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(date) – this is added after executive signature is obtained

Docket Nos.: 50-321
50-366

NL-16-0645

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
Request for Extension of Enforcement Discretion and Revised Submittal Date for
10 CFR 50.48(c) License Amendment Request

Ladies and Gentlemen:

By letter dated October 4, 2013, Southern Nuclear Operating Company (SNC) informed the Nuclear Regulatory Commission (NRC) of its intent to transition the fire protection licensing basis for Edwin I. Hatch Nuclear Plant (HNP) (ref.1) to adopt NFPA 805 in accordance with 10 CFR 50.48(c). By letter dated December 2, 2013 (ref.2), the NRC acknowledged receipt of the letter of intent and granted three years of enforcement discretion, for the preparation of the License Amendment Request (LAR), beginning on October 4, 2013. In accordance with the NRC Enforcement Policy, the enforcement discretion period will continue until the NRC approval of the LAR is completed.

In accordance with SECY-12-0031, SNC respectfully requests that the due date for the 10 CFR 50.48(c) LAR be extended eighteen (18) months. SECY-12-0031 provides the NRC Staff position that enforcement discretion could be extended if the licensee provides adequate justification. In evaluating the justification provided by a licensee, the staff would consider, but not be limited by, the status of the industry peer review, plant modifications, and the licensee's compliance reviews.

On June 21st, 2016, a public meeting was held between SNC and NRC staff to discuss the status of the HNP NFPA 805 transition project. Difficulty with development of the Fire Probabilistic Risk Assessment (PRA) model was the primary driver for the delay in the HNP LAR submittal. However, further considerations will require additional time to develop and submit a high quality submittal. Specifically, SNC informed the NRC that extension is under consideration to allow appropriate coordination and implementation of design

modifications at HNP. SNC was compelled to further supplement the timeframe of this extension request in order to coordinate modification schedules and the NFPA 805 project schedule.

Key modifications are identified in the HNP overall integrated plan in response to NRC Order regarding Mitigation Strategies for Beyond Design Basis External Events (FLEX Order), and were submitted to NRC by letter dated February 27, 2013 (ref. 3). In accordance with FLEX Order obligations and the current expectations for NFPA 805 implementation, these modifications will be implemented while the current fire protection program is still in effect and will afford potential risk improvements for NFPA 805 initiatives.

By letter dated December, 21, 2012, HNP provided a schedule for Backfit of Degraded Grid Voltage Protection (ref. 4). During the modification development process, risk insights were utilized to assist in determining cable locations such that portions of the modification packages would not only meet the Degraded Grid requirements but provide risk reduction for the fire PRA model.

The enclosure to this letter contains a table which provides NFPA 805 completion schedule and LAR status, as of June 15, 2016, for the remaining key activities and major milestones.

The transition process will be considered complete upon receipt of the approved LAR authorizing the transition to NFPA 805.

If you have any questions, please contact Ken McElroy at (205) 992-7369.

Respectfully submitted,

C. R. Pierce
Regulatory Affairs Director

CRP/PDB/LAC

Enclosure:

1. NFPA 805 Transition Progress

References:

1. Edwin I. Hatch Nuclear Plant Letter of Intent to Adopt the 2001 Edition of NFPA 805, "Performance-Based Standard for Fire Protection for Light

Water Reactor Electric Generating Plants", dated October 4, 2013
[ML13280A299]

2. Edwin I. Hatch Nuclear Plant, Units 1 and 2 - Request For Enforcement Discretion In Accordance With The Interim Enforcement Policy For Fire Protection Issues During Transition To National Fire Protection Standard NFPA 805., dated December 2, 2013 [ML13322B259]
3. Edwin I. Hatch Nuclear Plant - Units 1 and 2, "Southern Nuclear Operating Company's 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 [ML13059A385]
4. Edwin I. Hatch Nuclear Plant -Units 1 and 2 "Facility Operating License Amendment Request for Degraded Voltage Protection Modification Schedule" dated December, 21, 2012 [ML12356A472]
5. Staff Requirements Memorandum SECY-11-0061, "A Request To Revise The Interim Enforcement Policy For Fire Protection Issues On 10 CFR50.48(C) To Allow Licensees To Submit License Amendment Requests in a Staggered Approach" (RIN 3150-AG48) dated June 10, 2011 [ML111610616]
6. Staff Requirements Memorandum SECY-12-0031, "Enforcement Alternatives for Sites that Indicate Additional Time Required to Submit their License Amendment Requests to Transition to 10 CFR 50.48(c) National Fire Protection Association Standard 805," dated February 24, 2012 [ML12025A349]

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. Meier, Vice President – Regulatory Affairs

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

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

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U. S. Nuclear Regulatory Commission

Ms. C. Haney, Regional Administrator

Mr. M. D. Orenak, NRR Project Manager – Hatch

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

**Edwin I. Hatch Nuclear Plant – Units 1 and 2
Request for Extension of Enforcement Discretion and Revised Submittal
Date for 10 CFR 50.48(c) License Amendment Request**

Enclosure 1

NFPA 805 Transition Progress

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NFPA 805 Transition Progress

SECY-11-0061 requested information from licensees on demonstrated progress toward completion of NFPA 805 transition, as a condition of granting an extension of enforcement discretion. Southern Nuclear Operating Company (SNC) has made substantial progress in the Hatch NFPA 805 transition effort. SNC has completed the Nuclear Safety Capability Assessment (NSCA) and a preliminary set of Variations from Deterministic Requirements (VFDRs) have been determined based on compliance assessments. Fundamental fire protection program elements, Non-power operations (NPO) analysis, radio-active release and licensing action transition work tasks are also nearing completion. A full scope peer review of the fire PRA model was completed in April of 2016. The fire PRA model met 93 percent of the technical elements of the ASME standard. While the peer review generally endorsed the model methodology, the overall CDF and LERF are relatively high. Based on industry experience, delay of a successful peer review will also postpone the LAR development by at least one year. More time is also required for model refinement and incorporation of Flex and Degraded Grid modification packages.

SNC has participated in the NEI NFPA 805 Task Force, Fire PRA task forces, and Frequently Asked Question (FAQ) process. SNC has made significant efforts in performing work activities in an effective manner, while utilizing the lessons learned from other sites.

Table E-1 represents the major work activities for HNP associated with NFPA 805 LAR development. The "LAR/TR Reference" column refers to the referenced section of the NFPA 805 LAR/Transition Reports that document the results of the NFPA 805 Transition Report. As shown in the table E-1 HNP has demonstrated substantial progress in the NFPA 805 transition process.

Table E-1. LAR Status

LAR/TR Reference	Topic	% Complete
N/A	Safe Shutdown Analysis Update (pre-requisite task)	90%
4.1, Attachment A	Fundamental FP Program Elements and Minimum Design Requirements (Table B-1)	75% (Note 1)
4.2.1, Attachment B	Nuclear Safety Capability Assessment - Methodology (Table B-2)	70% (Note 2)
Section 4.2.2, Attachment C	Nuclear Safety Capability Assessment - Fire Area – by - Fire Area Review (Table B-3)	50% (Note 3, 4)
Section 4.3, Attachment D	Non Power Operational Modes (Table F-1)	60% (Note 5)

Enclosure 1 to NL-16-0645
 NFPA 805 Transition Progress

LAR/TR Reference	Topic	% Complete
Section 4.4, Attachment E	Radioactive Release (Table G-1)	90% (Note 6)
Section 4.1.3, Attachment I	Definition of Power Block and Plant	100%
Section 4.2.2	Existing Engineering Equivalency Evaluation Transition	30% (Note 7)
Section 4.2.3, Attachment K	Licensing Action Transition	90% (Note 8)
Section 4.1.2.3, Attachment L	NFPA 805 Chapter 3 Requirements Not Met and Not Previously Approved by NRC	55% (Note 9)
N/A	Fire PRA Peer Review	100%
N/A	FPRA Peer Review F&O closure	25%
Section 4.5.2.2	Fire Risk Evaluations	0%
Section 4.6	Monitoring Program	0%
Section 4.7	Program Documentation, Configuration Control, and Quality Assurance	0%
N/A	Transition Report	5% (Note 10)

Notes:

1 – All Table B-1 sections have been prepared. Sections 3.1 to 3.4 have been reviewed by SNC. Sections 3.5 to 3.11 are being reviewed by SNC. NFPA code evaluations to support Chapter 3 compliance have been prepared and reviewed by SNC. Additional evaluations to support Chapter 3 and/or NFPA code compliance have been identified but have not started.

2 – All Table B-2 sections have been prepared. The NSCA needs to be completed before Table B-2 section references can be completed.

3 – The NSCA model has been prepared and additional necessary circuit analysis has been completed. Additional instrument tubing sense line analysis has been completed. Current Transformer (CT) assessment has been completed. Assessment of 92-18 needs to be completed. Room heat up analysis needs to be completed. Preliminary VFDRs have been identified.

4 – Table B-3 information has been populated including: Fire Areas, Fire Zones, Performance Goals, Reference Documents, SLERD table information and Suppression Effects analysis information. Table B-3 awaits finalizing NSCA, evaluation of VFDRs and completion of FREs.

5 – The NPO analysis model has been prepared and cable selection for NPO components has started.

6 – The Radioactive Release evaluation has been completed including draft updates to training materials and pre-fire plans. The bounding calculation is being prepared and is under SNC review.

7 – Existing Engineering Equivalency Evaluations have been reviewed. Revisions to some evaluations have been started. Additional evaluations to support Chapter 3 and/or NFPA code compliance have been identified but have not started.

8 – Previous licensing actions have been reviewed. Some licensing actions are going to be documented in engineering evaluations. The engineering evaluations have not started.

9 – Five of eight (5 of 8) Attachment L requests for approval have been drafted and are under SNC review. Of the remaining three (3) requests, one has been started and the remaining two (2) requests for approval have not been started.

10 – The draft Transition Report has been started using the LAR template Rev 1Q.

Physical Modifications

While physical modifications may be identified as part of the transition effort and fire PRA model refinement, no physical modifications have been performed to address any fire protection issues. Optimization by use of risk insights for in progress modifications will be credited in the LAR based on risk benefit. Any modifications required will be identified in the LAR submittal letter and that letter will provide a schedule and commitments for any such modifications.

NFPA 805 Monitoring Program

SECY-11-0061 requested that as part of the status report for demonstrating substantial progress on the transition that the status of the NFPA 805 monitoring program be provided. The NFPA 805 monitoring program is highly dependent on fire PRA results as well as the traditional fire protection program issues. Therefore, the monitoring program is one of the last items to be completed during the transition effort

Information Available On Site

In addition to the information contained in this attachment, SECY-11-0061 requested that additional information be compiled / documented on site and available for inspection and/or audit.

Fire protection-related deterministic compliance concerns have been entered into the site corrective action program and appropriate compensatory measures in accordance with the existing fire protection program have been implemented. This information is contained within the site's corrective action program and is available for review.