

February 24, 2022

Docket Nos.: 52-025  
52-026

ND-22-0040

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant – Units 3 and 4  
Seventeenth Six-Month Status Report of the Implementation of the  
Requirements of the Commission Order with Regard to  
Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049)

References:

1. NRC Order Number EA-12-049, *Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events*, dated March 12, 2012.
2. NRC Interim Staff Guidance JLD-ISG-2012-01, *Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events*, Revision 0, dated August 29, 2012.
3. NEI 12-06, *Diverse and Flexible Coping Strategies (FLEX) Implementation Guide*, Revision 0, dated August 2012.
4. SNC Letter ND-13-1702, *Vogtle Electric Generating Plant Units 3 and 4 Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)*, dated August 22, 2013.
5. SNC Letter ND-20-0164, *Vogtle Electric Generating Plant Units 3 and 4 Updated Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order EA-12-049)*, dated May 15, 2020.

Ladies and Gentlemen:

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued an order (Reference 1) to Southern Nuclear Operating Company. Reference 1 was immediately effective and directed the Vogtle Electric Generating Plant - Units 3 and 4 (VEGP 3&4) to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. Specific requirements are outlined in Attachment 3 of Reference 1.

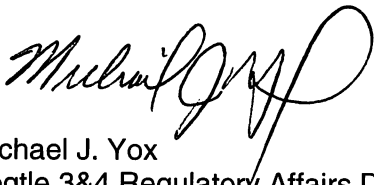
Reference 1 required submission of an Overall Integrated Plan within one year after issuance of the final NRC Interim Staff Guidance (Reference 2). Reference 2 endorses industry guidance document NEI 12-06, Revision 0 (Reference 3) with clarifications and exceptions identified in Reference 2. VEGP 3&4 has provided the original VEGP 3&4 Overall Integrated Plan (Reference 4) and an updated VEGP 3&4 Overall Integrated Plan (Reference 5).

Reference 1 requires submission of a status report at six-month intervals following submittal of the Overall Integrated Plan. Reference 3 provides direction regarding the content of the status reports and was followed in developing the enclosed report. The purpose of this letter is to provide the seventeenth six-month status report pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the requirements of Reference 1. The enclosed status report provides an update of milestone accomplishments since the last six-month update, including any changes to the compliance method, schedule, or need for relief and the basis, if any.

This letter contains no new regulatory commitments. This letter has been reviewed and determined not to contain security-related information.

If you have any questions, please contact Mr. Steven Leighty at 706-848-6790.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael J. Yox". The signature is fluid and cursive, with the first name being the most prominent.

Michael J. Yox  
Vogtle 3&4 Regulatory Affairs Director  
Southern Nuclear Operating Company

MJY/KMS/sfr

Enclosure:      Seventeenth Six-Month Status Report of the Implementation of the  
                         Requirements of the Commission Order with Regard to Mitigation Strategies for  
                         Beyond-Design-Basis External Events (EA-12-049)

cc:

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**Southern Nuclear Operating Company**

**ND-22-0040**

**Enclosure**

**Vogtle Electric Generating Plant Units 3 and 4**

**Seventeenth Six-Month Status Report of the Implementation of  
the Requirements of the Commission Order with Regard to  
Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049)**

(This enclosure consists of 6 pages including this cover page)

## 1 Introduction

Vogtle Electric Generating Plant (VEGP) - Units 3 and 4 developed an Overall Integrated Plan (Reference 1 in Section 8), followed by an Updated Overall Integrated Plan (Reference 2), documenting the diverse and flexible strategies (FLEX) in response to Nuclear Regulatory Commission Order EA-12-049 (Reference 3). This status report provides an update of milestone accomplishments since the last six-month update, including any changes to the compliance method, schedule, or need for relief/relaxation and the basis, if any.

## 2 Milestone Accomplishments

In addition to the submittal of status reports, the following milestone(s) directly related to FLEX implementation have been completed since the last six-month update (Reference 4), and are current as of February 12, 2022:

- None

## 3 Milestone Schedule Status

The following table provides an update to the milestone schedule with the activity status of each item and whether the expected completion date has changed. The dates are planning dates subject to change as design and implementation details are developed. The revised milestone target completion dates do not impact the Order implementation date.

During this reporting period, one new line item was added:

- Submit 18<sup>th</sup> 6-Month Status Report

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date (Feb 12, 2022 data date)
Submit 60 Day Status Report	Oct 2012	Complete	N/A
Submit Overall Integrated Plan (OIP)	Aug 2013	Complete	N/A
Submit 6 Month Status Report	Feb 2014	Complete	N/A
Submit 6 Month Status Report	Aug 2014	Complete	N/A
Submit 6 Month Status Report	Feb 2015	Complete	N/A
Submit 6 Month Status Report	Aug 2015	Complete	N/A
Submit 6 Month Status Report	Feb 2016	Complete	N/A
Submit 6 Month Status Report	Aug 2016	Complete	N/A
Submit 6 Month Status Report	Feb 2017	Complete	N/A
Submit 6 Month Status Report	Aug 2017	Complete	N/A
Submit 6 Month Status Report	Feb 2018	Complete	N/A
Submit 6 Month Status Report	Aug 2018	Complete	N/A
Submit 11 <sup>th</sup> 6-Month Status Report	Feb 2019	Complete	N/A
Submit 12 <sup>th</sup> 6-Month Status Report	Aug 2019	Complete	N/A

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<b>Milestone</b>	<b>Target Completion Date</b>	<b>Activity Status</b>	<b>Revised Target Completion Date (Feb 12, 2022 data date)</b>
Staffing Analysis Complete Unit 3	Oct 2019	Complete	N/A
Submit 13 <sup>th</sup> 6-Month Status Report	Feb 2020	Complete	N/A
Submit 14 <sup>th</sup> 6-Month Status Report	Aug 2020	Complete	N/A
Submit 15 <sup>th</sup> 6-Month Status Report	Feb 2021	Complete	N/A
Submit 16 <sup>th</sup> 6-Month Status Report	Aug 2021	Complete	N/A
Submit 17 <sup>th</sup> 6-Month Status Report	Feb 2022	Complete	N/A
Submit 18 <sup>th</sup> 6-Month Status Report	Aug 2022	Not started	N/A
Develop FLEX training	May 2020	Complete	N/A
Initiate Phase 3 Equipment Procurement – Units 3 and 4	Feb 2020	Complete	N/A
Ensure remaining BDB Nuclear Management Procedure (NMP) revisions and program documents (e.g., EOF, TSC, and SEC responses, EP procedures) include necessary information	Nov 2021	In Progress	Apr 2022
Ensure Operations’ BDB procedures (e.g., FSGs/SIGs) include necessary information	Oct 2021	In Progress	Mar 2022
Develop Response Plan with NSRC (storage plan and procedural guidance for strategy/maintenance) – Units 3 and 4	Sept 2020	Complete	N/A
Training complete and documented for Phase 3 to include connection and use of redundant offsite equipment for Ancillary Equipment.	Nov 2020	Complete	N/A
National SAFER Response Center (NSRC) Operational for Units 3 and 4	Oct 2020	Complete	N/A
Submit Order EA-12-049 Compliance Report for Unit 3	Nov 2021	In Progress	Apr 2022
Staffing Analysis Complete Unit 4 (adding Unit 4 to completed Unit 3 analysis)	Aug 2021	Complete <sup>(1)</sup>	N/A
Submit Order EA-12-049 Compliance Report for Unit 4 and Final Integrated Plan (FIP)	Apr 2022	Not started	July 2022

<sup>(1)</sup> pending NRC submittal

#### 4 Changes to Compliance Method

There are no changes to the compliance method as documented in the Updated Overall Integrated Plan (Reference 2) since the August 2021 six-month update (Reference 4).

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## 5 Need for Relief/Relaxation and Basis for the Relief/Relaxation

Vogtle Electric Generating Plant - Units 3 and 4 expects to comply with the order implementation date and no relief/relaxation is required at this time.

## 6 Open Items from Overall Integrated Plan and Draft Safety Evaluation

The following tables provide a summary and status of the open items documented in the Updated Overall Integrated Plan (OIP) and the confirmatory items documented in the NRC's Interim Safety Evaluation (ISE), dated October 27, 2020 (Reference 5).

Common information for VEGP 3&4 will be added to the FLEX program document NMP-GM-038-004 when issued for Unit 3. Specific Unit 4 information will be added to NMP-GM-038-004 when issued for Unit 4.

Overall Integrated Plan Open Item	Status
N/A	N/A

Interim Staff Evaluation (ISE) Confirmatory Items	U3 Status	U4 Status
(Section 3.2.3) Confirmatory Item 1: The design efforts related to the modifications noted in the OIP related to FLEX are complete. However, SNC should confirm that the construction and testing of the described modifications will be completed prior to implementation of OIP.	<u>In progress.</u> VEGP 3 confirmation that construction and testing of the modifications as described will be included in the VEGP 3 FLEX Compliance Letter.	<u>In progress.</u> VEGP 4 confirmation that construction and testing of the modifications as described will be included in the VEGP 3&4 FLEX Compliance Letter.
(Section 3.2.3) Confirmatory Item 2: In the original OIP, SNC provided simplified sketches depicting flow paths and FLEX connections. These sketches should be updated and provided in appropriate program documents, including the FIP.	<u>In progress.</u> The VEGP 3/4 updated sketches will be included in the FLEX program document NMP-GM-038-004 issued for VEGP 3 FLEX compliance.	<u>In progress.</u> The VEGP 3/4 updated sketches will also be included in the VEGP 3&4 FIP issued with the VEGP 3&4 FLEX Compliance Letter.
(Section 3.2.3) Confirmatory Item 3: SNC should provide an approved equipment list to delineate required FLEX equipment (pumps, generators, fans, etc.), capacities, need for spares, and associated support (hoses, cables, connections, ducting, etc.) similar to the information provided in original OIP and NEI 12-06. The list should include the required critical performance criterion.	<u>In progress.</u> The VEGP 3/4 approved equipment list will be included in the FLEX program document NMP-GM-038-004 issued for VEGP 3 FLEX compliance.	<u>In progress.</u> The VEGP 3/4 approved equipment list will be included in the VEGP 3&4 FIP issued with the VEGP 3&4 FLEX Compliance Letter.



Interim Staff Evaluation (ISE) Confirmatory Items	U3 Status	U4 Status
(Section 3.2.3) Confirmatory Item 4: SNC should provide a strategy to provide makeup water to containment as discussed in DCD/FSAR Section 5.4.7.5.	3-RNS-P72-001, <i>Post 72-Hour Operations of Containment Makeup</i> , is included in OIP Section 2.19.2.	
	<u>In progress.</u> Additional clarification for VEGP 3/4 will be added to the FLEX program document NMP-GM-038-004 issued for VEGP 3 FLEX compliance.	<u>In progress.</u> Additional clarification for VEGP 3&4 will be included in the VEGP 3&4 FIP issued with the VEGP 3&4 FLEX Compliance Letter.
(Section 3.2.3) Confirmatory Item 5: SNC updated the “Cold Weather Checklist” procedure for VEGP Units 1 and 2 to incorporate a check of roads and access routes in the OCA and protected area for icing conditions. The checklist designated a sand procurement location and to deploy ice melt from a storage warehouse. SNC needs to confirm that this checklist has been extended to cover the FLEX deployment routes for VEGP Units 3 and 4.	<u>Completed.</u>	<u>In progress.</u> 11877-2, “VEGP 1-2 Cold Weather Checklist”, will be updated to include VEGP 4 FLEX routes prior to VEGP 3&4 FLEX compliance.
(Section 3.2.3) Confirmatory Item 6: OIP References 63 and 64 are noted in Section 2.20.1 as an evaluation of the haul paths for Units 3 and 4. These references are not included in the OIP list of references.	<u>In progress.</u> References 63 and 64 for VEGP 3/4 will be added to the FLEX program document NMP-GM-038-004 issued for VEGP 3 FLEX compliance.	<u>In progress.</u> References 63 and 64 for VEGP 3/4 will be added to the VEGP 3&4 FIP issued with the VEGP 3&4 FLEX Compliance Letter.

**7 Potential Interim Staff Evaluation Impacts**

There are no potential impacts to the Interim Staff Evaluation since submittal of the August 2021 six-month update (Reference 4).

**8 References**

The following references support the updates to the Overall Integrated Plan described in this enclosure.

1. SNC Letter ND-13-1702, *Vogtle Electric Generating Plant Units 3 and 4 Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)*, dated August 22, 2013.
2. SNC Letter ND-20-0164, *Vogtle Electric Generating Plant Units 3 and 4 Updated Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses*

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*with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order EA-12-049), dated May 15, 2020.*

3. NRC Order Number EA-12-049, *Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events*, dated March 12, 2012.
4. SNC letter ND-21-0718, *Vogtle Electric Generating Plant – Units 3 and 4 Sixteenth Six-Month Status Report of the Implementation of the Requirements of the Commission Order with Regard to Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049)*, dated August 25, 2021.
5. NRC Letter, *Vogtle Electric Generating Plant, Units 3 and 4 – Staff Evaluation Regarding Implementation of Mitigating Strategies Related to Order EA-12-049 (EPID L-2020-LRQ-0002)*, dated October 27, 2020.
6. NEI 12-06, *Diverse and Flexible Coping Strategies (FLEX) Implementation Guide*, Revision 0, dated August 2012.