applicable.
- All new analyses should be well documented in the updated final safety analysis report (UFSAR). Exelon stated that they will update the UFSAR and understood the obligation to reflect the current licensing basis.
- Exelon should reflect the facility's current licensing basis in the UFSAR by identifying the specific methods used in the safety analysis for establishing operating limits. The NRC staff stated that the UFSAR is not intended to provide a running catalog of historic methods of evaluation used at the facility.
- Any licensing analyses methodology from a previous vendor can be retained in the COLR/TS/UFSAR. However, those references need to be removed as soon as Exelon converts to the new methodology.

- The generic ACE ATRIUM 10XM correlation supplement may be approved prior to the fuel transition license amendment request (LAR).
- Exelon has agreed to submit a detailed report on the applicability of AREVA methodology to DNPS and QCNPS.
- Thermal conductivity degradation with fuel burnup should be considered in all applicable methodologies.
- NRC-approved methodology should be used to model channel bow. Exelon should be aware of channel bow issues that have been a concern in similar fuel transition LARs.
- Exelon and the NRC staff agreed that the criticality safety analysis licensing approach would be reviewed in a follow-up public meeting. The NRC staff was not in a position to evaluate the planned changes under the Title 10 of the *Code of Federal Regulations*, Section 50.59.
- The application should address controls to manage pellet-clad interaction and will discuss whether AREVA fuel contains a cladding barrier.
- The application should address controls to manage rod blade interface with the two fuel types.
- NRC staff mentioned that there have been a number of requests for additional information related to determining which COLR methods were used. Current safety analysis and methods should be documented in the UFSAR as part of the current licensing basis.

Please direct any inquiries to me at 301-415-2020 or Brenda.Mozafari@nrc.gev

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Brenda L. Mozafari, Senior Project Manager Plant Licensing III-2 and Planning and Analysis Branch Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Enclosure List of Attendees

cc w/encl: Listserv

LIST OF ATTENDEES

AUGUST 23, 2013 MEETING WITH EXELON GENERATION COMPANY, LLC

PRESUBMITTAL MEETING REGARDING AREVA XM FUEL TRANSITION FOR DRESDEN

AND QUAD CITIES NUCLEAR STATIONS

Name	Affiliation
Timothy Byam	Exelon Generation
Doug Pruitt	AREVA
Brian Henning	Exelon Generation
Alan Meginnis	AREVA
Anthony Will	AREVA
Anthony Giancatarino	Exelon Generation
Brenda Mozafari	NRC/NRR/DORL
Nicholas DiFrancesco	NRC/NRR/DORL
John Monninger	NRC/NRR/DORL
Chris Jackson	NRC/NRR/SRXB
Matthew Panicker	NRC/NRR/SNPB
Andrew Proffitt	NRC/NRR/SNPB
Earl Reilly	Exelon Generation
Ben Parks*	NRC/NRR
Scott J. Vrtiska*	Public
Pete Piet*	Exelon Generation
Darrell Carr*	AREVA
Hossein Youssefnia*	Exelon Generation
Ashlev Guzzetta	NRC/NRR/SRXB

* - via teleconference

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Brenda L. Mozafari, Senior Project Manager Plant Licensing III-2 and Planning and Analysis Branch Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

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cc w/encl: Listserv

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ADAMS Accession No. Meeting Notice ML13238A188, Meeting Summary ML14241A633, Handouts ML13225A749

					via c-man		
OFFICE	LPL1-2/PM	LPL3-2/PM	NRR/DSS/SNPB*	LPL3-2/LA	LPL3-2/BC	LPL3-2/PM	
NAME	RGladney	BMozafari	MPanicker	SRohrer	TTate	BMozafari	
DATE	9/10/14	9/10/14	08/05/14	9/ 10 /14	9/11 /14	9/11 /14	

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