



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

July 6, 2017

Operating Reactor Licensees and
Holders of Construction Permits on
the enclosed list

**SUBJECT: NUCLEAR REGULATORY COMMISSION PLAN FOR THE AUDIT OF
LICENSEES' RESPONSES CONCERNING SEISMIC HAZARD
REEVALUATIONS RELATED TO REQUEST FOR INFORMATION PURSUANT
TO TITLE 10 OF THE CODE OF FEDERAL REGULATIONS SECTION 50.54(f)
REGARDING RECOMMENDATION 2.1 OF THE NEAR-TERM TASK FORCE
REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT**

This letter documents the U.S. Nuclear Regulatory Commission (NRC) staff's plan to perform regulatory audits of licensees' responses concerning seismic hazard reevaluations (including seismic probabilistic risk assessments (SPRAs)), which are being completed as part of implementing lessons learned from the 2011 accident at the Fukushima Dai-ichi plant in Japan. These audits will be conducted on an as-needed basis to support the NRC staff's review of licensees' limited-scope and SPRA submittals associated with their reevaluated seismic hazard information.

BACKGROUND

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the NRC issued a request for information pursuant to Title 10 of the Code of Federal Regulations (10 CFR), Section 50.54(f) (hereafter referred to as the 50.54(f) letter). Enclosure 1 to the 50.54(f) letter requested that licensees reevaluate the seismic hazards for their sites using present-day methods and regulatory guidance used by the NRC staff when reviewing applications for early site permits and combined licenses.

By letter dated October 27, 2015 (ADAMS Accession No. ML15194A015), the NRC made a determination of which licensees were to perform (1) a seismic probabilistic risk assessment (SPRA), (2) limited-scope evaluations, or (3) had no further actions to perform based on a comparison of the reevaluated seismic hazard and the site's design-basis earthquake. (Note: Some plant-specific changes regarding whether an SPRA was needed or limited-scope evaluations were needed at certain sites have occurred since the issuance of the October 27, 2015, letter.)

AUDIT PLAN

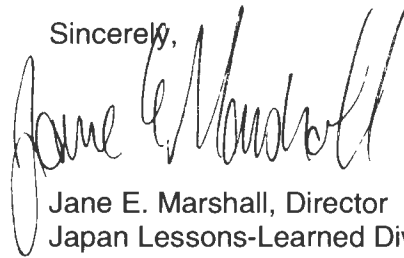
The enclosed audit plan outlines the process that the NRC staff will use to request and review additional information that is necessary to supplement the seismic hazard reevaluation submittals and resolve potential technical questions. Audits will be performed on a plant-specific basis and only if it is necessary to support the NRC staff's review of the submitted information. As part of the audit process, NRC staff members may be contacting licensees to discuss topics

relevant to the existing docketed submittals, as well as information that may be contained in the ePortal system. This audit process will provide the NRC staff with a better understanding of the submitted seismic information and the potential effects on the site. Specifically, the audits will be used to confirm that the information submitted by the licensee has adequately addressed the reevaluated seismic hazards with respect to the scope and intent of the 50.54(f) letter.

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

If you have any questions, please contact Nathan Sanfilippo at (301) 415 - 8744 or by e-mail at Nathan.Sanfilippo@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jane E. Marshall". The signature is written in a cursive style with a large, looped initial "J".

Jane E. Marshall, Director
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

Enclosures:

1. List of Operating Reactor Licensees and Holders of Construction Permits
2. Audit Plan

cc w/encls: Distribution via Listserv
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**LIST OF OPERATING REACTOR LICENSEES AND HOLDERS
OF CONSTRUCTION PERMITS**

Arkansas Nuclear One, Units 1 and 2
Entergy Operations, Inc.
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6

ANO Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802

Beaver Valley Power Station, Units 1 and 2
FirstEnergy Nuclear Operating Company
Docket Nos. 50-334 and 50-412
License Nos. DPR-66 and NPF-73

Mr. Marty L. Richey
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Beaver Valley Power Station
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Shippingport, PA 15077

Braidwood Station, Units 1 and 2
Exelon Generation Company, LLC
Docket Nos. STN 50-456 and STN 50-457
License Nos. NPF-72 and NPF-77

Mr. Bryan C. Hanson
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Exelon Generation Company, LLC
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Exelon Nuclear
Braidwood Station
4300 Winfield Road
Warrenville, IL 60555

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Tennessee Valley Authority
Docket Nos. 50-259, 50-260, and 50-296
License Nos. DPR-33, DPR-52, and DPR-68

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Affairs and Support Services
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

Callaway Plant, Unit 1
Union Electric Company
Docket No. 50-483
License No. NPF-30

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Senior Vice President and Chief
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Fulton, MO 65251

Catawba Nuclear Station, Units 1 and 2
Duke Energy Carolinas, LLC
Docket Nos. 50-413 and 50-414
License Nos. NPF-35 and NPF-52

Mr. Robert T. Simril
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Catawba Nuclear Station
4800 Concord Road
York, SC 29745

Columbia Generating Station
Energy Northwest
Docket No. 50-397
License No. NPF-21

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North Power Plant Loop
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Richland, WA 99352-0968

Cooper Nuclear Station
Nebraska Public Power District
Docket No. 50-298
License No. DPR-46

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Cooper Nuclear Station
72676 648A Avenue
Brownville, NE 68321

Davis-Besse Nuclear Power Station, Unit 1
FirstEnergy Nuclear Operating Company
Docket No. 50-346
License No. NPF-3

Mr. Brian D. Boles
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Davis-Besse Nuclear Power Station
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Mail Stop A-DB-3080
Oak Harbor, OH 43449-9760

Diablo Canyon Power Plant, Units 1 and 2
Pacific Gas and Electric Company
Docket Nos. 50-275 and 50-323
License Nos. DPR-80 and DPR-82

Mr. Edward D. Halpin
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and Chief Nuclear Officer
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Diablo Canyon Power Plant
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Avila Beach, CA 93424

Donald C. Cook Nuclear Plant, Units 1 and 2
Indiana Michigan Power Company
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74

Mr. Joel P. Gebbie
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Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
Donald C. Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106

Dresden Nuclear Power Station, Units 2 and 3
Exelon Generation Company, LLC
Docket Nos. 50-237 and 50-249
License Nos. DPR-19 and DPR-25

Mr. Bryan C. Hanson
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Edwin I. Hatch Nuclear Plant, Units 1 and 2
Southern Nuclear Operating Company, Inc.
Docket Nos. 50-321 and 50-366
License Nos. DPR-57 and NPF-5

Mr. James J. Hutto
Regulatory Affairs Director
Southern Nuclear Operating Company, Inc.
Edwin I. Hatch Nuclear Plant
P.O. Box 1295 / Bin 038
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Fermi 2
DTE Electric Company
Docket No. 50-341
License No. NPF-43

Mr. Paul Fessler, Senior Vice President
and Chief Nuclear Officer
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Fermi 2 - 210 NOC
6400 North Dixie Highway
Newport, MI 48166

Fort Calhoun Station, Unit 1
Omaha Public Power District
Docket No. 50-285
License No. DPR-40

Ms. Mary J. Fisher
Senior Director Fort Calhoun
Station Decommissioning
Omaha Public Power District
Fort Calhoun Station
9610 Power Lane, Mail Stop FC-2-4
Blair, NE 68008

H. B. Robinson Steam Electric Plant, Unit 2
Duke Energy Progress, LLC
Docket No. 50-261
License No. DPR-23

Mr. Ernest J. Kapopoulos, Jr.
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Hope Creek Generating Station
PSEG Nuclear, LLC
Docket No. 50-354
License No. NPF-57

Mr. Peter P. Sena, III
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PSEG Nuclear LLC – N09
Hope Creek Generating Station
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Hancocks Bridge, NJ 08038

Indian Point Nuclear Generating Units 1, 2,
and 3
Entergy Nuclear Operations, Inc.
Docket Nos. 50-247 and 50-286
License Nos. DPR-26 and DPR-64

Vice President, Operations
Entergy Nuclear Operations, Inc.
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Buchanan, NY 10511-0249

James A. FitzPatrick Nuclear Power Plant
Exelon Generation Company, LLC
Docket No. 50-333
License No. DPR-59

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Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

McGuire Nuclear Station, Units 1 and 2
Duke Energy Carolinas, LLC
Docket Nos. 50-369 and 50-370
License Nos. NPF-9 and NPF-17

Mr. Steven D. Capps, Vice President
Duke Energy Carolinas, LLC
McGuire Nuclear Station
12700 Hagers Ferry Road
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Monticello Nuclear Generating Plant
Northern States Power Company
Docket No. 50-263
License No. DPR-22

Mr. Peter A. Gardner
Senior Vice President and Chief
Nuclear Officer
Northern States Power Company -
Minnesota
Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362-9637

North Anna Power Station, Units 1 and 2
Virginia Electric and Power Company
Docket Nos. 50-338 and 50-339
License Nos. NPF-4 and NPF-7

Mr. Daniel G. Stoddard, Senior Vice
President and Chief Nuclear Officer
Virginia Electric and Power Company
North Anna Power Station
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

Palisades Nuclear Plant
Entergy Nuclear Operations, Inc.
Docket No. 50-255
License No. DPR-20

Vice President, Operations
Entergy Nuclear Operations, Inc.
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

Peach Bottom Atomic Power Station, Units 2
and 3
Exelon Generation Company, LLC
Docket Nos. 50-277 and 50-278
License Nos. DPR-44 and DPR-56

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Perry Nuclear Power Plant, Unit 1
FirstEnergy Nuclear Operating Company
Docket No. 50-440
License No. NPF-58

Mr. David B. Hamilton
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P.O. Box 97, 10 Center Road
Perry, OH 44081-0097

Pilgrim Nuclear Power Station
Entergy Nuclear Operations, Inc.
Docket No. 50-293
License No. DPR-35

Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

Point Beach Nuclear Plant, Units 1 and 2
NextEra Energy Point Beach, LLC
Docket Nos. 50-266 and 50-301
License Nos. DPR-24 and DPR-27

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NextEra Energy Point Beach, LLC
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Two Rivers, WI 54241-9516

Seabrook Station, Unit 1
NextEra Energy Seabrook, LLC
Docket No 50-443
License No. NFP-86

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President and Chief Nuclear Officer,
Nuclear Division
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Juno Beach, FL 33408

Sequoyah Nuclear Plant, Units 1 and 2
Tennessee Valley Authority
Docket Nos. 50-327 and 50-328
License Nos. DPR-77 and DPR-79

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
Sequoyah Nuclear Plant
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

Virgil C. Summer Nuclear Station, Unit 1
South Carolina Electric & Gas Company
Docket No. 50-395
License No. NPF-12

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South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
P.O. Box 88, Mail Code 800
Jenkinsville, SC 29065

Vogtle Electric Generating Plant, Units 1 and 2

Southern Nuclear Operating Company, Inc.
Docket Nos. 50-424 and 50-425
License Nos. NPF-68 and NPF-81

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Regulatory Affairs Director
Vogtle Electric Generating Plant
Southern Nuclear Operating Company, Inc.
P.O. Box 1295 / Bin 038
Birmingham, AL 35201-1295

Watts Bar Nuclear Plant, Units 1 and 2

Tennessee Valley Authority
Docket No. 50-390 and 50-391
License No. NPF-90 and NPF-96

Mr. Joseph W. Shea
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Tennessee Valley Authority
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Wolf Creek Generating Station

Wolf Creek Nuclear Operating Corporation
Docket No. 50-482
License No. NPF-42

Mr. Adam C. Heflin
President, Chief Executive Officer,
and Chief Nuclear Officer
Wolf Creek Nuclear Operating Corporation
Wolf Creek Generating Station
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Burlington, KS 66839

Enclosure 2
Audit Plan

NRC PLAN FOR THE AUDIT OF REVALUATED SEISMIC HAZARD SUBMITTALS
RELATING TO REQUEST FOR INFORMATION PURSUANT TO TITLE 10 OF THE CODE
OF FEDERAL REGULATIONS SECTION 50.54(f) REGARDING RECOMMENDATION 2.1
OF THE NEAR-TERM TASK FORCE REVIEW OF INSIGHTS FROM THE FUKUSHIMA
DAI-ICHI ACCIDENT FOR MULTIPLE PLANTS

BACKGROUND AND AUDIT BASIS

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the NRC issued a request for information pursuant to Title 10 of the Code of Federal Regulations (10 CFR), Section 50.54(f) (hereafter referred to as the 50.54(f) letter). Enclosure 1 to the 50.54(f) letter requested that licensees reevaluate the seismic hazards for their sites using present-day methods and regulatory guidance used by the NRC staff when reviewing applications for early site permits and combined licenses.

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REGULATORY AUDIT SCOPE AND METHODOLOGY

The areas of focus for the regulatory audit are the information contained in the SPRA submittals or limited-scope evaluation submittals, as applicable, and all associated and relevant supporting documentation used in the development of the aforementioned documents including, but not limited to, methodology, process information, calculations, computer models, etc.

NRC AUDIT TEAM:

Title	Team Member	Affiliation
Team Leader, NRR/JLD	Various Staff Members	NRC
Branch Chief, NRR/JLD/JHMB	Nathan Sanfilippo	NRC
Branch Chief, NRR/JLD/JERB	Stewart Bailey	NRC
Branch Chief, NRR/DRA	Greg Casto	NRC
Branch Chief, NRR/DE/ESEB	Brian Wittick	NRC
Branch Chief, NRO/DSEA	Michael Dudek	NRC
Technical Staff, NRR/JLD	Various Staff Members	NRC
Technical Staff, NRR/DRA	Various Staff Members	NRC

LOGISTICS:

The audit meetings will be coordinated with each licensee contact.

DELIVERABLES:

The NRC team will develop an audit summary report. 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 staff's evaluation of the licensees' reevaluated seismic hazard submittals.

NUCLEAR REGULATORY COMMISSION PLAN FOR THE AUDIT OF LICENSEE RESPONSES CONCERNING SEISMIC HAZARD REEVALUATIONS RELATED TO REQUEST FOR INFORMATION PURSUANT TO TITLE 10 OF THE CODE OF FEDERAL REGULATIONS SECTION 50.54(f) REGARDING RECOMMENDATION 2.1 OF THE NEAR-TERM TASK FORCE REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT DATED July 6, 2017

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RidsNrrDorlLSPB	RidsNrrPMMonticello	
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RidsNrrLASRohrer	RidsNrrPMRobinson	
RidsNrrLAIBetts	RidsNrrPMSeabrook	
RidsNrrPMANO	RidsNrrPMSequoyah	
RidsNrrPMBeaverValley	RidsNrrPMSummer	
RidsNrrPMBraidwood	RidsNrrPMVogtle	
RidsNrrPMBrownsFerry	RidsNrrPMWattsBar1	

ADAMS Accession No.: ML17177A446

*via email

OFFICE	NRR/JLD/JHMB/PM	NRR/JLD/JHMB/LA	NRR/JLD/JHMS/BC	NRR/JLD/DD
NAME	BTitus	SLent	NSanfilippo	MShams
DATE	6/29/17	6/28/17	6/29/17	6/29/17
OFFICE	NRR/JLD/D			
NAME	JMarshall			
DATE	7/6/17			

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