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August 27, 2013

Docket Nos.: 50-321

50-366

NL-13-1763

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
First 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:

- 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
- 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. Edwin I. Hatch Nuclear Plant Units 1 and 2 Initial Status Report in Response to Commission Order with Regard to Mitigation Strategies for Beyond-Design-Basis External Events (EA-12-049), dated October 23, 2012
- 5. 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

### 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.

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.

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Reference 4 provided the HNP initial status report regarding mitigation strategies. Reference 5 provided the HNP overall integrated plan.

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 first 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 NRC commitments. If you have any guestions, please contact John Giddens at 205.992.7924.

Mr. B. L. Ivey states he is a Vice President of 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,

Mr. B. L. Ivev

Vice President - Regulatory Affairs

BLI/CLN/lac

Sworn to and subscribed before me this 27th day of August

Notary Public Henders

My commission expires: March 23, 2014

Enclosure: Edwin I. Hatch Nuclear Plant - Units 1 and 2

First 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)

Southern Nuclear Operating Company

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

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

Mr. D. R. Madison, Vice President - Hatch

Mr. C. R. Pierce, Regulatory Affairs Director

Mr. B. J. Adams, Vice President – Fleet Operations

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# U. S. Nuclear Regulatory Commission

Mr. E. Leeds, Director of the Office of Nuclear Reactor Regulations

Mr. V. M. McCree, Regional Administrator

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

Mr. E. D. Morris, Senior Resident Inspector - Hatch

Ms. J. A. Kratchman, NRR/JLD/PMB

Mr. E. E. Bowman, NRR/DPR/PGCB

# State of Georgia

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
First 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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
First 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)

# Edwin I. Hatch Nuclear Plant – Units 1 and 2 First 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)

## 1 Introduction

Edwin I. Hatch Nuclear 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 attachment provides an update of milestone accomplishments since submittal of the Overall Integrated Plan, 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 development of the Overall Integrated Plan (Reference 1), and are current as of June 30, 2013:

None

#### 3 Milestone Schedule Status

The following provides an update to Attachment 2 of the Overall Integrated Plan. 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 revised milestone target completion date does not impact the Order implementation date.

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 (see Sec. 2)	N/A
Develop Strategies (Playbook) with RRC	Nov 2013	Started	Jun 2015
Submit 6 Month Status Report	Feb 2014	Not Started	
Develop Modifications – Unit 2	Apr 2014	Started	
Initiate Phase 2 Equipment Procurement	Jun 2014	Started	
Submit 6 Month Status Report	Aug 2014	Not Started	
Perform Staffing Analysis (Phase 2)	Aug 2014	Not Started	
Develop Operational Procedure Changes	Sep 2014	Not Started	
Create Maintenance Procedures	Nov 2014	Not Started	
Develop Training Material	Nov 2014	Not Started	
Submit 6 Month Status Report	Feb 2015	Not Started	
Issue FSGs	Mar 2015	Not Started	
Unit 2 Implementation Outage **	Mar 2015	Not Started	
Implement Training	Mar 2015	Not Started	
Develop Modifications – Unit 1	Apr 2015	Not Started	
Submit 6 Month Status Report	Aug 2015	Not Started	
Submit 6 Month Status Report	Feb 2016	Not Started	
Unit 2 Walk-throughs or Demonstrations	Apr 2016	Not Started	
Unit 1 Implementation Outage *	Apr 2016	Not Started	

Submit 6 Month Status Report	Aug 2016	Not Started	
Unit 1 Walk-throughs or Demonstrations	Dec 2016	Not Started	
Unit 2 Implement Non-Outage Mods **	Dec 2016	Not Started	
Submit Completion Report	Dec 2016	Not Started	

<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 1 of this enclosure).

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

NRC Order EA-12-049 requires implementation of Mitigation Strategies to address an ELAP and LUHS. The endorsed ISG for compliance with NRC Order EA-12-049, ISG-JLD-2012-01, utilized the containment vent required by NRC Order EA-12-050 for the heat removal function for BWRs. Reference 1 provided the Edwin I. Hatch Nuclear Plant - Unit 1 and 2 response to the NRC Order 12-049 utilizing the endorsed guidance from ISG-JLD-2012-01. On June 6, 2013 the NRC rescinded NRC Order EA-12-050 with the issuance of NRC Order EA-13-109. As a result, the Edwin I. Hatch Nuclear Plant – Units 1 and 2 will not be installing a containment vent in accordance with NRC Order EA-12-050 as stated in Reference 1.

Edwin I. Hatch Nuclear Plant – Units 1 and 2 will be revising strategies to comply with NRC Order EA-12-049 during 2013 with information from the industry, NEI and NRC relative to the new requirements and schedule associated with NRC Order EA-13-109. This new strategy will follow NRC issuance of an ISG in October 2013. It is anticipated that the revised criteria and implementation schedule associated with NRC Order EA-13-109 may impact containment venting procedures, training and demonstrations related to the compliance date for NRC Order EA-12-049. Edwin I. Hatch Nuclear Plant – Units 1 and 2 will be in compliance with the aspects of the Reference 1 Mitigation Strategies that do not rely upon a Hardened Containment Vent System unless otherwise described.

Any request for relief will be provided in a separate letter to the NRC and referenced in a future six (6) month update. It is anticipated this will occur prior to the February 2014 six (6) month update.

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

The following tables provide a summary of the open items documented in the Overall Integrated Plan or the Draft Safety Evaluation (SE) and the status of each item.

Overall Integrated Plan Open Item	Status
Structure, content and details of the Regional	SAFER Team developing Pilot Playbook
Response Center playbook will be determined.	Flaybook

Draft Safety Evaluation Open Item	Status
None Received to date	N/A

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

## 7 Potential Draft Safety Evaluation Impacts

There are no potential impacts to the Draft Safety Evaluation identified at this time.

#### 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.

## 9 Other Additional Information

The following information provides clarity or corrections to the Overall Integrated Plan but does not constitute a change in strategy:

- Edwin I. Hatch Nuclear Plant Unit 1 will not require any additional load-shedding from the existing SBO response, while Unit 2 will load-shed 5 breakers (versus 14 breakers) at a local panel for deep load-shed as referenced on Page 9 of Reference 1.
- 2. Initiating use of Hardened Containment Vent System (HCVS) per EOPs to maintain containment parameters below design limits and within the limits that allow continued use of RCIC (table item 8) is now between 7 and 7.3 hours, versus original values of between 7 and 7.5 hours as referenced on pages 9 and 30 of Reference 1.
- 3. For the method of SFP makeup referenced on page 35 of Reference 1, operators would require opening 4 manual valves per unit (1P41-F1383, 1P41-F070A, 1P41-F103, 1G41-F217, 2P41-F1156, 2P41-F070A, 2P41-073, and 2G41-F040) versus the 2 valves stated.
- 4. The revised calculation values for the MCR heat-up to greater than 110F is 3.5 hours versus the assumed value of 9 hours in Reference 1. The mitigation strategy remains unchanged (Reference 1, Page 42.)
- 5. The recently performed RCIC room heat-up calculation raised the maximum temperature reached in the room, but the conclusion that it remains below 148°F for the first 72 hours remains unchanged if the room door is opened at 1 hour, but stays below the 148°F for the first 8 hours with no actions.