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August 27, 2015

Docket Nos.: 50-321

50-366

NL-15-1157

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
Fifth 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.
- Edwin I. Hatch Nuclear 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. Edwin I. Hatch Nuclear 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 – Hatch Units 1&2 Mitigation Strategies (FLEX) Overall Integrated Implementation Plan (OIP), Revision 4.

#### 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 Edwin I. Hatch Nuclear Plant - Units 1 and 2 (HNP) 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.

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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 quidance document NEI 12-06 (Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the initial HNP overall integrated plan (OIP). A revised OIP was submitted with the fall 2014 sixmonth 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 fifth 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 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

C. R. Pierce

Regulatory Affairs Director

CRP/JMG/GLS

Sworn to and subscribed before me this 27 day of August

My commission expires: 1-2-2018

Enclosure: Edwin I. Hatch Nuclear Plant - Units 1 and 2 Fifth 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. D. R. Vineyard, Vice President - Hatch

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

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

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

Mr. G. L. Johnson, Regulatory Affairs Manager - Hatch

RType: CHA02.004

## U. S. Nuclear Regulatory Commission

Mr. W. M. Dean, Director of the Office of Nuclear Reactor Regulations

Mr. V. M. McCree, Regional Administrator

Mr. L. D. Wert, Regional Administrator (Acting)

Mr. R. E. Martin, NRR Senior Project Manager - Hatch

Mr. D. H. Hardage, Senior Resident Inspector - Hatch

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

## State of Georgia

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
Fifth Six-Month Status Report of the Implementation of the
Requirements of the Commission Order with Regard to
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### Enclosure

Edwin I. Hatch Nuclear Plant – Units 1 and 2
Fifth Six-Month Status Report Regarding Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049)

# Edwin I. Hatch Nuclear Plant – Units 1 and 2 Fifth Six-Month Status Report Regarding Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049)

#### 1 Introduction

Edwin I. Hatch Nuclear Plant - Units 1 and 2 developed an Overall Integrated Plan (OIP) (Reference 1 of this enclosure), documenting the diverse and flexible strategies (FLEX), in response to Reference 2. Reference 5 of this enclosure provided a revised OIP in fall 2014. 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 June 30, 2015:

- Unit 2 Implementation Outage
- Develop Modifications Unit 2

#### 3 Milestone Schedule Status

The following provides an update to Attachment 2 of the Overall Integrated Plan (Reference 5). The dates are planning dates subject to change as design and implementation details are developed.

| Milestone                                | Target<br>Completion<br>Date | Activity<br>Status | Revised Target<br>Completion<br>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                                  |  |
| Submit 6 Month Status Report             | Feb 2014                     | Complete           | N/A                                  |  |
| Initiate Phase 2 Equipment Procurement   | Jun 2014                     | Complete           | N/A                                  |  |
| Submit 6 Month Status Report             | Aug 2014                     | Complete           | N/A                                  |  |
| Perform Staffing Analysis (Phase 2)      | Oct 2014                     | Complete           | N/A                                  |  |
| Submit 6 Month Status Report             | Feb 2015                     | Complete           | N/A                                  |  |
| Unit 2 Implementation Outage **          | Mar 2015                     | Complete           | N/A                                  |  |
| Develop Modifications – Unit 2           | Apr 2015                     | In Progress        | Nov 2015                             |  |
| Develop Strategies (Hatch Response Plan) | Jun 2015                     | In Progress        | Dec 2015                             |  |
| Submit 6 Month Status Report             | Aug 2015                     | Complete           | N/A                                  |  |
| Develop Modifications – Unit 1           | Aug 2015                     | In Progress        | Oct 2015                             |  |
| Develop Operational Procedure Changes    | Sep 2015                     | In Progress        | Nov 2015                             |  |
| Create Maintenance Procedures            | Nov 2015                     | In Progress        |                                      |  |
| Develop Training Material                | Nov 2015                     | In Progress        |                                      |  |
| Submit 6 Month Status Report             | Feb 2016                     | Not Started        |                                      |  |
| Phase 2 Equipment Procurement            | Mar 2016                     | In Progress        |                                      |  |
| Unit 1 Implementation Outage *           | Mar 2016                     | Not Started        |                                      |  |
| Issue FSGs                               | Apr 2016                     | Not Started        | Mar 2016                             |  |
| Implement Training                       | Apr 2016                     | In Progress        | Mar 2016                             |  |
| Unit 1 Walk-throughs or Demonstrations   | Apr 2016                     | Not Started        | Mar 2016                             |  |
| Submit 6 Month Status Report             | Aug 2016                     | Not Started        |                                      |  |

| Milestone                              | Target<br>Completion<br>Date | Activity<br>Status | Revised Target<br>Completion<br>Date |
|--|------------------------------|--------------------|--------------------------------------|
| Unit 2 Walk-throughs or Demonstrations | Dec 2016                     | Not Started        |                                      |
| Unit 2 Implement Non-Outage Mods **    | Dec 2016                     | In Progress        |                                      |
| Submit Completion Report               | Dec 2016                     | Not Started        | Feb 2017                             |

<sup>\*</sup> Full compliance after second listed refueling outage

# 4 Changes to Compliance Method

There are no changes to the compliance method as documented in the Overall Integrated Plan (Reference 5).

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

Edwin I. Hatch Nuclear Plant - Units 1 and 2 expect to comply with the order implementation date and no relief/relaxation is required 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.

| Overall Integrated Plan Open Item   | Status                                       |
|---|--|
| Structure, content and details of the Hatch     Response Plan will be determined. | SAFER Team developing Hatch<br>Response Plan |

| Interim Staff Evaluation Open Items                                   | Status |
|---|--------|
| ISE was issued on February 27, 2014 (ML13364A202) with no Open Items. | N/A    |

#### 7 Potential Staff Evaluation Impacts

The NRC issued an Interim Staff Evaluation (ISE) for HNP (Reference 3) with no Open Items. 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 Edwin I. Hatch Nuclear Plant, Units 1 and 2."

<sup>\*\*</sup> Full compliance by 12/31/2016 since second refueling outage is after 12/31/2016

#### 8 References

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

- Edwin I. Hatch Nuclear 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.
- 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. Edwin I Hatch Nuclear Plant, Units 1 and 2 Interim Staff Evaluation Related to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies) (TAC NOS. MF0712 and MF0713).
- 4. Edwin I. Hatch Nuclear Plant Units 1 and 2 Response to Request for Information Pursuant to Title 10 CFR 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the NTTF Review of Insights from the Fukushima Daiichi Accident, dated March 12, 2012, providing the Hatch Phase 2 On-Shift Staffing Analysis report sent October 9, 2014.
- 5. Edwin I. Hatch Nuclear 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 Hatch Units 1 & 2 Mitigation Strategies (FLEX) Overall Integrated Implementation Plan (OIP), Revision 4.