

## **NON-CONCURRENCE PROCESS COVER PAGE**

The U.S. Nuclear Regulatory Commission (NRC) strives to establish and maintain an environment that encourages all employees to promptly raise concerns and differing views without fear of reprisal and to promote methods for raising concerns that will enhance a strong safety culture and support the agency's mission.

Employees are expected to discuss their views and concerns with their immediate supervisors on a regular, ongoing basis. If informal discussions do not resolve concerns, employees have various mechanisms for expressing and having their concerns and differing views heard and considered by management.

Management Directive, MD 10.158, "NRC Non-Concurrence Process," describes the Non-Concurrence Process (NCP), <http://nrcweb.nrc.gov:8600/policy/directives/catalog/md10.158.pdf>.

The NCP allows employees to document their differing views and concerns early in the decision-making process, have them responded to (if requested), and attach them to proposed documents moving through the management approval chain to support the decision-making process.

NRC Form 757, "Non-Concurrence Process" is used to document the process.

Section A of the form includes the personal opinions, views, and concerns of a non-concurring NRC employee.

Section B of the form includes the personal opinions and views of the non-concurring employee's immediate supervisor.

Section C of the form includes the agency's evaluation of the concerns and the agency's final position and outcome.

NOTE: Content in Sections A and B reflects personal opinions and views and does not represent official factual representation of the issues, nor official rationale for the agency decision. Section C includes the agency's official position on the facts, issues, and rationale for the final decision.

At the end of the process, the non-concurring employee(s):

- ☐ Concurred
- ☒ Continued to non-concur
- ☐ Agreed with some of the changes to the subject document, but continued to non-concur
- ☐ Requested that the process be discontinued
  
- ☐ The non-concurring employee(s) requested that the record be non-public.
- ☒ The non-concurring employee(s) requested that the record be public.
  
- ☐ This record is non-public and for official use only.
- ☒ This record has been reviewed and approved for public dissemination.



## NON-CONCURRENCE PROCESS

NCP-2017-016  
NCP PM 12/27/17

## SECTION A - TO BE COMPLETED BY NON-CONCURRING EMPLOYEE

TITLE OF SUBJECT DOCUMENT VEGP, Unit 1 and 2-Staff Review of Seismic PRA Associated with NTTF Recommendation 2.1		ADAMS ACCESSION NO. ML17293A427
DOCUMENT SIGNER Louise Lund		SIGNER TELEPHONE NO. (301) 415-3248
TITLE Branch Chief	ORGANIZATION Plant Licensing Branch 2-1, DORL, NRR	
NAME OF NON-CONCURRING EMPLOYEE(S) Michael T. Markley		TELEPHONE NUMBER (301) 415-5723
TITLE Chief, Plant Licensing Branch 2-1	ORGANIZATION Division of Operating Reactor Licensing, NRR	
<input type="checkbox"/> DOCUMENT AUTHOR <input type="checkbox"/> DOCUMENT CONTRIBUTOR <input type="checkbox"/> DOCUMENT REVIEWER <input checked="" type="checkbox"/> ON CONCURRENCE		
NON-CONCURRING EMPLOYEE'S SUPERVISOR Greg Casto		
TITLE Deputy Director (Acting)	ORGANIZATION Division of Operating Reactor Licensing, NRR	
<input checked="" type="checkbox"/> I WOULD LIKE MY NON-CONCURRENCE CONSIDERED AND WOULD LIKE A WRITTEN EVALUATION IN SECTION B AND C. <input type="checkbox"/> I WOULD LIKE MY NON-CONCURRENCE CONSIDERED, BUT A WRITTEN EVALUATION IN SECTIONS B AND C IS NOT NECESSARY.		
WHEN THE PROCESS IS COMPLETE, I WOULD LIKE THE NCP FORM: <input checked="" type="checkbox"/> PUBLIC <input type="checkbox"/> NON-PUBLIC		
REASONS FOR THE NON-CONCURRENCE, POTENTIAL IMPACT ON MISSION, AND THE PROPOSED ALTERNATIVES (use continuation pages or attach Word document)		
<p>The regulations in 10 CFR 50.54(f) states, in part, that licensees shall submit, as specified in Section 50.4, written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked. By letter dated, March 12, 2012 (ADAMS Accession No. ML12053A340), the NRC issued a letter to Vogtle Electric Generating Plant, Units 1 and 2, pursuant to 10 CFR 50.54(f). The licensee (Southern Nuclear Operating Company (SNC) responded to the NRC in a letter dated March 27, 2017 (ADAMS Accession No. ML17088A130). During the Senior Management Review (SMR) Panel on October 25, 2017, the submitter of this non-concurrence questioned why 21 clarification questions (Requests for Additional Information (RAIs) by another name) given to the licensee, were not docket for public availability, discussed during a public telephone call, with responses submitted under oath or affirmation. During the SMR Panel, the JLD staff stated that there is no RAI process for 50.54(f) questions and asserted the detailed questions were clarifications.</p> <p>This non-concurrence is submitted on the proposed staff review letter (ADAMS Accession No. ML17293A427) on the basis that the clarification questions (ADAMS Accession No. ML17292A136) were, in fact, detailed RAIs; licensee response to the clarifications questions were required to be submitted under oath and affirmation; and the generic audit process (ADAMS Accession No. ML17177A446) failed to follow NRR Office Instruction LIC-111. The entire technical review was conducted under the auspices of an audit which bypassed opportunity for public engagement, and no audit report was issued. There is substantial overlap of the 10 CFR 50.54(f) clarifying questions with draft RAIs (ADAMS Accession No. ML17319A325) for the ongoing SPRA licensing review (ADAMS Accession No. ML17173A875), indicating the issues subject to the clarifying questions remain unresolved for determining the quality and completeness of the seismic PRA, its peer review, and sufficiency for regulatory decision making.</p> <p>The use "clarifications" in lieu of RAIs, calls that were not publicly noticed under the auspices of LIC-111, and gathering of information in an extended audit protocol that bypasses 10 CFR 50.54(f) oath and affirmation requirements may also be a defect in review design (see attached email) common to NRC 10 CFR 50.54(f) reviews completed for mitigating strategies and flooding.</p>		
SIGNATURE 		DATE 12/20/2017



**Key Message:** The technical review team recommends that Vogtle be classified as a Group 1 plant. Further regulatory action is not warranted.

**SCDF:**  $2.8 \times 10^{-6}$  / reactor year (point estimate);  $3.6 \times 10^{-6}$  / reactor year (mean value)

**SLERF:**  $3.3 \times 10^{-7}$  / reactor year (point estimate);  $4.3 \times 10^{-7}$  / reactor year (mean value)

**Max GMRS/SSE Ratio:** 2.37

**Peer Review Results:** 10 Supporting Requirements not met

- 6 – Hazard
- 1 – Fragility
- 3 – Plant Response

46 total findings in SPRA submittal

**Staff Review Process:** Staff reviewed the licensee's resolution information for each finding

Staff asked a total of 20 clarification questions which were transmitted via email to the licensee for ease of communication

Clarification call was held with the licensee on July 6, 2017

Following the clarification call with the licensee, all staff clarification questions were resolved

SPRA checklist completed with no discrepancies noted

**Potential Modifications:** No risk-significant modifications were identified or judged worthy of further investigation as potential cost-justified, substantial safety enhancements

**Conclusions:** The staff finds that the results of the SPRA are of sufficient quality to support regulatory decision making

Technical review team is unanimously in favor of Vogtle being classified as a Group 1 plant; no further regulatory actions required

**Technical Review Team:** Team lead – Brett Titus, NRR/JLD  
Hazard – David Heeszel, NRO/DSEA  
Fragility – Bob Pettis, NRR/DE & SwRI (Bis Dasgupta, Daniel Pomerening)  
Plant Response – Shilp Vasavada, NRR/DRA & Sara Lyons NRR/DRA

## Markley, Michael

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**From:** Markley, Michael  
**Sent:** Thursday, December 07, 2017 11:54 AM  
**To:** Casto, Greg  
**Cc:** Brock, Kathryn  
**Subject:** RE: Path forward for Vogtle SPRA

Greg,

I am struggling to see what you found acceptable in Mo's response. They disagree with your assessment on both the audit and need for oath and affirmation. They gathered information that is not docketed under oath and affirmation. They used those documents to support the discussion during the senior management review. A lot of the same information is in the current license amendment audit plan and calls out the 50.54(f) response in the items. How can they declare success?

Essentially they disagreed with your assessment on the above. Nothing Mo stated would alter my expectation to submit a non-concurrence.

Mike

**From:** Casto, Greg  
**Sent:** Thursday, December 07, 2017 11:10 AM  
**To:** Shams, Mohamed <Mohamed.Shams@nrc.gov>  
**Cc:** Brock, Kathryn <Kathryn.Brock@nrc.gov>; Ross-Lee, MaryJane <MaryJane.Ross-Lee@nrc.gov>; Markley, Michael <Michael.Markley@nrc.gov>; Giitter, Joseph <Joseph.Giitter@nrc.gov>; Lund, Louise <Louise.Lund@nrc.gov>  
**Subject:** RE: Path forward for Vogtle SPRA

Thanks Mo, and look forward to what you find. We believe that this process can be efficient and meet the time frame, while also aligning with the primary O&A issue that we see. Please let me know when ready to re-visit and we will prioritize the review.

Also, I checked and DORL is not aware of receiving the info in bullet two. Kathy should be the new SMRP member to replace Anne. Tx greg

**From:** Shams, Mohamed  
**Sent:** Thursday, December 07, 2017 8:09 AM  
**To:** Casto, Greg <Greg.Casto@nrc.gov>  
**Cc:** Brock, Kathryn <Kathryn.Brock@nrc.gov>; Ross-Lee, MaryJane <MaryJane.Ross-Lee@nrc.gov>; Markley, Michael <Michael.Markley@nrc.gov>; Giitter, Joseph <Joseph.Giitter@nrc.gov>; Lund, Louise <Louise.Lund@nrc.gov>  
**Subject:** RE: Path forward for Vogtle SPRA

Thank you Greg and Mike for the detailed review and comments. A few quick thoughts....

- This is a new product from us and the feedback is helpful to improve the final product.
- I believe a couple of the items you have mentioned as not done have already been done (ex. the two documents Anne requested, have been distributed to board members). Will verify and send again if need be.
- Appreciate identifying areas where we potentially may have not been consistent with the agency's regulations/guidance. [REDACTED]



- At the core of this discussion is our use of an audit to support our review. We have been challenged on this approach before and we understand it is different than how other reviews are/have been carried out. But different is not deficient, and we have vetted that approach a number of times with senior management up through the DEDO [REDACTED]. We leverage audits to help the staff and licensees have a direct dialogue to address questions that center around staff clarification needs and don't result in the need to supplement the original submittal. When a supplementation is needed, we have issued RAIs and the licensees responded on the docket. Such supplementation was not needed for the Vogtle SPRA review.
- The audit approach has been a lifeline for us in addressing an extraordinary workload in an efficient and effective manner, while still adhering to our guidance. Absent this direct dialogue with the licensees, these staff clarification needs would have been addressed in our traditional way through RAIs, potentially requiring far more time and resources for both the staff and industry. We simply could not afford that, given our schedule and resource constraints.
- I stress—if we needed additional information from Southern Nuclear Company, we would have asked RAIs and required docketed information. We have done that in numerous other reviews.
- I acknowledge that there could be room to improve the clarity and completeness of our documentation of this review, and we will look for those opportunities again. But, I stand by our use of the audit to support conducting our reviews in an efficient and effective manner. And I contend that our review approach is innovative and consistent with the spirit of the various efficiency initiatives undertaken by NRR.

Will get back to you after we assess and address your comments.

Thank you again,  
Mo

**From:** Casto, Greg

**Sent:** Wednesday, December 06, 2017 4:54 PM

**To:** Shams, Mohamed <Mohamed.Shams@nrc.gov>

**Cc:** Brock, Kathryn <Kathryn.Brock@nrc.gov>; Ross-Lee, MaryJane <MaryJane.Ross-Lee@nrc.gov>; Markley, Michael <Michael.Markley@nrc.gov>; Giitter, Joseph <Joseph.Giitter@nrc.gov>

**Subject:** Path forward for Vogtle SPRA

**Importance:** High

Mo,

I owe you a response on moving forward with completing the Vogtle SPRA response letter. We've had some DORL staff discussions, as well as looked through the Office Instructions and other guidance referenced as process vehicles for this activity. Also, our meeting last week with your staff was helpful, and their insight was included with our path forward. Here are our comments, as well as recommendations to complete this letter and make sure there are no issues with the rest of the licensee reviews:

- As discussed by Anne Boland in her Sept. 29 email, and following her review as SMRP member in the Sept 25 meeting, docketed information needs to be expanded to include resolution of the questions provided to the licensee and their responses. This can be done through an audit report (see more on this), which is docketed with either licensee confirmation (under oath and affirmation) or a bridge document that shows the questions specifically align with docketed information in their submittal (March 27, 17 letter). This can be included in the audit report and documented in ADAMS.
- Also in Anne's email, broad conclusions for application of SPRA were to be limited to apply only to the 50.54 (f) review, and ensure that SPRA results in this review could not be also credited for seismic in 50.69, etc. Of note, the 50.69 LAR review RAIs are in a number of cases closely similar to the questions asked for this letter. We included some redline/strikeouts, but there may be others. It is worth a good re-read.

- 3) Anne also asked for two documents that were displayed at the SMRP meeting. I don't believe that DORL has received them, so we would like to be forwarded those documents to complete the DORL SMRP review (as I understand her request in her email).
- 4) Throughout, the closure process does not appear to follow the process referenced Office Instructions, or the specific guidance for some of the 50.47 review elements (SMRP of specific note). The attached letter has been noted where this is the case. Specifically:
  - a. The generic audit package does not follow LIC-111, though the guidance and letter reference it. Specific audit plan elements are missing from the referenced generic information, and necessary site specific audit plan elements would not appear to align under the generic plan. An additional site specific audit plan attachment would appear to address this issue.
  - b. An audit closure report, IAW LIC-111, needs to be concluded. In this example, the report would document the questions and responses from the licensee. In #1 above, this report should be used to docket licensee responses, and in this case, either a summary of question responses (which are confirmed by the licensee under O&A), or a matrixed bridge document that aligns the questions to sections in the (docketed) submittal that answer the questions, is necessary to close the loop that staff decisions were made from information provided in the submittal under O&A.
  - c. The letter and guidance for performance of the SMRP cites processes IAW 50.47, LIC-111, and LIC-504. Further, LIC-202 (50.54 (f) reviews) describe documentation actions. As noted in the attached, documentation of audits, review by senior managers, and signing authority of evaluations do not appear to have been followed. Additionally, the results of the SMRP are to be documented as approval of the conclusion that 50.54 (f) requested information has been satisfied (also consistent with 50.47).

For future efficiencies in processing SPRA letters, it would make sense to use this first one as the template. Considering cleaning up the documentation of the audit phase, adding concurrence by other divisions and SMRP management, and ensuring that licensee responses are provided under O&A, the rest of these reviews and letters should be able to efficiently processed by staff within the timeframes envisioned for this project.

Please consider the attached, and if we need to discuss further to resolve issues, then it might be worthwhile to use the SMRP as product and process evaluator. Tx greg

***Greg Casto***

(acting) Deputy Division Director, Division of Regulatory Licensing  
Office of Nuclear Reactor Regulation  
United States Nuclear Regulatory Commission  
Washington, DC 20555-0001  
[Greg.casto@nrc.gov](mailto:Greg.casto@nrc.gov)  
(301)415,1453



## Markley, Michael

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**From:** Markley, Michael  
**Sent:** Tuesday, November 21, 2017 4:30 PM  
**To:** Brock, Kathryn  
**Cc:** Casto, Greg; Benner, Eric  
**Subject:** RE: INFO: NTTF Rec 2.1/50.54(f) Vogtle SPRA Response Letter - ML17293A427

Kathy,

I only had time to do a quick read of the Vogtle seismic hazards letter. Below are my comments/concerns:

- It is good that they put the clarification questions (RAIs by another name) in ADAMS as being publicly available.
- A substantial problem remains that all licensee responses to 50.54(f) letters have to be submitted under oath and affirmation on the docket.

Note: The Vogtle risk-informed GSI-191 RAIs responses (ML17116A096 (non-publicly available), ML17192A245, and ML17314A014) to the 50.54(f) letter (GL 2004-02) are examples of how it should be done.

- The staff performed an audit but the results of that audit were not documented in an audit report in accordance with LIC-111. The staff assessment is insufficient to document the audit results and how they contributed to the staff findings and conclusions.
- The staff evaluation states that the "disposition of the peer review findings as described above, the NRC staff concluded that the technical adequacy of the licensee's SPRA submittal was sufficient to support regulatory decision-making associated with Phase 2 of the 10 CFR 50.54(f) letter." It is not apparent how this conclusion is supported when a majority of the "peer review" and "findings and observations" are listed as "NA" in the Topic Sheets supporting the evaluation.

Based on the above, I would suggest that this report also be reviewed by DRA. We also have an ongoing LAR submittal in process for SNC/Vogtle to transition from a seismic margins analysis to seismic PRA. The sweeping conclusions could have an adverse impact on this LAR review. I have discussed the above with Greg Casto, and he plans to discuss with DRA.

The quality and completeness of this review does not meet normal NRC review expectations or openness to public engagement. If they do not get the licensee responses under oath and affirmation, I would like to non-concur.

Mike

**From:** Brock, Kathryn  
**Sent:** Tuesday, November 21, 2017 7:24 AM  
**To:** Markley, Michael <Michael.Markley@nrc.gov>  
**Subject:** FW: INFO: NTTF Rec 2.1/50.54(f) Vogtle SPRA Response Letter - ML17293A427

I recall you had concerns about this. I haven't yet read it, but I wondered if you wanted to take a look. Let me know.

**From:** Titus, Brett

**Sent:** Monday, November 20, 2017 5:04 PM

**To:** Boland, Anne <[Anne.Boland@nrc.gov](mailto:Anne.Boland@nrc.gov)>; Brock, Kathryn <[Kathryn.Brock@nrc.gov](mailto:Kathryn.Brock@nrc.gov)>; Giitter, Joseph <[Joseph.Giitter@nrc.gov](mailto:Joseph.Giitter@nrc.gov)>; Lund, Louise <[Louise.Lund@nrc.gov](mailto:Louise.Lund@nrc.gov)>; Marshall, Jane <[Jane.Marshall@nrc.gov](mailto:Jane.Marshall@nrc.gov)>

**Cc:** Shams, Mohamed <[Mohamed.Shams@nrc.gov](mailto:Mohamed.Shams@nrc.gov)>; Valentin-Olmeda, Milton <[Milton.Valentin-Olmeda@nrc.gov](mailto:Milton.Valentin-Olmeda@nrc.gov)>; Lyons, Sara <[Sara.Lyons@nrc.gov](mailto:Sara.Lyons@nrc.gov)>

**Subject:** INFO: NTTF Rec 2.1/50.54(f) Vogtle SPRA Response Letter - ML17293A427

Former, present, and future members of the Senior Management Review Panel (SMRP),

Below, you will find a link to the Vogtle SPRA response letter which is in the final stages of concurrence. Following the SMRP meeting which solidified the decision that further regulatory action is not warranted at Vogtle, the technical team received some comments, suggestions, and requests from the SMRP regarding the final documentation of the decision.

In the final document, we have made every effort to incorporate and address all of the SMRP's input consistent with our process. One of the specific requests was that the SMRP members be provided a courtesy copy of the final letter for their review. That is the purpose of this email.

Our intent is to issue the letter by December 4<sup>th</sup>.

If you have any questions or would like to discuss the letter, please feel free to call or email me. (Note: I will be out of the office the rest of this week for Thanksgiving.)

Sincerely,

Brett Titus

301-415-3075

[View ADAMS Properties ML17293A427](#)

[Open ADAMS Document \(Vogtle Electric Generating Plant, Unit Nos. 1 and 2 Staff Review of Seismic Probabilistic Risk Assessment Associated with Reevaluated Seismic Hazard Implementation of the Near-Term Task Force Recommendation 2.1 \)](#)



## NON-CONCURRENCE PROCESS

NCP-2017-016  
NCP PM 12/27/17

## SECTION B - TO BE COMPLETED BY NON-CONCURRING EMPLOYEE'S SUPERVISOR

TITLE OF SUBJECT DOCUMENT

VEGP, Unit 1 and 2 - Staff Review of Seismic PRA Associated with NTTF Recommendation 2.1

ADAMS ACCESSION NO.

ML17293A427

NAME

Greg Casto

TITLE

Acting Deputy Division Director, NRR/DORL

TELEPHONE NUMBER

(301) 415-0565

ORGANIZATION

NRR/DORL

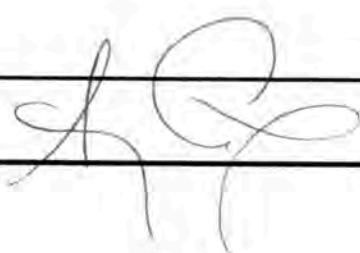
COMMENTS FOR THE NCP REVIEWER TO CONSIDER (use continuation pages or attach Word document)

As documented in Section A, specifically in emails included as part of the non-concurrence, I have discussed issues with the non-concurring staff member, staff in DRA and DLP responsible for the Vogtle SPRA response letter, and members of the NTTF 2.1 Senior Management Review Panel (SMRP). My resulting comments were provided in the December 6, 2017 email to Mo Shams and copied to Mike Markley, (included in Section A information). Those comments included information that had been raised by Anne Boland, member of the SMRP, following her review and provided in a September 29, 2017 email, (attached), where she raised similar issues regarding proper docketing and documentation of information exchanged with the licensee.

My email of December 6 provided a summary of issues that DORL had with the Vogtle SPRA letter. There were four primary comments provided, with three (3) comments pertaining to the September 29 email by the SMRP member (Boland), that did not appear to have been addressed in the final letter. A fourth comment related to documented processes applicable to correspondence under 50.47, LIC-111, and LIC-202, which were referenced under NTTF 2.1 guidance and reference documents as instructions for the SPRA review processes and did not appear to have been performed in accordance with those references.

The email from Mike Markley on December 7 incorrectly assumed that my earlier email on that date, (to Mo Shams, all included in Section A information), accepted the limited information provided on my earlier, (December 6), comments. Mr. Shams December 7 email just provided "a few quick thoughts", and no conclusions. Additionally, my response on December 7 did not accept the letter or "thoughts" as an acceptable justification for addressing my issues with the letter.

SIGNATURE



DATE

DEC 28 17

Shams, Mohamed

Subject:

FW: Follow-up to SPRA Review Panel for Vogtle

From: Boland, Anne

Sent: Friday, September 29, 2017 11:10 AM

To: Marshall, Jane <Jane.Marshall@nrc.gov>

Cc: Lund, Louise <Louise.Lund@nrc.gov>; Benner, Eric <Eric.Benner@nrc.gov>; Brock, Kathryn <Kathryn.Brock@nrc.gov>; Giitter, Joseph <Joseph.Giitter@nrc.gov>; Sanfilippo, Nathan <Nathan.Sanfilippo@nrc.gov>

Subject: Follow-up to SPRA Review Panel for Vogtle

Jane -

SOP 25 miles

I just wanted to follow-up on our conversation of yesterday regarding the Vogtle SPRA Panel. While we agreed on the final regulatory decision, there were still some outstanding questions which needed to be pursued - specifically, the public availability of certain documents associated with the review and conclusion (the questions transmitted to the licensee to support a clarification call and the matrix of disposition of the issues). We also agreed to evaluate opportunities to make future reviews more efficient when LARs for SPRA are in house or are coming in the near future. ①

In addition, there was discussion of the broad conclusion documented in the panel worksheet regarding the adequacy of the SPRA given the fact that the SPRA is also in-house as a LAR (didn't want any inadvertent correlation of the JLD review to the LAR review). I believe we agreed that the worksheet would be modified. \*  
"APPLICABLE FOR REGULATORY DECISION MAKING"

Staff also agreed to provide the two documents which were displayed at the meeting to the panel members to better understand their content. I have not received them and would like to review them to ensure I understand the full review.

Lastly, while DORL and DRA may not be on formal concurrence for the final letter, since this went through the review panel, I would like to have an opportunity for a courtesy review of the final letter to the licensee.

Thanks... Anne

→ SHOULD BE IN CONCURRENCE

SMRP DDs

②  
- TALK TO MO & MTHD 1

- DORL
- DRA
- DLP

- MTHD 4

- SOME ISSUES BEING BRING UP BY DRA.
- SOME ARE NOT CONSIDERING THE FINAL
- SEE WAYS TO CORRECT CURRENT CONCLUSION, w/ BETTER DOC. IN FUTURE THAT DOES NOT IMPROVE TIME LIMITS OF REVIEWING.



NON-CONCURRENCE PROCESS

NCP-2017-016

SECTION C - TO BE COMPLETED BY NCP COORDINATOR

TITLE OF SUBJECT DOCUMENT

VEGP, Unit 1 and 2 - Staff Review of Seismic PRA Associated with NTTF Recommendation 2.1

ADAMS ACCESSION NO

ML17293A427

NAME

Joseph Sebrosky

TITLE

Senior Project Manager

TELEPHONE NUMBER

(301) 415-1132

ORGANIZATION

NRR/DLP/PBMB

AGREED UPON SUMMARY OF ISSUES (use continuation pages or attach Word document)

See Attached

EVALUATION OF NON-CONCURRENCE AND RATIONALE FOR DECISION (use continuation pages or attach Word document)

See Attached

TYPED NAME OF NCP COORDINATOR

Joseph Sebrosky

TITLE

Senior Project Manager

ORGANIZATION

NRR/DLP/PBMB

SIGNATURE--NCP COORDINATOR

DATE

2/13/18

TYPED NAME OF NCP APPROVER

Louise Lund

TITLE

Director, Division of Licensing Projects

ORGANIZATION

NRR/DLP

SIGNATURE--NCP APPROVER

DATE

3/7/18

Non-Concurrence Process Documentation  
NCP-2017-017; Section C (Document Sponsor)

**Summary of Issues**

Section A of the non-concurrence provides a summary discussion of the concern and provides the following three supporting documents:

- Vogtle Senior Management Review Panel Briefing Sheet dated September 25, 2017
- Email chain from Mike Markley to Greg Casto dated December 7, 2017, 11:54 AM, titled, "Path forward for Vogtle SPRA"
- Email chain from Mike Markley to Kathryn Brock dated November 21, 2017, 4:30 PM, titled, "RE:INFO: NTTF Rec 2.1/50.54(f) Vogtle SPRA Response Letter – ML17293A427"

The supporting documents contain highlighted text. Based on the text in Section A of the non-concurrence and the attached supporting documents the non-concurring individual makes the following assertions:

- 1) The regulations in 10 CFR 50.54(f) state, in part, that licensees shall submit, as specified in Section 50.4, written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked. By letter dated March 12, 2012 (ADAMS Accession No. ML12053A340), the NRC issued a letter to Vogtle Electric Generating Plant, Units 1 and 2, pursuant to 10 CFR 50.54(f). The licensee responded to the NRC in a letter dated March 27, 2017 (ADAMS Accession No. ML17088A130). The 21 clarification questions the staff gave to the licensee were not docketed for public availability. The "clarifications" were, in fact, detailed requests for additional information (RAIs) for which licensee responses are required to be submitted under oath or affirmation in accordance with 10 CFR 50.54(f).
- 2) The generic audit process used by the staff did not follow NRR Office Instruction LIC-111.
- 3) The entire technical review was conducted under the auspices of an audit which bypassed the opportunity for public engagement, and no audit report was issued.
- 4) There is substantial overlap in the 10 CFR 50.54(f) clarifying questions with draft RAIs for the ongoing seismic probabilistic risk assessment (SPRA) licensing review indicating the clarifying questions remain unresolved for determining the quality and completeness of the SPRA, its peer review, and the sufficiency for regulatory decision making.
- 5) The use of "clarifications" in lieu of RAIs, calls that were not publicly noticed under the auspices of LIC-111, and gathering of information in an extended audit protocol that bypasses 10 CFR 50.54(f) oath or affirmation requirements may also be a defect in review design common to NRC 10 CFR 50.54(f) reviews completed for mitigating strategies and flooding.

The non-concurring individual agreed to the above summary of issues on February, 2, 2018.



## Disposition of Concerns/Actions Taken

### Introduction

When NRC management and staff implemented the audit process to assist in completing evaluations of licensee submittals in response to the NRC's March 12, 2012, 50.54(f) information request, they carefully considered the audit requirements in NRR Office Instruction LIC-111 and the regulations governing licensee responses to 50.54(f) requests. As discussed in further detail below, the underlying process the NRC staff used to arrive at the conclusion documented in "Vogtle Electric Generating Plant, Units 1 and 2 – Staff Review of Seismic Probabilistic Risk Assessment Associated with Reevaluated Seismic Hazard Implementation of the Near-Term Task Force Recommendation [NTTF] 2.1: Seismic," (ADAMS Accession No. ML17293A427), meets applicable NRC regulations and followed the applicable guidance. The issues raised by the non-concurrence are not supported for the following reasons:

- The staff's conclusion is based on the detailed docketed information that was submitted under oath by the licensee. This docketed information met NRC endorsed guidance. The clarification questions discussed during an audit call were used to verify information in the licensee's submittal. Because the clarification questions did not serve as a basis for the staff's conclusion, there is no requirement for responses to these questions to be submitted under oath or affirmation.
- In accordance with Office of Nuclear Reactor Regulation (NRR) NRR Office Instruction LIC-111, "Regulatory Audits," an audit plan dated July 6, 2017, (ADAMS Accession No. ML17177A446) was issued to support the staff's review. The audit summary was prepared and is provided as an enclosure to the Vogtle SPRA staff assessment associated with NTTF Recommendation 2.1.
- The development of guidance was based on extensive and thorough public interactions with various stakeholders including licensees, industry trade groups, members of the public, and the Advisory Committee on Reactor Safeguards (ACRS).
- The Vogtle SPRA staff assessment associated with NTTF Recommendation 2.1 states that the assessment of the SPRA for use in other licensing applications (e.g., 10 CFR 50.69) will warrant additional review depending on its proposed use.
- The use of the audit process by the staff to support reviews of the docketed information provided by licensees as a result of Fukushima lessons learned is consistent with LIC-111 and focused on supporting information to verify the docketed information.

### Regulatory Requirements and Guidance

The underlying regulatory requirement for issuing and responding to the March 12, 2012, request for information is title 10 of the *Code of Federal Regulations* Part 50, Section 50.54(f). Enclosure 1, Item 8 of the March 12, 2012, 50.54(f) letter requested that certain licensees complete a seismic probabilistic risk assess (SPRA) to determine if plant enhancements are warranted due to the change in the reevaluated seismic hazard compared to the site's design-basis seismic hazard. The requirement found in 10 CFR 50.54(f) is as follows:

*The licensee shall at any time before expiration of the license, upon request of the Commission, submit, as specified in § 50.4, written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked. Except for information sought to verify licensee compliance with the current licensing basis for that facility, the NRC must prepare the*

*reason or reasons for each information request prior to issuance to ensure that the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information. Each such justification provided for an evaluation performed by the NRC staff must be approved by the Executive Director for Operations or his or her designee prior to issuance of the request.*

The March 12, 2012, 50.54(f) Enclosure 1 seismic hazard reevaluation is considered beyond the current design and licensing basis for operating power plants as described in a memo to all licensees dated February 20, 2014 (ADAMS Accession No. ML14030A046). Therefore, the requirement found in 10 CFR 50.54(f) applies in that the NRC is obligated to prepare reason or reasons for each information request prior to issuance to ensure the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information.

In addition to the regulatory requirements found in 10 CFR 50.54(f) the staff's processes were informed by the guidance found in the following documents and guidance:

- NRR Office Instruction LIC-202, "Procedures for Managing Plant-Specific Backfits and 50.54(f)," ADAMS Accession No. ML092010045.
- NRC Management Directive 8.4, "Management of Facility-Specific Backfitting and Information Collection," dated October 9, 2013 (ADAMS Accession No. ML12059A460).
- NRR Office Instruction LIC-111, "Regulatory Audits," ADAMS Accession No. ML082900195.
- The NRC's Principles of Good Regulations found at <https://www.nrc.gov/about-nrc/values.html>. These principles focus on ensuring safety and security while appropriately balancing the interests of NRC's stakeholders, including the public and licensees. The principles include: independence, openness, efficiency, clarity, and reliability.

## Discussion

As discussed in the March 12, 2012, 50.54(f) letter, the seismic reevaluation request for information and the subsequent NRC evaluations were divided into two phases:

- Phase 1: Issue 10 CFR 50.54(f) letters to all licensees to request that they reevaluate the seismic and flooding hazards at their sites using updated seismic and flooding hazard information and present-day regulatory guidance and methodologies and, if necessary, to request they perform a risk evaluation. The evaluations associated with the requested information in this letter do not revise the design basis of the plant. This letter implements Phase 1.
- Phase 2: Based upon the results of Phase 1, the NRC staff will determine whether additional regulatory actions are necessary (e.g., update the design basis and SSCs important to safety) to provide additional protection against the updated hazards.

The purpose of the letter found at ADAMS Accession No. ML17293A427, which is the subject of the non-concurrence, is to document the results of the NRC's decision related to the Vogtle SPRA. That is, in accordance with 10 CFR 50.54(f), the NRC decision of whether or not the Vogtle Units 1 and 2 licenses should be modified, suspended, or revoked. As documented in the letter found at ADAMS Accession No. ML17293A427, the NRC used the information found



in the licensee's March 27, 2017, SPRA report (ADAMS Accession No. ML17088A130), submitted under oath, as the underlying basis for the NRC staff's Phase 2 determination. The process that the NRC used for reaching its Phase 2 decision is described in an August 29, 2017, staff memorandum titled, "Guidance for Determination of Appropriate Regulatory Action Based on Seismic Probabilistic Risk Assessment Submittals in Response to Near Term Task Force Recommendation 2.1: Seismic" (ADAMS Accession No. ML17146A200).

The development of the March 12, 2012, request for information and the detailed guidance related to the information that licensees were expected to provide in response to this request included extensive public interactions in accordance with the openness principle found in NRC's Principles of Good Regulation. These public interactions included:

- Twenty six public meetings leading up to the issuance of the March 12, 2012, 50(f) letter. A partial listing of the Fukushima lessons-learned public meetings can be found at: <https://www.nrc.gov/reactors/operating/ops-experience/japan/japan-meeting-briefing.html>
- Over 15 public meetings related to guidance for performing and submitting the results for those plants required to submit an SPRA. These SPRA submittals were prepared according to the guidance in the Electric Power Research Institute – Nuclear Energy Institute (EPRI-NEI) Screening, Prioritizations, and Implementation Details (SPID) document (ADAMS Accession No. ML123330282), which was endorsed by the staff for the purpose of responding to the March 12, 2012, 50.54(f) letter. The staff's endorsement of the SPID can be found in a letter dated February 15, 2013 (ADAMS Accession No. ML12319A074).
- A public meeting on December 7, 2016, in which the staff discussed a detailed checklist that it intended to use to document the results of its SPRA review. The summary of the meeting can be found at ADAMS Accession No. ML16350A181.

The purpose of such extensive public interactions was to ensure that licensees and other interested stakeholders were provided detailed guidance such that when information was submitted in response to the March 12, 2012, 50.54(f) letter the NRC would have the necessary information to support the Phase 2 decision making process described in the March 12, 2012, letter. Providing detailed guidance on what information the licensee was required to submit under oath or affirmation in response to the March 12, 2012, letter also helped to fulfill the requirement that the NRC prepare reason or reasons for each information request prior to issuance to ensure the burden to be imposed on respondents is justified in view of the potential safety significance of the issue to be addressed in the requested information. The detailed reasons for the information request are described in the March 12, 2012, request for information as required by 10 CFR 50.54(f) and in accordance with the guidance found in LIC-202. In addition, providing such detailed guidance to licensees is consistent with the clarity principle found in NRC's Principle of Good Regulations.

As documented in the Vogtle SPRA staff assessment associated with NTTF Recommendation 2.1 (ADAMS Accession No. ML17293A427), the licensee's submittal complied with the NRC's endorsed guidance. After reviewing the submission, the staff conducted an audit to verify information provided in the licensee's submittal and to determine if any additional information was necessary to be submitted on the docket to support its decision to modify, suspend, or revoke the Vogtle Units 1 and 2 licenses. As a result of the audit process, and reflected in the audit summary enclosed with the letter, the staff determined that the response from the licensee on the docket was sufficient to support its decision and no further actions were required in response to the March 12, 2012, 50.54(f) letter. The staff concluded that no action to modify, suspend, or revoke the Vogtle Units 1 and 2 licenses with

respect to the SPRA was necessary. The staff has been clear that the use of the SPRA to support licensing actions in other settings could require additional review and modifications and that acceptance for the purpose of resolving issues associated with the March 12, 2012, 50.54(f) letter would not imply acceptance for any other purpose.

The use of the audit process to verify information that licensees provided in their response to the March 12, 2012, letter, instead of using multiple rounds of requests for information, is a more efficient process and is consistent with NRC regulations and guidance. The adoption of the audit process is consistent with the efficiency principle found in NRC's Principles of Good Regulations in that where several effective alternatives are available, the option which minimizes the use of resources should be adopted.

The NRC's staff determination on whether to modify, suspend, or revoke the Vogtle 1 and 2 licensees included consideration of the seismic core damage frequency (SCDF) and seismic large early release frequency (SLERF) in relationship to the thresholds of the backfit screening process described in Management Directive 8.4. The March 27, 2017, SPRA report included information that the SCDF and SLERF were below the thresholds for which NRC would consider a backfit (i.e., modify, suspend, or revoke the license). As documented in the letter that is the subject of the non-concurrence (ADAMS Accession No. ML17293A427), the staff performed an audit of the supporting information to the SPRA provided by the licensee in its March 27, 2017, letter. The NRC staff's conclusion, however, is based on the information provided under oath by the licensee. The staff concluded that additional regulatory actions are not warranted (i.e., the staff does not have a basis for modifying, suspending, or revoking the Vogtle 1 and 2 licenses based on the information submitted by the licensee in response to Enclosure 1 of the March 12, 2012, letter). The non-concurrence does not challenge the staff's determination that no additional action is warranted.

#### Description of Development and Changes to Vogtle Phase 2 Documentation

The document that is the subject of the non-concurrence (ADAMS Accession No. ML17293A427), is the first proposed letter to document the NRC's Phase 2 decision related to an SPRA report. Throughout the process of developing the letter extensive interactions were held with NRC management and technical staff. As a result of these interactions several changes to the document were made. These changes included:

- Adding the individual to concurrence such that the issues identified in the December 20, 2017 non-concurrence are addressed
- Adding the Division Directors for Division of Operating Reactor Licensing, and Division of Risk Assessment of the Office of Nuclear Reactor Regulation (NRR) to concurrence on the document.
- Changing the signature of the document to the Division Director for the Division of Licensing Projects of NRR.
- Adding a detailed audit summary report as an enclosure to the document

## Specific Responses to Five Non-Concurring Assertions

Assertion 1: The clarification questions discussed during an audit should have been issued as request for additional information (RAIs) and the licensee's responses should have been submitted under oath or affirmation.

### Response

The March 12, 2012, [50.54\(f\) letter](#) provides a detailed list of the SPRA information requested to be submitted to the NRC under oath or affirmation. The Vogtle SPRA submittal provided the information requested in the 50.54(f) letter under oath. LIC-202 and 10 CFR 50.54(f) state that except for information sought to verify licensee compliance with the current licensing basis for the facility, the reason for each information request such as these must be documented and approved by the EDO or designee.<sup>1</sup> The staff used the audit process to verify and confirm its understanding of the information submitted under oath or affirmation.

Gaining an understanding and verifying portions of the detailed docketed information was both the purpose and the outcome of the clarification call with the licensee. Based on the audit call, the staff determined that no additional information was needed on the docket to supplement Vogtle's docketed SPRA report because the information provided by the licensee on the docket was complete and sufficient for the purpose of the 50.54(f) letter and the staff's ultimate decision that no additional actions are warranted. As such, no additional response information requests were needed in order to support Phase 2 of the process outlined in the March 12, 2012, 50.54(f) letter. Phase 2 of the process is based on the information provided by the licensee in Phase 1 (i.e., 50.54(f) responses). Phase 2 of the process consists of the NRC staff determining if additional regulatory actions are necessary, which is the underlying purpose of the 50.54(f) process (i.e., determine if a license should be modified, suspended, or revoked). The clarification questions were made publicly available.

Assertion 2: The generic audit process used by the staff did not follow NRR Office Instruction LIC 111.

### Response

The staff's position is that LIC-111 was followed in that an audit can be used to review non-docketed material, and the staff will make a decision if any of that material must be docketed by the licensee in order to support the staff's regulatory decision. The staff's decision was that the material discussed during the call did not need to be docketed. As allowed by staff guidance, an audit summary was prepared and integrated with the staff's response letter to the licensee. In response to the concern and to enhance documentation clarity, the staff segregated the audit summary report in a separate enclosure to the response letter and addressed each of the pertinent elements of an audit summary as described in Section 4.5 of [LIC-111](#).

Assertion 3: The entire technical review was conducted under the auspices of an audit which bypassed the opportunity for public engagement, and no audit report was issued.

### Response

Throughout the implementation of the post-Fukushima actions, the staff conducted extensive interactions with internal and external stakeholders, including the public. Pertinent to the SPRA review, the March 12, 2012, 50.54 (f) letter and the associated guidance were developed

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<sup>1</sup> The seismic hazard reevaluation is considered beyond the current design and licensing basis for operating power plants as described in a memo to all licensees dated February 20, 2014 (ADAMS Accession No. ML14030A046).



through comprehensive public interactions including numerous public meetings with the ACRS (e.g., see SECY-12-0025). These interactions and the associated guidance resulted in clear expectations regarding the detailed information that licensees needed to provide on the docket under oath or affirmation in response to the March 12, 2012, 50.54(f) letter. The audit process used by the staff to support reviews of licensees' submittals is consistent with LIC-111 in that it focused on non-docketed, supporting information to verify docketed information. The staff used the docketed information to form the basis of the staff decision. As discussed in response to assertion 2 above, the staff segregated the audit summary report in a separate enclosure to the response letter and addressed each of the pertinent elements of an audit summary as described in Section 4.5 of [LIC-111](#)

Assertion 4: There is substantial overlap in the 10 CFR 50.54(f) clarifying questions with draft RAs for the ongoing SPRA licensing review indicating the clarifying questions remain unresolved for determining the quality and completeness of the SPRA, its peer review, and the sufficiency for regulatory decision making.

#### Response

The NRR Division of Licensing Projects is aware that the licensee relied on the results of the same SPRA in support of a license amendment request that the NRR Division of Operating Reactor Licensing is currently processing. However, the regulatory reviews of the SPRA are different based on the regulatory decision being made for each submittal. In conducting the SPRA reviews, the staff requests the appropriate information to support the associated regulatory decision, namely the 50.54(f) letter response or the license amendment request. In the context of the 50.54(f) letter response, based on its review of the docketed SPRA submittal, the staff concluded that the SPRA is of sufficient technical adequacy to support a regulatory decision associated with the 50.54(f) letter request for information, which is a decision for the staff to require that the licenses be modified, suspended, or revoked. No additional information beyond the docketed submittal was necessary to support that decision for Vogtle. The outcome of this review was that no change to the license was warranted.

The licensing review of the Vogtle SPRA to support the license amendment request by the licensee is inherently different in that, if approved, this review would result in modifying the current facility's operating license. In such a review with the potential to change the license, the staff is drafting RAs in accordance with LIC-101, "License Amendment Review Procedures," (ADAMS Accession No. ML16061A451) to request the necessary information on the docket to support the potential license amendment decision. The staff has consistently indicated that the SPRA acceptability for the 50.54(f) response does not indicate that the SPRA or its associated documentation would be acceptable for use in support of a license amendment. This has been stressed from the beginning of the process, as such the following statement was included in the original version of the document:

*Application of this review is limited to the review of the 10 CFR 50.54(f) response associated with NTTF Recommendation 2.1, "Seismic" review. The staff notes that assessment of the SPRA for use in other licensing applications would warrant reviewing the SPRA for its intended application.*

Assertion 5: The use of "clarifications" in lieu of RAs, calls that were not publicly noticed under the auspices of LIC-111, and gathering of information in an extended audit protocol that bypasses 10 CFR 50.54(f) oath or affirmation requirements may also be a defect in review design common to NRC 10 CFR 50.54(f) reviews completed for mitigating strategies and flooding.

## Response

The staff used audits to support the reviews of licensees' responses to various post-Fukushima actions including 50.54(f) responses and preliminary reviews of steps licensees' planned on implementing in order to comply with post-Fukushima Orders. The audit process used by the staff to support these reviews of licensees' submittals is consistent with LIC-111, focusing on non-docketed, supporting information to verify docketed information. The audit activities were captured in audit summaries consistent with the office instruction. The use of the audit process to support the reviews was communicated extensively internally. In addition, robust and extensive public interactions, including public interactions with the ACRS, were held to communicate to interested stakeholders expectations for licensee submittals in response to the March 12, 2012, 50.54(f) letter, and how such information would be reviewed by the NRC.

## Conclusion

The document that is the subject of the non-concurrence found at ADAMS Accession No. (ADAMS Accession No. ML17293A427) was enhanced as a result of the interactions and issues identified in this non-concurrence. The underlying process the NRC staff used to arrive at the conclusion found in this document meets all applicable NRC requirements and guidance.