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Docket Nos.: 50-424
50-425

NL-16-0024

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

**Vogtle Electric Generating Plant – Units 1 and 2
Sixth 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. Vogtle Electric Generating Plant - Units 1 and 2 Overall Integrated Plan in Response to Commission Order with Regard to Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049), dated February 27, 2013.
5. Vogtle Electric Generating Plant - Units 1 and 2 Third 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 26, 2014, including Enclosure 2 – Vogtle Units 1&2 Mitigation Strategies (FLEX) Overall Integrated Implementation Plan (OIP), Revision 4.
6. SNC Letter NL-15-1777, Vogtle Electric Generating Plant - Unit 1 Completion of Required Action for NRC Orders EA-12-049 & EA-12-051 Mitigation Strategies for Beyond-Design-Basis External Events and Reliable Spent Fuel Pool Level Instrumentation, dated November 20, 2015.

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 directs the Vogtle Electric Generating Plant - Units 1 and 2 (VEGP) 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 2 of Reference 1.

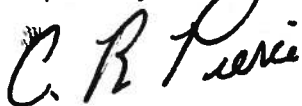
Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (Reference 2) and an overall integrated plan pursuant to Section IV, Condition C.1.a of Reference 1. Reference 2 endorses industry guidance document NEI 12-06, Revision 0, (Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the initial VEGP overall integrated plan (OIP). A revised OIP was submitted with the fall 2014 six-month update (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. The purpose of this letter is to provide the sixth 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. Reference 6 documents compliance with NRC Order EA-12-049 on VEGP Unit 1 in fall 2015. The enclosed report provides an update of milestone accomplishments since the last status report, including any changes to the compliance method, schedule, or need for relief and the basis, if any.

This letter contains no new NRC commitments. If you have any questions, please contact John Giddens at 205.992.7924.

Mr. C. R. Pierce states he is the Regulatory Affairs Director for Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,



C. R. Pierce
Regulatory Affairs Director

CRP/JMG/GLS



Sworn to and subscribed before me this 25 day of February, 2016.


Notary Public

My commission expires: 10.8.2017

Enclosure: Vogtle Electric Generating Plant - Units 1 and 2 Sixth Six-Month Status Report
Regarding Mitigation Strategies for Beyond-Design-Basis External Events
(EA-12-049)

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cc: Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO

Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer

Mr. B. K. Taber, Vice President – Vogtle 1 & 2

Mr. M. D. Meier, Vice President – Regulatory Affairs

Mr. B. J. Adams, Vice President - Engineering

Mr. D. R. Madison, Vice President – Fleet Operations

Mr. G. W. Gunn, Regulatory Affairs Manager – Vogtle 1 & 2

RType: CVC7000

U. S. Nuclear Regulatory Commission

Mr. V. M. McCree, Director of the Office of Nuclear Reactor Regulations

Ms. C. Haney, Regional Administrator

Mr. R. E. Martin, NRR Senior Project Manager – Vogtle 1 & 2

Mr. W. D. Deschaine, Senior Resident Inspector – Vogtle 1 & 2

Mr. A. M. Alen Resident Inspector – Vogtle 1 & 2

Mr. E. E. Bowman, NRR/JLD/TSD

State of Georgia

Mr. J. H. Turner, Director – Environmental Protection Division

**Vogtle Electric Generating Plant – Units 1 and 2
Sixth 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)**

Enclosure

**Vogtle Electric Generating Plant – Units 1 and 2
Sixth Six-Month Status Report Regarding Mitigation Strategies for
Beyond-Design-Basis External Events (EA-12-049)**

**Vogtle Electric Generating Plant – Units 1 and 2
Sixth Six-Month Status Report Regarding Mitigation Strategies for
Beyond-Design-Basis External Events (EA-12-049)**

1 Introduction

Vogtle Electric Generating Plant - Units 1 and 2 developed an Overall Integrated Plan (Reference 1 of this enclosure), documenting the diverse and flexible strategies (FLEX), in response to Reference 2. This enclosure provides an update of milestone accomplishments since submittal of the last status report, 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 previous 6-month update, and are current as of December 31, 2015:

- Develop Operational Procedure Changes
- Unit 1 Walk-throughs or Demonstrations
- Unit 1 Implementation Outage
- Develop FSGs (Unit 1 only)
- Issue FSGs (Unit 1 only)
- Implement Training
- Phase 2 Equipment Procurement Complete

3 Milestone Schedule Status

The following provides an update to Attachment 2 of the Overall Integrated Plan (Reference 1). It provides 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 Target Completion Dates are also based on the approval of one additional refueling cycle for full implementation of the order for Vogtle Electric Generating Plant – Unit 2 (References 4 & 5).

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Submit 60 Day Status Report	Oct 2012	Complete	N/A
Submit Overall Integrated Plan	Feb 2013	Complete	N/A
Submit 6 Month Status Report	Aug 2013	Complete	N/A
Initiate Phase 2 Equipment Procurement	Sep 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
Develop Modifications	Mar 2015	Complete	N/A
Develop Training Material	Jun 2015	Complete	N/A
Develop Strategies (Vogtle Response Plan) with National SAFER Response Center	Jun 2015	Complete	N/A
Submit 6 Month Status Report	Aug 2015	Complete	N/A
Develop Operational Procedure Changes	Oct 2015	Complete	N/A
Unit 1 Walk-throughs or Demonstrations	Oct 2015	Complete	N/A
Unit 1 Implementation Outage *	Oct 2015	Complete	N/A
Develop FSGs	Oct 2015	In Progress	April 2016 **
Issue FSGs	Oct 2015	In Progress	April 2016 **

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Sixth Six-Month Status Report of FLEX Implementation

Implement Training	Oct 2015	Complete	N/A
Phase 2 Equipment Procurement Complete	Dec 2015	Complete	N/A
Submit 6 Month Status Report	Feb 2016	Complete	N/A
Unit 2 Walk-throughs or Demonstrations	Apr 2016	In Progress	
Unit 2 Implementation Outage *	Apr 2016	Not Started	
Submit Completion Report	Jun 2016	Not Started	

*Full compliance after the implementation/second refueling outage or as approved by NRC extension (Reference 5)

**Unit 1 FSGs developed and issued; Unit 2 FSGs in progress with new target date

4 Changes to Compliance Method

There are no changes to the compliance method as documented in the Overall Integrated Plan (Reference 1).

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

Vogtle Electric Generating Plant – Unit 1 has completed the implementation of this Order and the compliance letter has been submitted to the NRC dated November 20, 2015 (Reference 7). As noted in Section 2, the Milestones accomplished by December 31, 2015 are included in this report. Vogtle Electric Generating Plant – Unit 2 requested and received a schedule relaxation of one additional refueling cycle for full implementation of the Order requirements and expects to comply with the relaxed date (References 4 & 5). No additional relief/relaxation is required or anticipated at this time.

6 Open Items from Overall Integrated Plan and Interim Staff Evaluation

The following tables provide a summary and status of any open items documented in the Overall Integrated Plan and any open items documented in the Interim Staff Evaluation (ISE) dated January 16, 2014 (ML13339A781).

Overall Integrated Plan Open Item	Status
1. Structure, content and details of the Vogtle Response Plan will be determined.	Complete

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Interim Staff Evaluation Open Item	Status
<p>3.2.4.10.A Load Reduction to Conserve DC Power - The licensee stated that the Class 1E batteries are capable maintaining critical loads for 10 hours prior to reaching the minimum voltage during an ELAP event, with margin. However, on page 10 of the Integrated Plan the licensee stated that the 480V Flex DGs will be available at any point past 12 hours to restore power to one battery charger on each Class 1E 125Vdc distribution bus. The licensee's response does not address the additional 2 hours that the critical loads would be powered from the Class 1E batteries and whether the minimum voltage would be exceeded during this time.</p>	<p>Closed</p> <p>NRC reviewed and closed in VEGP, Units 1 and 2 - Report for the Audit Regarding Implementation of Mitigating Strategies for Order EA-12-049 as documented on page 6 of section 3.2.b last paragraph, dated August 25, 2015. (ML15210A510)</p>

7 Potential Interim Staff Evaluation Impacts

The NRC issued an Interim Staff Evaluation (ISE) for VEGP (Reference 3) with the Open Item listed in Section 6 above. The ISE states that, "the NRC concludes that the licensee has provided sufficient information to determine that there is reasonable assurance that the plan, when properly implemented, will meet the requirements of Order EA-12-049 at the Vogtle Electric Generating Plant, Units 1 and 2."

8 References

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

1. Vogtle Electric Generating Plant - Units 1 and 2 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 February 27, 2013.
2. 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.
3. NRC Letter, Vogtle Electric Generating Plant, Units 1 and 2 - Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies) (TAC NOS. MF0714 and MFO715), dated January 16, 2014.

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Sixth Six-Month Status Report of FLEX Implementation

4. **Vogtle Electric Generating Plant - Unit 2 Request for Relaxation of Commission Order Modifying Licenses With Regards to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated February 26, 2014.**
5. **NRC Letter, Vogtle Electric Generating Plant, Unit 2 - Relaxation of Certain Schedule Requirements for Order EA-12-049, Issuance of Order to Modify Licenses With Regard to Requirements for Mitigation Strategies Beyond Design Basis External Events, dated August 14, 2014.**
6. **Vogtle Electric Generating Plant - Units 1 and 2 Third 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 26, 2014, including Enclosure 2 – Vogtle Units 1&2 Mitigation Strategies (FLEX) Overall Integrated Implementation Plan (OIP), Revision 4.**
7. **SNC Letter NL-15-1777, Vogtle Electric Generating Plant - Unit 1 Completion of Required Action for NRC Orders EA-12-049 & EA-12-051 Mitigation Strategies for Beyond-Design-Basis External Events and Reliable Spent Fuel Pool Level Instrumentation, dated November 20, 2015.**