



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

October 27, 2015

The Power Reactor Licensees
on the Enclosed List

SUBJECT: FINAL DETERMINATION OF LICENSEE SEISMIC PROBABILISTIC RISK ASSESSMENTS UNDER THE REQUEST FOR INFORMATION PURSUANT TO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* 50.54(f) REGARDING RECOMMENDATION 2.1 "SEISMIC" OF THE NEAR-TERM TASK FORCE REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this letter to (1) inform power reactor licensees of the remaining seismic evaluations¹ that each licensee will perform, (2) inform those licensees that will perform a seismic probabilistic risk assessment (SPRA), and (3) establish the associated due dates for the seismic evaluations and SPRAs to complete licensees' responses to the March 12, 2012, request for information². By letters³ dated May 9, 2014,⁴ and May 13, 2015⁵, the NRC informed licensees of the initial screening and prioritization results, indicating that 33 power reactor sites would perform SPRAs⁶ because their reevaluated hazard exceeds their current design-basis. The NRC staff has completed an assessment of reevaluated hazard and available seismic risk information and has concluded that 13 sites with low to moderate reevaluated seismic hazard exceedance above their current design-basis are no longer expected to perform a SPRA. For the remaining 20 sites, SPRAs continue to be the appropriate analyses to assess the total plant response to the reevaluated hazard, so as to inform the NRC's regulatory decisions on the adequacy of these sites' current seismic design-basis. For these 20 sites, the NRC staff revised the schedule for submitting the SPRAs to more effectively align the submittal dates with available NRC and industry resources. The revised schedule expedites the industry's completion of the SPRAs to December 2019, one year ahead of the original schedule, while staggering the submittals to allow for additional time for some sites to enable thorough evaluations. The NRC staff continues to have reasonable assurance that plants can operate safely while these risk evaluations are completed.

Enclosure 1 to this letter lists the SPRA submittal dates for the sites that will submit a SPRA. In addition to SPRAs, the enclosure outlines the remaining seismic evaluations (i.e., high frequency (HF), low frequency, spent fuel pool (SFP), and individual plant examination of external events (IPEEE)-associated evaluations) for plant structures, systems, and components that each licensee will complete to conclude its response to the March 12, 2012, request for information.

¹ Enclosure 2 of this letter provides a glossary of seismic-related evaluations.

² Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340.

³ Additional seismic hazard screening letters are listed in Enclosure 3.

⁴ Seismic Screening and Prioritization results can be found at ADAMS Accession No. ML14111A147.

⁵ Screening and Prioritization for Western United States Sites can be found at ADAMS Accession No. ML15113B344.

⁶ Guidance would have allowed a few sites to complete Seismic Margin Assessments (SMAs) due to the small amount of reevaluated hazard exceedance above the plant design-basis.

The information and the associated schedule for submittal of the mitigation strategies assessment reflecting the reevaluated seismic hazard will be addressed in subsequent correspondence.

BACKGROUND

On March 12, 2012, the NRC issued a request for information pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 50.54(f) (hereafter referred to as the 50.54(f) letter). One purpose of that request was to gather information concerning the reevaluated seismic hazards at operating reactor and construction permit sites to enable the NRC staff to determine whether licenses should be modified, suspended, or revoked. The "Required Response" section of Enclosure 1 of the 50.54(f) letter indicated that licensees and construction permit holders should provide seismic hazard evaluation using present-day methods. Enclosure 3 of this letter lists the reevaluated seismic hazard and screening reports (SHSR) provided by each of the licensees. The NRC staff has reviewed each of the SHSRs and is in the process of documenting each review. The 50.54(f) letter stated that the NRC would provide the results of the screening and prioritization indicating deadlines for individual plants to complete SPRAs, if necessary, to assess the total plant response to the reevaluated seismic hazard.

By letters dated May 9, 2014, and May 13, 2015, the NRC informed licensees of operating reactors and construction permit holders of the initial screening and prioritization results, as described in Enclosure 1 of the 50.54(f) letter. The letters also discussed that the NRC would determine which plants will complete a SPRA to support NRC regulatory decision-making. The NRC initially screened plants consistent with the industry developed and the NRC endorsed "Seismic Evaluation Guidance: Screening, Prioritization and Implementation Details [SPID] for the Resolution of Fukushima Near-Term Task Force [NTTF] Recommendation 2.1: Seismic"⁷ (ADAMS Accession No. ML12333A170). The SPID guidance established the evaluations that would be requested by the NRC. This was determined by considering the difference in the plant's design-basis safe shutdown earthquake (SSE) or IPEEE capacity spectrum and the reevaluated seismic hazard (ground motion response spectrum (GMRS)). The initial screening approach is discussed in greater detail in the SPID guidance and in prior screening letters. In light of improved understanding of the reevaluated hazards, as well as consideration of available risk insights, the staff has reassessed the need and scope of additional seismic evaluations for some plants. The reassessment approach and results are discussed below.

FINAL DETERMINATION FOR SEISMIC PROBABILISTIC RISK ASSESSMENTS

The initial screening documented in the May 9, 2014, and May 13, 2015, letters, categorized 33 sites as needing to submit a SPRA. Following the initial screening, the NRC staff performed an additional assessment, examining available information to determine the need for these plants to perform a SPRA. For each plant, the NRC staff assessed if the reevaluated seismic hazard creates a significantly higher seismic demand, such that a SPRA is necessary to inform the NRC's decision described in the 50.54(f) letter.

The first consideration focused on the change in seismic hazard. Specifically, the amount by which the GMRS exceeds the SSE in the 1-10 Hertz (Hz) frequency range and the peak of the

⁷ The NRC endorsed the SPID guidance by letter dated February 15, 2013 (ADAMS Accession No. ML12319A074).

spectral acceleration in the 1-10 Hz frequency range were considered. If the GMRS exceedance and/or peak spectral acceleration were considered significant, then the NRC staff concluded that a SPRA continues to be necessary for that site.

If the first consideration was judged as not significant, then the second of the two considerations focused on a general estimation of the plant's seismic core damage frequency (SCDF) and on insights related to the conditional containment failure probability for that plant's specific type of containment. As with the first consideration, if the estimated SCDF was considered significant and/or if there were potential implications in the context of the containment type, then the NRC staff concluded that a SPRA evaluation continues to be the appropriate approach.

If the seismic hazard exceedance, peak of the spectral acceleration, and the general estimation of the SCDF were judged to be not significant, then the NRC staff concluded that a SPRA is not necessary for NRC's 50.54(f) letter-related regulatory decisions. Based on this additional assessment, the NRC staff has determined that SPRA are not warranted for 13 sites listed in Table 1a in Enclosure 1.

For the remaining 20 sites, SPRAs continue to be the appropriate analysis to assess the total plant response to the reevaluated hazard so as to inform the NRC's regulatory decisions on the adequacy of these sites' current seismic design-basis. Table 1a in Enclosure 1, lists the SPRA submittal dates for the sites that will be submitting a SPRA. In addition for all sites, Tables 1a and 1b outline the remaining seismic evaluations (i.e., high frequency, low frequency, SFP, and IPEEE-associated evaluations) for plant system, structures, and components that will be submitted by each licensee to complete its response to the March 12, 2012, request for information.

NEXT STEPS FOR COMPLETION OF RECOMMENDATION 2.1 SEISMIC ACTIVITIES

SPRA SUBMITTAL SCHEDULES

Licensees are now expected to provide their SPRA by the dates indicated in Enclosure 1 to this letter. The established dates are consistent with those discussed during a public meeting⁸ held on September 3, 2015. The NRC staggered the schedule for the SPRA submittals to align with the availability of NRC and industry resources. The schedule revisions support earlier submittal of SPRAs by March 2017, three months sooner than the previous date for the first submittals, and support the last submittal being no later than December 31, 2019, which is one year sooner than the previous date. The revised schedules will also allow for additional time for some sites to enable a thorough evaluation. The NRC continues to have reasonable assurance that plants can operate safely while these risk evaluations are completed.

Licensees that are expected to submit a SPRA, should use the reevaluated seismic hazard already reviewed by the NRC staff. The NRC does not plan to re-review the reevaluated seismic hazard as part its review of the SPRA, unless a licensee has used a new or updated reevaluated seismic hazard that has not been reviewed by the NRC staff. Consistent with the letter dated December 10, 2014 (ADAMS Accession No. ML14307B707), licensees are

⁸ The NRC and the Nuclear Energy Institute (NEI) September 3, 2015, public meeting slides can be found in ADAMS Accession Nos. ML15247A225, ML15245A714, and ML15245A720, respectively.

encouraged to inform the NRC of planned changes to the reevaluated seismic hazard to support development of NRC review plans.

LIMITED SCOPE EVALUATION SUBMITTAL SCHEDULES

As indicated above, Tables 1a and 1b outline the limited scope evaluations remaining to be submitted by licensees. As part of the seismic hazard reevaluation activities described in the SPID, the detailed implementation guidance for the limited scope evaluations continues to be under development. Once the implementing guidance is finalized, licensees are encouraged to use the guidance in preparing their limited scope evaluations. The Nuclear Energy Institute (NEI) proposed a schedule for the submittal of HF evaluations by letter dated July 30, 2015 (ADAMS Accession No. ML15223A095), and for the SFP evaluations in the September 3, 2015, public meeting. The NRC staff accepts these submitted schedules, but the NRC acknowledges that further prioritization and refinements to NTF Recommendation 2.1 Seismic submittal schedules may occur to accommodate the proposed mitigation strategies assessments for the reevaluated hazard identified in draft regulatory guide DG-1301, "Flexible Mitigation Strategies for Beyond-Design-Basis Events," supporting SECY 15-0065, "Proposed Rule: Mitigation of Beyond-Design-Basis Events."

As a result of NRC staff efforts to conduct efficient reviews, HF and SFP evaluation submittals fall into two tiers based on hazard exceedance above the design-basis or peak spectral acceleration. For HF evaluations, licensees with limited exceedance above plant design bases, submittals are expected by December 31, 2015. For remaining licensees conducting a HF evaluation, submittals are expected by December 31, 2016. Further, for those sites where SPRA evaluations are no longer expected, HF evaluations submittals are expected by August 31, 2017. For licensees who are completing a SPRA, HF component performance will be assessed as part of the SPRA submittal. Separately, licensees requested to complete low-frequency evaluations should submit the evaluation no later than December 2016.

For SFP evaluations, sites are divided between low to moderate GMRS sites (i.e., peak spectral acceleration less than 0.8g for this application) and those with higher peak spectral acceleration. Sites with lower peak spectral acceleration are projected to submit their evaluations by December 31, 2016. Those with higher peak spectral acceleration are expected to complete SFP evaluations by December 31, 2017.

The NRC will continue to work with licensees and other external stakeholders to schedule limited scope evaluation submittals commensurate with safety significance and the availability of NRC and industry resources.

OPTIONS FOR SUBMITTAL OF REMAINING IPEEE SCREENING EVALUATIONS

As indicated in Tables 1a and 1b in Enclosure 1 to this letter, several licensees demonstrated that IPEEE capacity spectra are a suitable comparison to the GMRS to screen out of performing a SPRA. These plants are expected to complete additional HF and SFP evaluations, consistent with the IPEEE acceptance criteria in the SPID. The plants listed in Table 1b have a moderate high frequency exceedance compared to the SSE. Table 1b includes a subset of four sites listed in Table 1a and outlines two options to respond to the remaining information requests associated with the 50.54(f) letter. Option 1 relies on the IPEEE submittal and would need a relay chatter evaluation as indicated by the IPEEE criteria in the SPID guidance. Consistent

with NEI letter dated July 30, 2015, submittal of IPEEE relay chatter evaluation is due December 31, 2016. Option 2 allows for completion using the HF evaluation approach. In choosing one of the two options, these licensees should consider that a relay chatter study will continue to be needed for the IPEEE submittal to meet the SPID acceptance criteria. Meeting the SPID criteria will be necessary if a licensee plans to rely on the IPEEE results in its mitigation strategies assessment with respect to the reevaluated hazard.

If you have any questions regarding this letter, please contact Nicholas DiFrancesco at 301-415-1115 or via email at Nicholas.Difrancesco@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. M. Dean', written in a cursive style.

William M. Dean, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Recommendation 2.1 Seismic –
Information Request Tables
2. Glossary of Recommendation
2.1 Seismic Evaluations
3. Seismic Hazard Submittals
and Prior Screening Letters
4. List of Licensees

cc: Listserv

Table 1a. Recommendation 2.1 Seismic – Information Requests ¹					
Plant Name	Seismic Probabilistic Risk Assessment Submittal Date ^{2,3}	Limited-Scope Evaluations			IPEEE Screening Evaluation
		High Frequency ²	Low Frequency	Spent Fuel Pool	Relay Chatter
Arkansas Nuclear One, Units 1 and 2		x		x	
Beaver Valley Power Station, Units 1 and 2	9/30/17			x	
Bellefonte Nuclear Plant, Units 1 and 2	Footnote 4			x	
Braidwood Station, Units 1 and 2		x			
Browns Ferry Nuclear Plant, Units 1, 2, and 3	12/31/19			x	
Brunswick Steam Electric Plant, Units 1 and 2		x		x	x
Byron Station, Units 1 and 2	See Table 1b.				
Callaway Plant, Unit 1	12/31/17			x	
Calvert Cliffs Nuclear Power Plant, Units 1 and 2		x		x	
Catawba Nuclear Station, Units 1 and 2	9/30/19			x	
Clinton Power Station, Unit No. 1		x			
Columbia Generating Station	3/31/19			x	
Comanche Peak Nuclear Power Plant, Units 1 and 2					
Cooper Nuclear Station		x		x	

¹ This table identifies the SPRA submittal dates for applicable sites. The table also identifies the remaining information to be submitted by licensees to complete the response to the 50.54(f) letter.

² The SPRAs will assess the effects of high frequency exceedance on plant equipment.

³ SPRAs or SMAs are no longer expected for Calvert Cliffs Nuclear Power Plant, Units 1 and 2, Cooper Nuclear Station, Davis-Besse Nuclear Power Station, Unit 1, Edwin I. Hatch Nuclear Plant, Units 1 and 2, Fermi, Unit 2, LaSalle County Station, Units 1 and 2, Monticello Nuclear Generating Plant, Oyster Creek Nuclear Generating Station, Point Beach Nuclear Plant, Units 1 and 2, Perry Nuclear Power Plant, Unit 1, Seabrook, Unit 1, Three Mile Island Nuclear Station, Unit 1, and Wolf Creek Generating Station, Unit 1.

⁴ By letter dated February 26, 2015, the NRC accepted an alternative submittal schedule due to deferred construction status.

Table 1a. Recommendation 2.1 Seismic – Information Requests ¹					
Plant Name	Seismic Probabilistic Risk Assessment Submittal Date ^{2,3}	Limited-Scope Evaluations			IPEEE Screening Evaluation
		High Frequency ²	Low Frequency	Spent Fuel Pool	Relay Chatter
Davis-Besse Nuclear Power Station, Unit 1		x		x	
Diablo Canyon Power Plant, Unit Nos. 1 and 2	9/30/17			x	
Donald C. Cook Nuclear Plant, Units 1 and 2	6/30/18			x	
Dresden Nuclear Power Station, Units 2 and 3	6/30/19			x	
Duane Arnold Energy Center		x			
Edwin I. Hatch Nuclear Plant, Units 1 and 2		x	x	x	
Fermi, Unit 2		x		x	
Fort Calhoun Station, Unit 1				x	x
Grand Gulf Nuclear Station, Unit 1					
H. B Robinson Steam Electric Plant, Unit No. 2	3/31/19			x	
Hope Creek Generating Station		x ⁵			
Indian Point Nuclear Generating, Unit No. 2	6/30/17			x	
Indian Point Nuclear Generating, Unit No. 3	6/30/18			x	
James A. FitzPatrick Nuclear Power Plant	See Table 1b.				
Joseph M. Farley Nuclear Plant, Units 1 and 2		Footnote 6	Footnote 6		
LaSalle County Station, Units 1 and 2		x		x	
Limerick Generating Station, Units 1 and 2		x			
McGuire Nuclear Station, Units 1 and 2	12/31/19			x	
Millstone Power Station, Units 2 and 3	See Table 1b.				
Monticello Nuclear Generating Plant		x		x	

⁵ By letter dated March 28, 2014, the licensee committed to complete an IPEEE relay review in lieu of a high frequency confirmation.

⁶ Evaluation no longer expected based on de minimis exceedance above the design-basis SSE.

Table 1a. Recommendation 2.1 Seismic – Information Requests¹

Plant Name	Seismic Probabilistic Risk Assessment Submittal Date ^{2,3}	Limited-Scope Evaluations			IPEEE Screening Evaluation
		High Frequency ²	Low Frequency	Spent Fuel Pool	Relay Chatter
Nine Mile Point Nuclear Station, Units 1 and 2		x			
North Anna Power Station, Units 1 and 2	3/31/18			x	
Oconee Nuclear Station, Units 1, 2, and 3	12/31/18			x	
Oyster Creek Nuclear Generating Station		x		x	
Palisades Nuclear Plant	9/30/19			x	
Palo Verde Nuclear Generating Station, Units 1, 2, and 3					
Peach Bottom Atomic Power Station, Units 2 and 3	3/31/18			x	
Perry Nuclear Power Plant, Unit 1		x		x	
Pilgrim Nuclear Power Station	12/31/17			x	
Point Beach Nuclear Plant, Units 1 and 2		x		x	
Prairie Island Nuclear Generating Plant, Units 1 and 2		Footnote 7			
Quad Cities Nuclear Power Station, Units 1 and 2				x	
R. E. Ginna Nuclear Power Plant		x			
River Bend Station, Unit 1		x			
Salem Nuclear Generating Station, Units 1 and 2	See Table 1b.				
Seabrook Station, Unit No. 1		x		x	
Sequoyah Nuclear Plant, Units 1 and 2	12/31/19			x	
Shearon Harris Nuclear Power Plant, Unit 1		x			
South Texas Project, Units 1 and 2					
St. Lucie Plant, Units 1 and 2					

⁷ Evaluation no longer expected based on NRC acceptance of licensee seismic hazard.

Table 1a. Recommendation 2.1 Seismic – Information Requests ¹					
Plant Name	Seismic Probabilistic Risk Assessment Submittal Date ^{2,3}	Limited-Scope Evaluations			IPEEE Screening Evaluation
		High Frequency ²	Low Frequency	Spent Fuel Pool	Relay Chatter
Surry Power Station, Unit Nos. 1 and 2		Footnote 8			
Susquehanna Steam Electric Station, Units 1 and 2		x		x	
Three Mile Island Nuclear Station, Unit 1		x		x	
Turkey Point, Units 3 and 4					
Virgil C. Summer Nuclear Station, Unit 1	9/30/18			x	
Vogtle Electric Generating Plant, Units 1 and 2	3/31/17			x	
Waterford Steam Electric Station, Unit 3		x			
Watts Bar Nuclear Plant, Units 1 and 2	6/30/17			x	
Wolf Creek Generating Station, Unit 1		x		x	

⁸ Evaluation no longer expected based on de minimis exceedance above design-basis SSE.

Table 1b. Recommendation 2.1 Seismic – Information Requests Options for remaining IPEEE Screening Evaluations¹					
Plant Name	Seismic Probabilistic Risk Assessment Submittal Date	Limited-Scope Evaluations			IPEEE Screening Evaluation
		High Frequency	Low Frequency	Spent Fuel Pool	Relay Chatter
Byron Station, Units 1 and 2	Option 1	x		x	x
	Option 2	x		x	
James A. FitzPatrick Nuclear Power Plant	Option 1			x	x
	Option 2	x		x	
Millstone Power Station, Units 2 and 3	Option 1	x		x	x
	Option 2	x		x	
Salem Nuclear Generating Station, Units 1 and 2	Option 1			x	x
	Option 2	x		x	

¹ This table outlines two options for licensees to respond to the remaining information requests associated with high frequency exceedance as part of the 50.54(f) letter. The high frequency evaluation and IPEEE relay review differ in scope of equipment and evaluation approach. Both approaches are acceptable to assessing plant performance for high frequency exceedance dependent on site screening. For additional background, the high frequency evaluation approach is discussed in the Nuclear Energy Institute letter dated July 30, 2015, and the IPEEE relay review is discussed in Section 3.4 of the industry-issued SPID guidance dated November 16, 2012.

In choosing one of the two options, these licensees should consider that a relay chatter study will continue to be needed for the IPEEE submittal to meet the SPID acceptance criteria. Meeting the SPID criteria will be necessary if a licensee plans to rely on the IPEEE results in its mitigation strategies assessment with respect to the reevaluated hazard.

Glossary of Evaluations

Associated with Near-Term Task Force Recommendation 2.1 Seismic Evaluations

Interim Evaluation or Actions – An immediate licensee and NRC review of the reevaluated hazard to determine whether actions are needed to assure plant safety while further evaluations are ongoing. The NRC staff completed its review and concluded that, based on the licensees' interim evaluations and actions, Central and Eastern United States (CEUS), as well as Western United States (WUS) plants are safe for continued operations, while more detailed evaluations are on-going. Interim evaluations and actions are provided in Section 5.0, "Interim Actions," of the licensees' seismic hazard reevaluation and screening report submittals.

Expedited Approach – A near-term licensee evaluation completed in December 2014 for CEUS plants and by January 31, 2016, for WUS plants whose reevaluated hazard exceeds the current design-basis for the safe shutdown earthquake hazard level. The evaluation looked at certain key pieces of equipment that can be used to provide core cooling under the conditions of a station blackout (i.e., no alternating current power is available) and loss of ultimate heat sink for a seismic hazard up to two times the safe shutdown earthquake.

Seismic Probabilistic Risk Assessment – The seismic probabilistic risk assessment provides comprehensive plant seismic capacity information to make regulatory decisions, such as whether to amend a plant's design or licensing basis or make additional safety enhancements. These evaluations provide information to make risk-informed decisions. The NRC staff will use this information in conjunction with the existing regulatory tools, such as backfit analysis, to decide on further regulatory actions.

Limited-Scope Evaluations – These include i) Spent Fuel Pool Evaluation, ii) High Frequency Evaluation, and iii) Low Frequency Evaluation. Respectively, these evaluations are focused on the following: i) spent fuel pool structure and cooling components and systems that influence the water inventory for cooling the spent fuel, ii) a review of components susceptible to high frequency accelerations (e.g., electrical relays) to ensure maintenance of certain key functions, and iii) a review of select components susceptible to low frequency accelerations (e.g., water storage tanks).

Relay Chatter Evaluation – The individual plant examination for external events (IPEEE) seismic risk evaluations included a number of different approaches, such as seismic probabilistic risk assessment, reduced-scope seismic margin analysis (SMA), focused-scope SMA, and full-scope SMA. For licensees that used their IPEEE results for screening considerations, but for which their IPEEE was a focused-scope SMA, the licensee needs to enhance their relay chatter evaluations to be comparable to the evaluations performed for full-scope SMAs. The relay chatter evaluation needs to be a full-scope review for components, such as electric relays and switches.

Seismic Hazard Submittals and Prior Screening Letters		
Licensee Facility	Seismic Hazard and Screening Report and Supplements (ADAMS Accession Nos.)	Prior Screening Letter(s) (ADAMS Accession Nos.)
Arkansas Nuclear One, Units 1 and 2	March 28, 2014 (ML14092A021), and August 21, 2014 (ML14233A275)	May 9, 2014 (ML14111A147), and November 21, 2014 (ML14246A428)
Beaver Valley Power Station, Units 1 and 2	March 31, 2014 (ML14090A143), and June 29, 2015 (ML15181A085)	May 9, 2014 (ML14111A147)
Bellefonte Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14098A478), October 21, 2014 (ML14295A290), and December 3, 2014 (ML14338A787)	May 9, 2014 (ML14111A147), and February 26, 2015 (ML15023A259)
Braidwood Station, Units 1 and 2	March 31, 2014 (ML14091A243)	May 9, 2014 (ML14111A147)
Browns Ferry Nuclear Plant, Units 1, 2, and 3	March 31, 2014 (ML14098A478)	May 9, 2014 (ML14111A147)
Brunswick Steam Electric Plant, Units 1 and 2	March 31, 2014 (ML14106A461), and August 14, 2014 (ML14241A432)	May 9, 2014 (ML14111A147), and September 17, 2014 (ML14231A964)
Byron Station, Units 1 and 2	March 31, 2014 (ML14091A010)	May 9, 2014 (ML14111A147)
Callaway Plant, Unit 1	March 28, 2014 (ML14090A446)	May 9, 2014 (ML14111A147)
Calvert Cliffs Nuclear Power Plant, Units 1 and 2	March 31, 2014 (ML14099A196)	May 9, 2014 (ML14111A147)
Catawba Nuclear Station, Units 1 and 2	March 31, 2014 (ML14099A184) and January 8, 2015 (ML15009A257)	May 9, 2014 (ML14111A147)
Clinton Power Station, Unit 1	March 31, 2014 (ML14091A011), and August 21, 2014 (ML14234A124)	May 9, 2014 (ML14111A147), and October 3, 2014 (ML14258A043)
Columbia Generating Station	March 12, 2015 (ML15078A243), and September 24, 2015 (ML15267A780)	May 13, 2015 (ML15113B344)
Comanche Peak Nuclear Power Plant, Units 1 and 2	March 27, 2014 (ML14099A197)	May 9, 2014 (ML14111A147)

Seismic Hazard Submittals and Prior Screening Letters		
Licensee Facility	Seismic Hazard and Screening Report and Supplements (ADAMS Accession Nos.)	Prior Screening Letter(s) (ADAMS Accession Nos.)
Cooper Nuclear Station	March 31, 2014 (ML14094A048), February 11, 2015 (ML15050A165), and June 22, 2015 (ML15177A097)	May 9, 2014 (ML14111A147) and October 28, 2014 (ML14273A259)
Davis-Besse Nuclear Power Station, Unit 1	March 31, 2014 (ML14090A143)	May 9, 2014 (ML14111A147)
Diablo Canyon Power Plant, Unit Nos. 1 and 2	March 11, 2015 (ML15071A046), August 12, 2015 (ML15224B575), and September 16, 2015 (ML15259A600)	May 13, 2015 (ML15113B344) and July 14, 2015 (ML15173A428)
Donald C. Cook Nuclear Plant, Units 1 and 2	March 27, 2014 (ML14092A327) and November 21, 2014 (ML14329A713)	May 9, 2014 (ML14111A147)
Dresden Nuclear Power Station, Units 2 and 3	March 31, 2014 (ML14091A012), and July 22, 2015 (ML15204A088)	May 9, 2014 (ML14111A147)
Duane Arnold Energy Center	March 28, 2014 (ML14092A331) and	May 9, 2014 (ML14111A147) and August 21, 2014 (ML14198A070)
Edwin I. Hatch Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14092A017), January 20, 2015 (ML15020A728), and August 10, 2015 (ML15233A074)	May 9, 2014 (ML14111A147)
Fermi, Unit 2	March 31, 2014 (ML14090A326), December 18, 2014 (ML14353A149), and June 4, 2015 (ML15155B634)	May 9, 2014 (ML14111A147)
Fort Calhoun Station, Unit 1	March 31, 2014 (ML14097A087), and July 25, 2014 (ML14206B064)	May 9, 2014 (ML14111A147), and September 22, 2014 (ML14224A526)
Grand Gulf Nuclear Station, Unit 1	March 31, 2014 (ML14090A098)	May 9, 2014 (ML14111A147)
H. B Robinson Steam Electric Plant, Unit No. 2	March 31, 2014 (ML14099A204), November 12, 2014 (ML14325A645), April 29, 2015 (ML15132A127), July 17, 2015 (ML15201A006), and August 29, 2015 (ML15243A061)	May 9, 2014 (ML14111A147)

Seismic Hazard Submittals and Prior Screening Letters		
Licensee Facility	Seismic Hazard and Screening Report and Supplements (ADAMS Accession Nos.)	Prior Screening Letter(s) (ADAMS Accession Nos.)
Hope Creek Generating Station	March 28, 2014 (ML14087A436)	May 9, 2014 (ML14111A147)
Indian Point Nuclear Generating Unit Nos. 2 and 3	March 31, 2014 (ML14099A110), March 31, 2014 (ML14099A111), August 18, 2014 (ML14241A026), and November 5, 2014 (ML14310A666)	May 9, 2014 (ML14111A147) and November 21, 2014 (ML14246A428)
James A. FitzPatrick Nuclear Power Plant	March 31, 2014 (ML14090A243), August 21, 2014 (ML14237A097), and December 5, 2014 (ML14339A773)	May 9, 2014 (ML14111A147) and December 31, 2014 (ML14323A027)
Joseph M. Farley Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14092A020)	May 9, 2014 (ML14111A147)
LaSalle County Station, Units 1 and 2	March 31, 2014 (ML14091A013) and July 22, 2015 (ML15204A088)	May 9, 2014 (ML14111A147)
Limerick Generating Station, Units 1 and 2	March 31, 2014 (ML14090A236) and August 21, 2014 (ML14234A124)	May 9, 2014 (ML14111A147) and October 3, 2014 (ML14258A043)
McGuire Nuclear Station, Units 1 and 2	March 20, 2014 (ML14098A421)	May 9, 2014 (ML14111A147)
Millstone Power Station, Units 2 and 3	March 31, 2014 (ML14092A417) July 21, 2014 (ML14204A620)	May 9, 2014 (ML14111A147) and November 21, 2014 (ML14246A428)
Monticello Nuclear Generating Plant	March 31, 2014 (ML14090A297), April 3, 2014 (ML14093B361), and May 14, 2014 (ML14136A285)	May 9, 2014 (ML14111A147) and August 20, 2014 (ML14210A030)
Nine Mile Point Nuclear Station, Units 1 and 2	March 31, 2014 (ML14099A196)	May 9, 2014 (ML14111A147)
North Anna Power Station, Units 1 and 2	March 31, 2014 (ML14092A416)	May 9, 2014 (ML14111A147)
Oconee Nuclear Station, Units 1, 2, and 3	March 31, 2014 (ML14092A024), November 14, 2014 (ML14325A584), and April 30, 2015 (ML15128A332)	May 9, 2014 (ML14111A147)
Oyster Creek Nuclear Generating Station	March 31, 2014 (ML14090A241) and August 21, 2014 (ML14234A124)	May 9, 2014 (ML14111A147) and November 28, 2014 (ML14307A638)

Seismic Hazard Submittals and Prior Screening Letters		
Licensee Facility	Seismic Hazard and Screening Report and Supplements (ADAMS Accession Nos.)	Prior Screening Letter(s) (ADAMS Accession Nos.)
Palisades Nuclear Plant	March 31, 2014 (ML14090A069)	May 9, 2014 (ML14111A147)
Palo Verde Nuclear Generating Station, Units 1, 2, and 3	March 10, 2015, (ML15076A073), April 10, 2015 (ML15105A076), and August 6, 2015 (ML15223A206)	May 13, 2015 (ML15113B344)
Peach Bottom Atomic Power Station Units 2 and 3	March 31, 2014 (ML14090A247)	May 9, 2014 (ML14111A147)
Perry Nuclear Power Plant, Unit 1	March 31, 2014 (ML14090A143)	May 9, 2014 (ML14111A147)
Pilgrim Nuclear Power Station, Unit No. 1	March 31, 2014 (ML14092A023)	May 9, 2014 (ML14111A147)
Point Beach Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14090A275)	May 9, 2014 (ML14111A147)
Prairie Island Nuclear Generating Plant, Units 1 and 2	March 27, 2014 (ML14086A628)	May 9, 2014 (ML14111A147)
Quad Cities Nuclear Power Station, Units 1 and 2	March 31, 2014 (ML14090A526), June 6, 2014 (ML14157A389), and August 21, 2014 (ML14234A124)	May 9, 2014 (ML14111A147) and October 3, 2014 (ML14258A043)
R.E. Ginna Nuclear Power Plant	March 31, 2014 (ML14099A196)	May 9, 2014 (ML14111A147)
River Bend Station	March 26, 2014 (ML14091A426)	May 9, 2014 (ML14111A147)
Salem Nuclear Generating Station, Units 1 and 2	March 31, 2014 (ML14090A043)	May 9, 2014 (ML14111A147) and October 3, 2014 (ML14258A043)
Seabrook, Unit 1	March 27, 2014 (ML14092A413)	May 9, 2014 (ML14111A147)
Sequoyah Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14098A478)	May 9, 2014 (ML14111A147)
Shearon Harris Nuclear Power Plant, Unit 1	March 27, 2014 (ML14090A441)	May 9, 2014 (ML14111A147)
South Texas Project, Units 1 and 2	March 31, 2014 (ML14099A235)	May 9, 2014 (ML14111A147)
St. Lucie Plant, Units 1 and 2	March 31, 2014 (ML14099A106)	May 9, 2014 (ML14111A147)
Surry Power Station, Unit Nos. 1 and 2	March 31, 2014 (ML14092A414)	May 9, 2014 (ML14111A147) and October 3, 2014 (ML14258A043)

Seismic Hazard Submittals and Prior Screening Letters		
Licensee Facility	Seismic Hazard and Screening Report and Supplements (ADAMS Accession Nos.)	Prior Screening Letter(s) (ADAMS Accession Nos.)
Susquehanna Steam Electric Station, Units 1 and 2	March 26, 2014 (ML14086A163)	May 9, 2014 (ML14111A147)
Three Mile Island Nuclear Station, Unit 1	March 31, 2014 (ML14090A271)	May 9, 2014 (ML14111A147)
Turkey Point, Units 3 and 4	March 27, 2014 (ML14106A032)	May 9, 2014 (ML14111A147)
Virgil C. Summer Nuclear Station, Unit 1	March 26, 2014 (ML14092A250), November 12, 2014 (ML14318A314), and April 28, 2015 (ML15124A596)	May 9, 2014 (ML14111A147)
Vogtle Electric Generating Plant, Units 1 and 2	March 31, 2014 (ML14092A019)	May 9, 2014 (ML14111A147)
Waterford Steam Electric Station, Unit 3	March 27, 2014 (ML14086A427)	May 9, 2014 (ML14111A147)
Watts Bar Nuclear Plant, Units 1 and 2	March 31, 2014 (ML14098A478)	May 9, 2014 (ML14111A147)
Wolf Creek Generating Station, Unit 1	March 31, 2014 (ML14097A020)	May 9, 2014 (ML14111A147)

LIST OF APPLICABLE POWER REACTOR LICENSEES

Arkansas Nuclear One

Entergy Operations, Inc.
Docket Nos. 50-513 and 50-368
License Nos. DPR-51 and NPF-6

Vice President, Operations

Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802

Beaver Valley Power Station

First Energy Nuclear Operating Co.
Docket Nos. 50-334 and 50-412
License Nos. DPR-66 and NPF-73

Mr. Eric A. Larson
Site Vice President
Beaver Valley Power Station
P.O. Box 4, Route 168
Shippingport, PA 15077

Bellefonte Nuclear Plant

Tennessee Valley Authority
Docket Nos. 50-438 and 50-439
Construction Permit Nos. CPPR
No. 122 and CPPR No. 123

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

Braidwood Station

Exelon Generation Co., LLC
Docket Nos. 50-456 and 50-457
License Nos. NPF-72 and NPF-77

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

Browns Ferry Nuclear Plant

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
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

Byron Station

Exelon Generation Co., LLC
Docket Nos. STN 50-454 and STN 50-455
License Nos. NPF-37 and NPF-66

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

Callaway Plant

Union Electric Company
Docket No. 50-483
License No. NPF-30

Mr. Fadi Diya
Senior Vice President and
Chief Nuclear Officer
Ameren Missouri
Callaway Plant
P.O. Box 620
Fulton, MO 65251

Calvert Cliffs Nuclear Power Plant
Calvert Cliffs Nuclear Power Plant, LLC
Docket Nos. 50-317 and 50-318
License Nos. DPR-53 and DPR-69

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

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

Mr. Kelvin Henderson
Site Vice President
Duke Energy Carolinas, LLC
Catawba Nuclear Station
4800 Concord Road
York, SC 29745

Clinton Power Station
Exelon Generation Company
Docket No. 50-461
License No. NPF-62

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

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

Mr. Mark E. Reddemann
Chief Executive Officer
Energy Northwest
MD 1023
North Power Plant Loop
P.O. Box 968
Richland, WA 99352

Comanche Peak Nuclear Power Plant
Luminant Generation Company LLC
Docket Nos. 50-445 and 50-446
License Nos. NPF-87 and NPF-89

Mr. Rafael Flores
Senior Vice President and Chief Nuclear
Officer
Attention: Regulatory Affairs
Luminant Generation Company, LLC
P.O. Box 1002
Glen Rose, TX 76043

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

Mr. Oscar A. Limpas
Vice President Nuclear and
Chief Nuclear Officer
Nebraska Public Power District
72676 648A Avenue
P.O. Box 98
Brownville, NE 68321

Davis-Besse Nuclear Power Station
First Energy Nuclear Operating Co.
Docket No. 50-346
License No. NPF-3

Mr. Brian D. Boles
Site Vice President
FirstEnergy Nuclear Operating Company
c/o Davis-Besse NPS
5501 N. State Route 2
Oak Harbor, OH 43449-9760

Diablo Canyon Power Plant
Pacific Gas and Electric Co.
Docket Nos. 50-275 and 50-323
License Nos. DPR-80 and DPR-82

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
P.O. Box 56,
Mail Code 104/6
Avila Beach, CA 93424

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

Mr. Lawrence J. Weber
Senior Vice President and Chief Nuclear
Officer
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

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

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

Duane Arnold Energy Center
NextEra Duane Arnold, LLC
Docket No. 50-331
License No. DPR-49

Mr. Thomas A. Vehec
Site Vice President
Next Era Energy
Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324-9785

Edwin I. Hatch Nuclear Plant
Southern Nuclear Operating Co.
Docket Nos. 50-321 and 50-366
License Nos. DPR-57 and NPF-5

Mr. C.R. Pierce
Regulatory Affairs Director
Southern Nuclear Operating Company, Inc.
P.O. Box 1295/BIN B038
Birmingham, AL 35201-1295

Fermi
DTE Electric Company
Docket No. 50-341
License No. NPF-43

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

Fort Calhoun Station

Omaha Public Power District
Docket No. 50-285
License No. DPR-40

Mr. Louis Cortopassi
Site Vice President and Chief
Nuclear Officer
Omaha Public Power District
Fort Calhoun Station
Mail Stop FC-2-4
9610 Power Lane
Blair, NE 68008

Grand Gulf Nuclear Station

Entergy Operations, Inc.
Docket No. 50-416
License No. NPF-29

Vice President, Operations
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

H. B. Robinson Steam Electric Plant

Duke Energy Progress, Inc.
Docket No. 50-261
License No. DPR-23

Mr. Richard M. Glover, Site Vice President
H.B. Robinson Steam Electric Plant
Duke Energy
3581 West Entrance Road
Hartsville, SC 29550

Hope Creek Generating Station

PSEG Nuclear LLC
Docket No. 50-354
License No. NPF-57

Mr. Robert Braun
President and Chief Nuclear Officer
PSEG Nuclear LLC - N09
P. O. Box 236,
Hancocks Bridge, NJ 08038

Indian Point Nuclear Generating

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.
Indian Point Energy Center
450 Broadway, GSB
P.O. Box 249
Buchanan, NY 10511-0249

James A. FitzPatrick Nuclear Power Plant

Entergy Nuclear Operations, Inc.
Docket No. 50-333
License No. DPR-59

Vice President, Operations
James A. FitzPatrick Nuclear Power Plant
P.O. Box 110
Lycoming, NY 13093

Joseph M. Farley Nuclear Plant

Southern Nuclear Operating Co., Inc.
Docket Nos. 50-348 and 50-364
License Nos. NPF-2 and NPF-8

Mr. C. R. Pierce, Regulatory Affairs Director
Southern Nuclear Operating Co., Inc.
P.O. Box 1295, Bin 038
Birmingham, AL 35201-1295

LaSalle County Station

Exelon Generation Company, LLC
Docket Nos. 50-373 and 50-374
License Nos. NPF-11 and NPF-18

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

Limerick Generating Station

Exelon Generation Co., LLC
Docket Nos 50-352 and 50-353
License Nos. NPF-39 and NPF-85
Mr. Bryan C. Hanson
President and Chief Nuclear Office
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

McGuire Nuclear Station

Duke Energy Carolinas, LLC
Docket Nos. 50-369 and 50-370
License Nos. NPF-9 and NPF-17

Mr. Steven D. Capps
Duke Energy Carolinas, LLC
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

Millstone Nuclear Power Station

Dominion Nuclear Connecticut, Inc.
Docket No. 50-245
License No. DPR-21

Mr. David A. Heacock
President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

Monticello Nuclear Generating Plant

Northern States Power Company - Minnesota
Docket No. 50-263
License No. DPR-22

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

Nine Mile Point Nuclear Station

Nine Mile Point Nuclear Station, LLC
Docket No. 50-220
License No. DPR-63

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

North Anna Power Station

Virginia Electric and Power Co.
Docket Nos. 50-338 and 50-339
License Nos. NPF-4 and NPF-7

Mr. David A. Heacock
President and Chief Nuclear Officer
Virginia Electric and Power Co.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

Oconee Nuclear Station

Duke Energy Carolinas, LLC
Docket Nos. 50-269, 50-270 and 50-287
License Nos. DPR-38, DPR-47 and DPR-55

Mr. Scott Batson
Vice President, Oconee Nuclear Station
Duke Energy Carolinas, LLC
7800 Rochester Highway
Seneca, SC 29672

Oyster Creek Nuclear Generating Station

Exelon Generation Co., LLC
Docket No. 50-219
License No. DPR-16

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

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

Palo Verde Nuclear Generating Station
Arizona Public Service Company
Docket Nos. 50-528, 50-529 and 50-530
License Nos. NPF-41, NPF-51 and NPF-74

Mr. Randall K. Edington
Executive Vice President Nuclear and Chief
Nuclear Officer
Arizona Public Service Co.
P.O. Box 52034, MS 7602
Phoenix, AZ 85072-2034

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

Mr. Bryan C. Hanson
President and Chief Nuclear Office
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

Perry Nuclear Power Plant
FirstEnergy Nuclear Operating Co.
Docket No. 50-440
License No. NPF-58

Mr. Ernest J. Harkness
Site Vice President - Nuclear - Perry
FirstEnergy Nuclear Operating Company
Perry Nuclear Power Plant
PO Box 97, A290
Perry, OH 44081

Pilgrim Nuclear Power Station Unit No. 1
Entergy Nuclear Generation Co.

Docket No. 50-293
License No. DPR-35

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

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

Mr. Eric McCartney
Site Vice President
NextEra Energy Point Beach, LLC
6610 Nuclear Road
Two Rivers, WI 54241-9516

Prairie Island Nuclear Generating Plant
Northern States Power Company - Minnesota
Docket Nos. 50-282 and 50-306
License Nos. DPR-42 and DPR-60

Mr. Kevin K. Davison
Site Vice President
Northern States Power Company - Minnesota
Prairie Island Nuclear Generating Plant
1717 Wakonade Drive East
Welch, MN 55089-9642

Quad Cities Nuclear Power Station
Exelon Generation Company, LLC
Docket Nos. 50-254 and 50-265
License Nos. DPR-29 and DPR-30

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

R. E. Ginna Nuclear Power Plant
R. E. Ginna Nuclear Power Plant, LLC
Docket No. 50-244

License No. DPR-18

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

River Bend Station

Entergy Operations, Inc.
Docket No. 50-458
License No. NPF-47

Vice President, Operations
Entergy Operations, Inc.
River Bend Station
5485 U.S. Highway 61N
St. Francisville, LA 70775

Salem Nuclear Generating Station

PSEG Nuclear LLC
Docket Nos. 50-272 and 50-311
License Nos. DPR-70 and DPR-75

Mr. Robert Braun
President and CNO
PSEG Nuclear LLC-N09
P. O. Box 236
Hancocks Bridge, NJ 08038

Seabrook Station NextEra Energy Seabrook, LLC

Docket No 50-443
License No. NFP-86

Mr. Dean Curtland
Vice President, Seabrook Nuclear Plant
c/o Mr. Michael Ossing
NextEra Energy Seabrook, LLC
P.O. Box 300
Seabrook, NH 03874

Sequoyah Nuclear Plant

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
1101 Market Street LP 3D-C
Chattanooga, TN 37402

Shearon Harris Nuclear Power Plant

Duke Energy Progress, Inc.
Docket No. 50-400
License No. NPF-63

Mr. Benjamin C. Waldrep, Site Vice President
Shearon Harris Nuclear Power Plant
5413 Shearon Harris Rd
New Hill, NC 27562-0165

South Texas Project

STP Nuclear Operating Company
Docket Nos. 50-498 and 50-499
License Nos. NPF-76 and NPF-80

Mr. Dennis L. Koehl
President and CEO/CNO
STP Nuclear Operating Company
South Texas Project
P.O. Box 289
Wadsworth, TX 77483

St. Lucie Plant

Florida Power and Light Company
Docket Nos. 50-335 and 50-389
License Nos. DPR-67 and NPF-16

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P.O. Box 14000
Juno Beach, FL 33408-0420

Surry Power Station

Virginia Electric and Power Company
Docket Nos. 50-280 and 50-281
License Nos. DPR-32 and DPR-37

Mr. David A. Heacock
President and Chief Nuclear Officer
Virginia Electric and Power Company
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

Susquehanna Steam Electric Station
Susquehanna Nuclear, LLC
Docket Nos. 50-387 and 50-388
License Nos. NPF-14 and NPF-22

Mr. Jon A. Franke
Site Vice President
Susquehanna Nuclear, LLC
769 Salem Boulevard
NUCSB3
Berwick, PA 18603-0467

Three Mile Island Nuclear Station
Exelon Generation Company, LLC.
Docket No. 50-289
License No. DPR-50

Mr. Bryan C. Hanson
President and Chief Nuclear Office
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

Turkey Point Nuclear Generating
Florida Power and Light Company
Docket Nos. 50-250 and 50-251
License Nos. DPR-31 and DPR-41

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P. O. Box 14000
Juno Beach, FL 33408-0420

Virgil C. Summer Nuclear Station
South Carolina Electric and Gas Company
Docket No. 50-395
License No. NPF-12

Mr. Thomas D. Gatlin, Vice President
Nuclear Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
Post Office Box 88, Mail Code 800
Jenkinsville, SC 29065

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

Mr. C. R. Pierce
Regulatory Affairs Director
Southern Nuclear Operating Co., Inc.
P. O. Box 1295 / Bin 038
Birmingham, AL 35201-1295

Waterford Steam Electric Station
Entergy Operations, Inc.
Docket No. 50-382
License No. NPF-38

Site Vice President
Entergy Operations, Inc.
Waterford Steam Electric Station, Unit 3
17265 River Road
Killona, LA 70057-0751

Watts Bar Nuclear Plant
Tennessee Valley Authority
Docket Nos. 50-390 and 50-391
License Nos. NPF-90

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

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
P.O. Box 411
Burlington, KS 66839

with NEI letter dated July 30, 2015, submittal of IPEEE relay chatter evaluation is due December 31, 2016. Option 2 allows for completion using the HF evaluation approach. In choosing one of the two options, these licensees should consider that a relay chatter study will continue to be needed for the IPEEE submittal to meet the SPID acceptance criteria. Meeting the SPID criteria will be necessary if a licensee plans to rely on the IPEEE results in its mitigation strategies assessment with respect to the reevaluated hazard.

If you have any questions regarding this letter, please contact Nicholas DiFrancesco at 301-415-1115 or via email at Nicholas.Difrancesco@nrc.gov.

Sincerely,

/RA/

William M. Dean, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Recommendation 2.1 Seismic – Information Request Tables
2. Glossary of Recommendation 2.1 Seismic Evaluations
3. Seismic Hazard Submittals and Prior Screening Letters
4. List of Licensees

cc: Listserv

DISTRIBUTION:

See next page

ADAMS Accession No.: ML15194A015

*via email

OFFICE	NRR/JLD/PMB/PM	NRR/JLD/LA	NRR/JLD/HMB/BC	NRO/DSEA/RGS2/BC	NRR/DRA/BC
NAME	NDiFrancesco	SLent	MShams	DJackson	SRosenberg
DATE	08/17/2015	08/31/2015	10/06/2015	10/08/2015	09/15/2015
OFFICE	NRO/DSEA/D	OGC	NRR/JLD/D	NRR/D	
NAME	SFlanders	BHarris (NLO)	JDavis	WDean	
DATE	09/23/2015	09/22/2015	10/8/2015	10/27/2015	

OFFICIAL RECORD COPY

Letter to the Power Reactor Licensees on the Enclosed List from William M. Dean dated October 27, 2015.

SUBJECT: FINAL DETERMINATION OF LICENSEE SEISMIC PROBABILISTIC RISK ASSESSMENTS UNDER THE REQUEST FOR INFORMATION PURSUANT TO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* 50.54(f) REGARDING RECOMMENDATION 2.1 "SEISMIC" OF THE NEAR-TERM TASK FORCE REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT

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RidsNrrLaSLent
RidsNrrLAMHenderson
RidsNrrLAPBlechman
RidsNrrLALRonewicz
RidsNrrPMANO
RidsNrrPMBeaverValley
RidsNrrPMBellefonte

RidsNrrPMBraidwood
RidsNrrPMBrownsFerry
RidsNrrPMBrunswick
RidsNrrPMByron
RidsNrrPMCallaway
RidsNrrPMCalvertCliffs
RidsNrrPMCatawba
RidsNrrPMClinton
RidsNrrPMColumbia
RidsNrrPMComanchePeak
RidsNrrPMCooper
RidsNrrPMDCCook
RidsNrrPMDavisBesse
RidsNrrPMDiabloCanyon
RidsNrrPMDresden
RidsNrrPMDuaneArnold
RidsNrrPMFarley
RidsNrrPMFermi2
RidsNrrPMFitzPatrick
RidsNrrPMFortCalhoun
RidsNrrPMHatch
RidsNrrPMHopeCreek
RidsNrrPMIndianPoint
RidsNrrPMLaSalle
RidsNrrPMLimerick
RidsNrrPMMcGuire
RidsNrrPMMillstone
RidsNrrPMMonticello
RidsNrrPMNineMilePoint
RidsNrrPMNorthAnna
RidsNrrPMOconee
RidsNrrPMOysterCreek
RidsNrrPMPalisades
RidsNrrPaloVerde
RidsNrrPMPeachBottom
RidsNrrPMPerry

RidsNrrPMPilgrim
RidsNrrPMPointBeach
RidsNrrPMPrairieIsland
RidsNrrPMQuadCities
RidsNrrPMREGinna
RidsNrrPMRiverBend
RidsNrrPMRobinson
RidsNrrPMSalem
RidsNrrPMSeabrook
RidsNrrPMSequoyah
RidsNrrPMSouthTexas
RidsNrrPMStLucie
RidsNrrPMSummer
RidsNrrPMSusquehanna
RidsNrrPMThreeMileIsland
RidsNrrPMTurkeyPoint
RidsNrrPMVogle
RidsNrrPMWaterford
RidsNrrPMWattsBar1
RidsNrrPMWattsBar2
RidsNrrPMWolfCreek
RidsOgcRp Resource
RidsRgn1MailCenter
RidsRgn2MailCenter
RidsRgn3MailCenter
RidsRgn4MailCenter
RidsEdoMailCenter Resource
RidsNroOd
RidsNrrOd
RidsNsirOd
MShams, NRR
AKock, NRO
DJackson, NRO
SDevlin-Gill, NRO
RidsOgcRp Resource