

## NRR-PMDAPEm Resource

---

**From:** Jackson, Diane  
**Sent:** Friday, July 31, 2015 1:21 PM  
**To:** Shams, Mohamed  
**Cc:** DiFrancesco, Nicholas; Wyman, Stephen; Spence, Jane; Devlin-Gill, Stephanie; Roche, Kevin; Yee, On; Stirewalt, Gerry; Lyons, Sara; Jain, Bhagwat; Basavaraju, Chakrapani; Graizer, Vladimir; 50.54f\_Seismic Resource; RidsNroDsea Resource  
**Subject:** VOGTLE ELECTRIC GENERATING PLANT- TECHNICAL REVIEW CHECKLIST RELATED TO INTERIM ESEP SUPPORTING IMPLEMENTATION OF NTTF R2.1, SEISMIC (TAC NO.MF5271 AND MF5272)  
**Attachments:** Vogtle R2.1 seismic ESEP staff review.docx

July 31, 2015

MEMORANDUM TO: Mohamed K. Shams, Chief  
Hazards Management Branch (JHMB)  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

FROM: Diane T. Jackson, Chief  
Geosciences and Geotechnical Engineering Branch 2 (RGS2)  
Division of Site Safety and Environmental Analysis  
Office of New Reactors

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT- TECHNICAL REVIEW CHECKLIST RELATED TO INTERIM EXPEDITED SEISMIC EVALUATION PROCESS SUPPORTING IMPLEMENTATION OF NTTF RECOMMENDATION 2.1, SEISMIC, RELATED TO THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT (TAC NO. MF5271 AND MF5272)

The NRC technical staff working through the Geosciences and Geotechnical Engineering Branches 1 and 2 (RGS1 and RGS2) completed the Technical Review Checklist of the VOGTLE ELECTRIC GENERATING PLANT response to Enclosure 1, Item (6) of the March 12, 2012, request for information letter issued per Title 10 of the Code of Federal Regulations, Subpart 50.54(f), to power reactor licensees and holders of construction permits requesting addressees to provide further information to support the NRC staff's evaluation of regulatory actions to be taken in response to Fukushima Near-Term Task Force (NTTF) Recommendation 2.1: Seismic which implements lessons learned from Japan's March 11, 2011, Great Tōhoku Earthquake and subsequent tsunami. This addresses the staff review of the interim Expedited Seismic Evaluation Process (ESEP) report in response to Requested Item (6) of Enclosure 1, "Recommendation 2.1: Seismic," of the 50.54(f) letter. Attached is a file containing the technical review checklist to prepare a response letter to the licensee.

The NRC staff reviewed the information provided and, as documented in the enclosed staff checklist, determined that sufficient information was provided to be responsive to this portion of the Enclosure 1 of the 50.54(f) letter. The application of this staff review is limited to the interim ESEP as part of NTTF R2.1: Seismic activities.

This electronic memo constitutes the DSEA concurrence provided that only editorial changes are made to the staff assessment that would not affect the technical conclusions or technical context of the assessment.

This concludes the NRC's efforts associated with TAC NO. MF5271 and MF5272 for the review of the interim ESEP report for the VOGTLE ELECTRIC GENERATING PLANT.

Docket No: 50-424 and 50-425

CONTACT: Stephanie Devlin-Gill  
Office of New Reactors  
301-415-5301

Copy: Nicholas DiFrancesco, Steve Wyman, Jane Spence, Stephanie Devlin-Gill, Kevin Roche, On Yee, Gerry Stirewalt, Sara Lyons, BP Jain, Basavaraju Chakrapani, Vladimir Graizer, 50.54f Seismic Resource, RidsNroDseaResource

**Hearing Identifier:** NRR\_PMDA  
**Email Number:** 2268

**Mail Envelope Properties** (031774c5d3294445b36243de5fb56eb7)

**Subject:** VOGTLE ELECTRIC GENERATING PLANT- TECHNICAL REVIEW  
CHECKLIST RELATED TO INTERIM ESEP SUPPORTING IMPLEMENTATION OF NTTF R2.1,  
SEISMIC (TAC NO.MF5271 AND MF5272)

**Sent Date:** 7/31/2015 1:21:10 PM

**Received Date:** 7/31/2015 1:21:11 PM

**From:** Jackson, Diane

**Created By:** Diane.Jackson@nrc.gov

**Recipients:**

"DiFrancesco, Nicholas" <Nicholas.DiFrancesco@nrc.gov>

Tracking Status: None

"Wyman, Stephen" <Stephen.Wyman@nrc.gov>

Tracking Status: None

"Spence, Jane" <Jane.Spence@nrc.gov>

Tracking Status: None

"Devlin-Gill, Stephanie" <Stephanie.Devlin-Gill@nrc.gov>

Tracking Status: None

"Roche, Kevin" <Kevin.Roche@nrc.gov>

Tracking Status: None

"Yee, On" <On.Yee@nrc.gov>

Tracking Status: None

"Stirewalt, Gerry" <Gerry.Stirewalt@nrc.gov>

Tracking Status: None

"Lyons, Sara" <Sara.Lyons@nrc.gov>

Tracking Status: None

"Jain, Bhagwat" <Bhagwat.Jain@nrc.gov>

Tracking Status: None

"Basavaraju, Chakrapani" <Chakrapani.Basavaraju@nrc.gov>

Tracking Status: None

"Graizer, Vladimir" <Vladimir.Graizer@nrc.gov>

Tracking Status: None

"50.54f\_Seismic Resource" <50.54f\_Seismic.Resource@nrc.gov>

Tracking Status: None

"RidsNroDsea Resource" <RidsNroDsea.Resource@nrc.gov>

Tracking Status: None

"Shams, Mohamed" <Mohamed.Shams@nrc.gov>

Tracking Status: None

**Post Office:** HQPWMSMRS07.nrc.gov

Files	Size	Date & Time
MESSAGE	3064	7/31/2015 1:21:11 PM
Vogtle R2.1 seismic ESEP staff review.docx	50866	

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

TECHNICAL REVIEW CHECKLIST  
BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO EXPEDITED SEISMIC EVALUATION PROCESS INTERIM EVALUATION  
IMPLEMENTING NTTF RECOMMENDATION 2.1 SEISMIC  
VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-424 AND 50-425

By letter dated March 12, 2012 (USNRC, 2012a), 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"). Enclosure 1 of the 50.54(f) letter requests addressees to reevaluate the seismic hazard at their site using present-day methods and guidance for licensing new nuclear power plants, and identify actions to address or modify, as necessary, plant components affected with the reevaluated seismic hazards. Requested Information Item (6) in Enclosure 1 to the 50.54(f) letter requests addressees to provide an interim evaluation and actions taken or planned to address a higher seismic hazard relative to the design basis, as appropriate, prior to completion and submission of the seismic risk evaluation.

Additionally, by letter dated April 12, 2013<sup>1</sup>, the Electric Power Research Institute (EPRI) staff submitted EPRI TR 3002000704 "Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-Term Task Force (NTTF) Recommendation 2.1: Seismic" (hereafter referred to as the guidance). The Augmented Approach proposed that licensees would use an Expedited Seismic Evaluation Process (ESEP) to address the interim actions as requested by Information Item (6) in the 50.54(f) letter. The ESEP is a simplified seismic capacity evaluation with a focused scope of certain key installed Mitigating Strategies equipment that is used for core cooling and containment functions to cope with scenarios that involve a loss of all AC power and loss of access to the ultimate heat sink to withstand the Review Level Ground Motion, which is up to two times the safe shutdown earthquake (SSE). Due to the expedited and interim nature of the ESEP, the assessment does not include many considerations that are part of a normal risk evaluation. These deferred items, include but are not limited to, structures, piping, non-seismic failures, and operator actions, as well scenarios such as addressing loss of coolant accidents. By letter dated May 7, 2013<sup>2</sup>, the NRC staff endorsed the guidance. Central and eastern United States licensees with a reevaluated seismic hazard exceeding the SSE submitted an ESEP interim evaluation in December 2014.

Consistent with the interim nature of this activity, the staff performed the review of the licensee's submittal to assess whether the intent of the guidance was implemented. A multi-disciplined team checked whether the identified methods were consistent with the guidance. A senior expert panel reviewed the team's questions, if any, and checklist for consistency and scope. New or updated parameters (e.g., In-Structure Response Spectra, High Confidence of Low Probability of Failure calculations) presented by the licensees were assessed only based on licensee statements for acceptability for the Item (6) response. The application of this staff review is limited to the ESEP interim evaluation as part of NTTF R2.1: Seismic activities.

---

<sup>1</sup> ADAMS Accession No. ML13102A142

<sup>2</sup> ADAMS Accession No. ML13106A331

## NTTF Recommendation 2.1 Expedited Seismic Evaluation Process

---

### Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2

By letter dated December 30, 2014,<sup>3</sup> Southern Nuclear Operating Co., Inc. (the licensee) provided an Expedited Seismic Evaluation Process (ESEP) report in a response to Enclosure 1, Requested Information Item (6) of the 50.54(f) letter, for the Vogtle Electric Generating Plant, Units 1 & 2 (Vogtle).

#### I. Review Level Ground Motion

The licensee:	
• described the determination of the review level ground motion (RLGM) using one of the means acceptable by the guidance	Yes
• identified location of the control point and is consistent with March submittal	Yes
• compared the site ground motion response spectra used to select the ESEP RLGM to the SSE	Yes
Vogtle used 2 x SSE.	
<b>Notes from reviewer:</b> None	
<b>Deviation(s) or Deficiency(ies) and Resolution:</b> No deviations or deficiencies were identified	
The NRC staff concludes:	
• the licensee's RLGM meets the intent of the guidance	Yes
• the RLGM is reasonable for use in the interim evaluation	Yes

#### II. Selection of the Success Path

The licensee:	
• described the success path	Yes
• described normal and desired state of the equipment for the success path	Yes
• ensured that the success path is consistent with the plant's overall mitigating strategies approach or provided a justification for an alternate path	Yes
• stated that the selection process was in accordance with the guidance or meets the intent of the guidance	Yes
• used installed FLEX Phase 1 equipment as part of the success path	Yes
• included FLEX Phase 2 and/or 3 connections	Yes
• considered installed FLEX Phase 2 and/or 3 equipment	Yes
<b>Notes from reviewer:</b> None	
<b>Deviation(s) or Deficiency(ies) and Resolution:</b> No deviations or deficiencies were identified	
The NRC staff concludes that:	
• the selected success path is reasonable for use in the interim evaluation	Yes
• the licensee considered installed Phase 2 and 3 connections or equipment in the interim evaluation	Yes

---

<sup>3</sup> ADAMS Accession No. ML15049A517

**NTTF Recommendation 2.1 Expedited Seismic Evaluation Process**

---

**Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2**

III. Selection of the Equipment List

<p>The licensee:</p> <ul style="list-style-type: none"> <li>• developed and provided the ESEL by applying the ESEP</li> <li>• identified equipment considering the following functions: <ul style="list-style-type: none"> <li>○ Core cooling (with focus on Mode 1) function</li> <li>○ Available, sustainable water source</li> <li>○ Containment function and integrity</li> </ul> </li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p><b>Notes from reviewer:</b></p> <ol style="list-style-type: none"> <li>1. The staff requested clarification regarding interlock failures for inaccessible valves that were excluded from consideration. The licensee's response (ML15114A446) stated that remote operation of inaccessible valves is no longer part of the Phase 3 mitigation strategy. The licensee provided an explanation of how core cooling would be maintained. The staff finds that the response adequately addressed the question and met the intent of the guidance for this interim evaluation.</li> </ol> <p><b>Deviation(s) or Deficiency(ies) and Resolution:</b></p> <ul style="list-style-type: none"> <li>• No deviations or deficiencies were identified</li> </ul>	
<p style="text-align: center;"><u>PWR Plants ONLY</u></p> <p>The licensee included indicators / instrumentation for the following functions: level, pressure, temperature, that would be indicative of (but not explicitly identified to specific instruments): water level of the steam generator (SG), pressure of SG, containment, and reactor coolant system (RCS); and temperature of the RCS.</p>	<p>Yes</p>
<p style="text-align: center;"><u>BWR Plants ONLY</u></p> <p>The licensee considered indicators for the following functions: level, pressure, temperature that would be indicative of, but not explicitly identified with, specific instruments: Temperature of suppression pool, RCS, containment; pressure of suppression pool, RCS, and drywell; water level of the suppression pool.</p>	<p>N/A</p>
<p><b>Notes from reviewer:</b></p> <ol style="list-style-type: none"> <li>1. The staff reviewed the rationale for the diesel fuel oil storage tank and fuel oil day tank components to be included only in the Unit 2 ESEL and not in the Unit 1 ESEL, because the licensee's FLEX strategy relies on diesel-powered equipment beginning in Phase 2, including portable diesel generators and portable pumps. The staff reviewed the Mitigating Strategies interim staff evaluation and audit report dated January 16, 2014 (ML13339A781). The staff noted that the licensee can cope with an extended loss of all power and loss of ultimate heat sink event potentially affecting both Units 1 and 2 by relying on one Unit 2 tank for a duration sufficient to obtain off-site resources and off-site fuel oil delivery. The staff determined that this information adequately addressed this issue, and meets the intent of the guidance, therefore, no clarification question was necessary.</li> </ol> <p><b>Deviation(s) or Deficiency(ies) and Resolution:</b></p> <ul style="list-style-type: none"> <li>• No deviations or deficiencies were identified</li> </ul>	

**NTTF Recommendation 2.1 Expedited Seismic Evaluation Process**

---

**Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2**

Through a sampling of the ESEP key components, the NRC staff concludes that:	
<ul style="list-style-type: none"> <li>the licensee's process to develop the ESEL meets the intent of the guidance for the interim evaluation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>the desired equipment state for the success path were identified</li> </ul>	Yes
<ul style="list-style-type: none"> <li>the licensee considered the support equipment for the ESEL</li> </ul>	Yes
<ul style="list-style-type: none"> <li>both front-line and support systems appeared to be included in the ESEL as evidenced by inclusion of SSCs on the success path and of support systems (e.g., batteries, motor control centers, inverters)</li> </ul>	Yes

**IV. Walkdown Approach**

The licensee:	
<ul style="list-style-type: none"> <li>described the walkdown screening approach, including walkbys and walkdowns performed exclusively for the ESEP, in accordance with the guidance</li> </ul>	Yes
<ul style="list-style-type: none"> <li>credited previous walkdown results, including a description of current action(s) to verify the present equipment condition and/or configuration (e.g., walk-bys), in accordance with the guidance</li> </ul>	Yes
<ul style="list-style-type: none"> <li>stated that the walkdown was performed by seismically trained personnel</li> </ul>	Yes
<b>Notes from reviewer:</b> None	
<b>Deviation(s) or Deficiency(ies) and Resolution:</b>	
<ul style="list-style-type: none"> <li>No deviations or deficiencies were identified</li> </ul>	
The licensee:	
<ul style="list-style-type: none"> <li>described adverse material condition of the equipment (e.g., material degradation)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>credited previous walkdown results, included a description of current action(s) to verify the present equipment condition (e.g., walk-bys), meeting the intent of the guidance</li> </ul>	Yes
The licensee:	
<ul style="list-style-type: none"> <li>described the conditions of structural items considered for the interim evaluation, including:               <ul style="list-style-type: none"> <li>spatial interactions (i.e., interaction between block walls and other items/components)</li> <li>anchorage</li> <li>piping connected to tanks (i.e., differential movement between pipes and tanks at connections)</li> </ul> </li> </ul>	N/A (Note 1)  Yes Yes



## NTTF Recommendation 2.1 Expedited Seismic Evaluation Process

## Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2

**Notes from reviewer:**

1. The licensee stated that there are no block walls in the vicinity of the ESEL items.
2. The staff requested clarification regarding whether anchorage for ESEL items that screened out based on their functional capacity were evaluated. The licensee's response (ML15114A446) stated that anchorage for each item on the ESEL was evaluated regardless of whether the ESEL item screened out of further review for functional and structural capacities and provided additional information regarding the seismic review team assessment. The staff finds that the response adequately addressed the question and meets the intent of the guidance for this interim evaluation.

**Deviation(s) or Deficiency(ies) and Resolution:**

- No deviations or deficiencies were identified

The licensee reported no deviations for Vogtle Units 1 and 2

If deviations were identified, there is a discussion of how the deficiencies were or will be addressed in the ESEP submittal report.

N/A

The NRC staff concludes that:

- the licensee described the performed walkdown approach, including any credited previous efforts (e.g., Individual Plant Examination of External Events(IPEEE) consistent with the guidance
- the licensee addressed identified deviations consistent with the guidance, if any

Yes

N/A

## V. Capacity Screening Approach and HCLPF Calculation Results

The licensee:

- described the capacity screening process for the ESEL items, consistent with the guidance (e.g., use of EPRI NP-6041 screening table).
- presented the results of the screened-out ESEL items in the ESEP report.
- described the development of in-structure response spectra (ISRS) based on scaling
- described the development of ISRS based on new analysis consistent with the guidance
- described the method for estimating HCLPF capacity of screened-in ESEL items, including both structural and functional failure modes consistent with the guidance:
  - use of Conservative Deterministic Failure Margin (CDFM)
  - use of fragility analysis (FA)
  - use of experience data or generic information
- credited IPEEE spectral shape for HCLPF capacity estimates is similar to or envelopes the RLGM, and anchored at the same control point
- presented the results of HCLPF capacities including associated

Yes

Yes

Yes

N/A

Yes

Yes

N/A

N/A

N/A

**NTTF Recommendation 2.1 Expedited Seismic Evaluation Process**

---

**Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2**

<p>failure modes for screened-in ESEL items</p> <ul style="list-style-type: none"> <li>• reviewed the ESEL items with the lowest HCLPF values to ensure that their capacities are equal or greater than the RLGM</li> </ul>	<p>Yes</p> <p>Yes</p>
<p><b>Notes from reviewer:</b></p> <ol style="list-style-type: none"> <li>1. The staff requested clarification on the screening of ESEL items located at an elevation greater than 40 ft. above grade. The licensee's response (ML15114A446) explained that there is no equipment on the VEGP ESEL located more than 40' above grade. The staff finds this response acceptable and meets the guidance for this interim evaluation.</li> </ol> <p><b>Deviation(s) or Deficiency(ies) and Resolution:</b></p> <ul style="list-style-type: none"> <li>• No deviations or deficiencies were identified</li> </ul>	
<p>The NRC staff concludes that:</p> <ul style="list-style-type: none"> <li>• the licensee described the implementation of the capacity screening process consistent with the intent of the guidance</li> <li>• the licensee presented capacity screening and calculation results, as appropriate, in the ESEP report</li> <li>• the method used to develop the ISRS is consistent with guidance for use in the ESEP</li> <li>• for HCLPF calculations, the licensee used HCLPF calculation methods as endorsed in the guidance</li> <li>• no anomalies were noted in the reported HCLPF</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

**VI. Inaccessible Items**

<p>The licensee:</p> <ul style="list-style-type: none"> <li>• provided a list of inaccessible items</li> <li>• provided a schedule of the planned walkdown and evaluation for all inaccessible items</li> <li>• provided Regulatory Commitment to complete walkdowns</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Vogtle will complete walkdowns and evaluations, and provide results no later than March 31, 2017.</p>	
<p><b>Notes from reviewer:</b></p> <ol style="list-style-type: none"> <li>1. The licensee stated that several local instruments and junction boxes were inaccessible and described the walkdown alternatives utilized in accordance with the guidance. All installed ESEP items were walked down or an alternative was utilized. ESEP items which were not installed at the time of the walkdown were identified with commitments for follow-up actions.</li> <li>2. The licensee stated that ESEL items (eight per unit) not installed at the time of the walkdowns will be evaluated after installation per the SMA methodology by December 2016 (i.e., two years after submission of the ESEP report). The licensee committed to submit a letter summarizing the results within 90 days following completion of ESEP activities but no later than March 31, 2017.</li> </ol> <p><b>Deviation(s) or Deficiency(ies) and Resolution:</b></p> <ul style="list-style-type: none"> <li>• No deviations or deficiencies were identified</li> </ul>	

**NTTF Recommendation 2.1 Expedited Seismic Evaluation Process**

---

**Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2**

The NRC staff concludes that the licensee:	
• listed inaccessible items	Yes
• committed to provide the results (e.g. walkdowns, walkbys, etc) of the remaining inaccessible items consistent with the guidance	Yes
• substitutions, if needed, were appropriately justified	Yes

**VII. Modifications to Plant Equipment**

The licensee:	
• identified modifications for ESEL items necessary to achieve HCLPF values that bound the RLGM (excluding mitigative strategies equipment (FLEX)), as specified in the guidance	No
• provided a schedule to implement such modifications (if any), consistent with the intent of the guidance	Yes
• provided Regulatory Commitment to complete modifications	Yes
• provided Regulatory Commitment to report completion of modifications	Yes
Vogtle will:	
• complete modifications by: <u>December 2016</u>	
• report completion of modifications no later than <u>March 31, 2017</u>	
<b>Notes from reviewer:</b> 1. The licensee indicated that no modifications were identified for installed ESEL items. However, the licensee stated that ESEL items (eight per unit) not installed at the time of the walkdowns will be evaluated after installation per the SMA methodology and will implement any necessary modifications by December 2016 (i.e., two years after submission of the ESEP report). The licensee committed to submit a letter summarizing the results within 90 days following completion of ESEP activities but no later than March 31, 2017.	
<b>Deviation(s) or Deficiency(ies) and Resolution:</b> • No deviations or deficiencies were identified	
The NRC staff concludes that the licensee:	
• identified plant modifications necessary to achieve the target seismic capacity	Yes
• provided a schedule to implement the modifications (if any) consistent with the guidance	Yes

**VIII. Conclusions:**

The NRC staff assessed the licensee's implementation of the ESEP guidance. Due to the interim applicability of the ESEP evaluations, use of the information for another application would require a separate NRC review and approval. Based on its review, the NRC staff concludes that the licensee's implementation of the interim evaluation meets the intent of the guidance. The staff concludes that, through the implementation of the ESEP guidance, the licensee identified and evaluated the seismic capacity of certain key installed Mitigating Strategies equipment that is used for core cooling and containment functions to cope with scenarios that involve a loss of all AC power and loss of access to the ultimate heat sink to withstand a seismic event up to the Review Level Ground Motion (RLGM). In the case of Vogtle, the RLGM was set at the maximum ratio of two times the SSE in accordance with the guidance. The staff did not identify deviations or exceptions taken from the guidance. The

## **NTTF Recommendation 2.1 Expedited Seismic Evaluation Process**

### **Technical Review Checklist for Vogtle Electric Generating Plant, Units 1 & 2**

---

application of this staff review is limited to the ESEP interim evaluation as part of NTTF R2.1: Seismic activities. The licensee did not identify modifications for the installed ESEL items. ESEL items not installed at the time of the walkdowns will be evaluated after installation and any necessary modifications will be completed by December 2016 (i.e., two years after submission of the ESEP report). The licensee committed to submit a letter summarizing the results within 90 days following completion of ESEP activities but no later than March 31, 2017.

In summary, the licensee, by implementing the ESEP interim evaluation, has demonstrated additional assurance which supports continued plant safety while the longer-term seismic evaluation is completed to support regulatory decision making. The NRC staff concludes that the licensee responded appropriately to Enclosure 1, Item (6) of the 50.54(f) letter, dated March 12, 2012, for Vogtle Electric Generating Plant, Units 1 and 2.

Principal Contributors: Vladimir Graizer, Kevin Roche, Sara Lyons, Jinsuo Nie, B.P. Jain, Basavaraju Chakrapani, Gerry Stirewalt, Carl Constatino (NRC Consultant)