



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

July 21, 2015

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

SUBJECT: NUCLEAR REGULATORY COMMISSION PLAN FOR THE AUDIT OF EXELON GENERATION COMPANY, LLC'S FLOOD HAZARD REEVALUATION REPORT SUBMITTAL RELATING TO THE NEAR-TERM TASK FORCE RECOMMENDATION 2.1-FLOODING FOR BRAIDWOOD STATION, UNITS 1 AND 2 (TAC NOS. MF3895 AND MF3896); BYRON STATION, UNITS 1 AND 2 (TAC NOS. MF3893 AND MF3894), CLINTON POWER STATION, UNIT NO. 1 (TAC NO. MF3654); LASALLE COUNTY STATION, UNITS 1 AND 2 (TAC NOS. MF3655 AND MF3656); LIMERICK GENERATING STATION, UNITS 1 AND 2 (TAC NOS. MF6107 AND MF6108); OYSTER CREEK NUCLEAR GENERATING STATION (TAC NO. MF6111); QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 (TAC NOS. MF1108 AND MF1109); AND THREE MILE ISLAND NUCLEAR STATION, UNIT 1 (TAC NO. MF1113).

Dear Mr. Hanson:

This letter documents the U.S. Nuclear Regulatory Commission (NRC) staff's plan to perform regulatory audits of Exelon Generation Company, LLC's (the licensee) Flood Hazard Reevaluation Report (FHRR) submittals related to the Near-Term Task Force Recommendation 2.1, Flooding for the following plants:

- Braidwood Station, Units 1 and 2 (Braidwood)
- Byron Station, Units 1 and 2 (Byron)
- Clinton Power Station, Unit No. 1 (Clinton)
- LaSalle County Station, Units 1 and 2 (LaSalle)
- Limerick Generating Station, Units 1 and 2 (Limerick)
- Oyster Creek Nuclear Generating Station (Oyster Creek)
- Quad Cities Nuclear Power Station Units 1 and 2 (Quad Cities)
- Three Mile Island Nuclear Station, Unit 1 (Three Mile Island).

These technical audits will be performed consistent with NRC Office of Nuclear Reactor Regulation, Office Instruction LIC-111, "Regulatory Audits," dated December 29, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082900195). The audits will be conducted over multiple sessions, as needed, and the NRC staff will develop an audit summary report to document its observations and conclusions within 90 days of the final audit session.

The audits will provide the NRC with a better understanding of the FHRRs, which were submitted to the NRC. Specifically, the audits will provide the NRC with a better understanding

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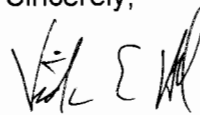
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of the analyses of the flooding hazards presented in the FHRRs. The audits are intended to support completion of the staff's review of the FHRRs and the subsequent issuance of a Staff Assessments.

The enclosed audit plan outlines the process that will allow the NRC staff to identify additional information potentially necessary for licensees to supplement their FHRRs, and resolve any potential technical concerns. The details of this audit have been discussed with Mr. Dave Distel, of your staff.

If you have any questions, please contact me at (301) 415-2915 or by e-mail at [Victor.Hall@nrc.gov](mailto:Victor.Hall@nrc.gov).

Sincerely,



Victor E. Hall, Senior Project Manager  
Hazards Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

Docket Nos.:

Braidwood: STN 50-456 and STN 50-457  
Byron: STN 50-454 and STN 50-455  
Clinton: 50-461  
LaSalle: 50-373 and 50-374  
Limerick: 50-352 and 50-353  
Oyster Creek: 50-219  
Quad Cities: 50-254 and 50-265  
Three Mile Island: 50-289

Enclosure:  
Audit Plan

cc w/encl: Distribution via Listserv



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NRC PLAN FOR THE AUDIT OF EXELON GENERATION COMPANY, LLC'S FLOOD  
HAZARD REEVALUATION REPORT SUBMITTAL RELATING TO THE NEAR-TERM TASK  
FORCE RECOMMENDATION 2.1-FLOODING FOR MULTIPLE PLANTS

BACKGROUND AND AUDIT BASIS:

By letter dated March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information to all power reactor licensees and holders of construction permits in active or deferred status, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) "Conditions of license" (hereafter referred to as the "50.54(f) letter"). The request was issued in connection with implementing lessons-learned from the 2011 accident at the Fukushima Dai-ichi nuclear power plant, as documented in the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident. Recommendation 2.1 of that document recommended that the staff issue orders to all licensees to reevaluate seismic and flooding for their sites against current NRC requirements and guidance. Subsequent Staff Requirements Memoranda associated with Commission Papers SECY 11-0124 and SECY-11-0137, instructed the NRC staff to issue requests for information to licensees pursuant to 10 CFR 50.54(f).

Exelon Generation Company, LLC (Exelon, the licensee) submitted its Flood Hazard Reevaluation Report (FHRR) for the following plants:

- Braidwood Station, Units 1 and 2, by letter dated March 12, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14079A427)
- Byron Station, Units 1 and 2, by letter dated March 12, 2014 (ADAMS Accession No. ML14079A421)
- Clinton Power Station, Unit No. 1, by letter dated March 12, 2014 (ADAMS Accession No. ML14079A419)
- LaSalle County Station, Units 1 and 2, by letter dated March 12, 2014 (ADAMS Accession No. ML14079A425)
- Limerick Generating Station, Units 1 and 2, by letter dated March 12, 2015 (ADAMS No. ML15084A586)
- Oyster Creek Nuclear Generating Station, by letter dated March 12, 2015 (ADAMS No. ML15085A046)
- Quad Cities Nuclear Power Station Units 1 and 2, by letter dated March 12, 2013 (ADAMS Accession No. ML13081A037)
- Three Mile Island Nuclear Station, Unit 1, by letter dated March 12, 2013 (ADAMS Accession No. ML13093A260)

The NRC staff has begun its review of the aforementioned submittals and plans to conduct regulatory audits of Exelon to aid in its review of the licensee's FHRRs.

Enclosure

REGULATORY AUDIT SCOPE AND METHODOLGY:

The areas of focus for the regulatory audit is the information contained in the FHRR submittals, and all associated and relevant supporting documentation used in the development of the aforementioned document including, but not limited to, methodology, process information, calculations, computer models, etc. The audits will be conducted and completed over several meetings that are to be determined, as necessary.

INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY AUDIT:

The information required for the audit is the licensee's models and supporting calculations, as well as documentation related to the storm surge and site specific probable maximum precipitation analyses. Other information needs will be discussed as audit meetings are scheduled.

NRC AUDIT TEAM:

<b>Title</b>	<b>Team Member</b>	<b>Affiliation</b>
Team Leader, NRR/JLD	Victor Hall	NRC
Branch Chief, NRO/DSEA/RHM1	Chris Cook	NRC
Branch Chief, NRO/DSEA/RHM2	Aida Rivera-Varona	NRC
Technical Leads	Peter Chaput (Braidwood, Clinton, LaSalle)	NRC
	Steve Breithaupt (Byron)	NRC
	Warren Sharp (Limerick)	NRC
	Mike Lee (Oyster Creek)	NRC
	Barbara Hayes (Quad Cities)	NRC
	Hosung Ahn (Three Mile Island)	NRC
Technical Managers	Laura Quinn-Willingham	NRC
	Mike Willingham	NRC
Technical Support	Various Contractors	Department of Energy National Laboratory

LOGISTICS:

The audit meetings will be coordinated with Exelon staff.

DELIVERABLES:

The NRC team will develop an audit summary report to convey the audit results. The report will be placed in ADAMS within 90 days of the completion of the final audit session, and will be publicly available.

The information discussed in the audit may be included, fully or in part, in the development of the NRC technical staff's assessments as a result of the FHRR review.

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of the analyses of the flooding hazards presented in the FHRRs. The audits are intended to support completion of the staff's review of the FHRRs and the subsequent issuance of a Staff Assessments.

The enclosed audit plan outlines the process that will allow the NRC staff to identify additional information potentially necessary for licensees to supplement their FHRRs, and resolve any potential technical concerns. The details of this audit have been discussed with Mr. Dave Distel, of your staff.

If you have any questions, please contact me at (301) 415-2915 or by e-mail at [Victor.Hall@nrc.gov](mailto:Victor.Hall@nrc.gov).

Sincerely,

*/RA/*

Victor E. Hall, Senior Project Manager  
Hazards Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

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Audit Plan

cc w/encl: Distribution via Listserv

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RidsNrrDorLPL1-2	RidsNrrDorLPL3-2	JBowen, NRR	
RidsNrrPMBraidwoodResource	RidsNrrPMBByronResource	RidsNrrPMClintonResource	
RidsNrrPMLaSalleResource	RidsNrrPMLimerickResource	RidsNrrPMOysterCreekResource	
RidsNrrPMQuadCitiesResource	RidsNrrPMThreeMileIslandResource		

**ADAMS Accession No.: ML15148A286**

**\*via email**

<b>OFFICE</b>	NRR/JLD/JHMB/PM	NRR/JLD/JHMB/LA*	NRR/JLD/JHMB/BC	NRR/JLD/JHMB/PM
<b>NAME</b>	VHall	SLent	MShams	VHall
<b>DATE</b>	07/20/15	06/09/15	07/20/15	07/21/15

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