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FFR 0 5 2020

Docket Nos.: 50-321  
50-366

NL-20-0108

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2  
Supplemental Response to Request for Additional Information Regarding the License  
Amendment Request to Transition to 10 CFR 50.48(c) – NFPA -805 Performance Based  
Standard for Fire Protection for Light Water Reactor Generating Plants

Ladies and Gentlemen:

By letter dated April 4, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18096A936), Southern Nuclear Operating Company (SNC) submitted a license amendment request (LAR) for the Edwin I. Hatch Nuclear Plant (HNP), Units 1 and 2, to adopt National Fire Protection Association Standard 805 (NFPA 805), "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition (ADAMS Accession No. ML010800360), as incorporated into Title 10 of the Code of Federal Regulations, Part 50, Section 50.48(c). This LAR was supplemented by letters dated May 28, 2019, August 9, 2019, October 7, 2019, and December 13, 2019.

On January 30, 2020, a clarification call was held between SNC and the U.S. Nuclear Regulatory Commission (NRC) regarding the December 13, 2019 response to Probabilistic Risk Assessment (PRA) Request for Additional Information (RAI) 03. During this call, SNC agreed to provide a supplemental clarification to this RAI response.

The conclusions of the No Significant Hazards Consideration and Environmental Consideration contained in the original LAR have been reviewed and are unaffected by this RAI response.

This letter contains no NRC commitments. If you have any questions, please contact Jamie Coleman at 205.992.6611.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 05 day of February 2020.

Respectfully submitted,

  
C. A. Gayheart  
Director, Regulatory Affairs  
Southern Nuclear Operating Company

CAG/RMJ

U.S. Nuclear Regulatory Commission  
NL-20-0108  
Page 2

Enclosure: Supplemental Response to PRA RAI 03

cc: Regional Administrator, Region II  
NRR Project Manager – Hatch  
Senior Resident Inspector – Hatch  
Director, Environmental Protection Division – State of Georgia  
RType: CHA02.004

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**Enclosure**

**Supplemental Response to PRA RAI 03**

**NRC Request:**

The following two items were not included in the licensee’s response to Probabilistic Risk Assessment (PRA) Request for Additional Information (RAI) 03, dated December 13, 2019 (ADAMS Accession No. ML19351D130):

In its response to NFPA 805 PRA RAI 07.01(a), dated October 7, 2019 (ADAMS Accession No. ML19280C812), SNC stated that the Fire PRA (FPRA) methodology for treatment of enclosed sensitive electronics will be updated, so that electrical cabinets that contain sensitive electronics will not be screened, based on the function of the electrical cabinet. Electrical cabinets that contain enclosed sensitive electronics will be treated as such in the FPRA. The results will be included in the aggregate analysis in response to PRA RAI 03.

In its response to NFPA 805 PRA RAI 15.b.01.b.ii, dated October 7, 2019 (ADAMS Accession No. ML19280C812), SNC stated that a surrogate Main Control Room (MCR) abandonment Conditional Core Damage Probability (CCDP) limit will no longer be used in the compliant model. The change in risk will be based on the calculated risk of the compliant and post transition plant models. This is consistent with the other fire area risk evaluations. These results will be included with the response to RAI 03.

**SNC Response to NRC Request:**

These two items were included in the changes to the PRA made in response to previous NRC RAIs. The table below is an updated version from that provided in the December 13, 2019 response to PRA RAI 03(b) to clarify the NRC’s concern. New additions from the December 13, 2019 table are provided in **bold**.

PRA RAI	PRA Resolution	PRA Upgrade	Comment
02.b	No change required	N/A	N/A
04.b	No change required	N/A	N/A
<b>07.01.a</b>	<b>The FPRA methodology for treatment of enclosed sensitive electronics no longer screens out electrical cabinets that contain sensitive electronics based on the function of the cabinet.</b>	<b>No</b>	<b>No new failures were identified as a result of this change.</b>
07.b	No change required	N/A	N/A
08	The FPRA was revised to incorporate the changes to the transient weighting factors.	No	No new or change in method.

Enclosure to NL-20-0108  
 Supplemental Response to PRA RAI 03

PRA RAI	PRA Resolution	PRA Upgrade	Comment
09.c	The FPRA was changed to use a minimum JHEP floor value of 1E-5	No	The minimum JHEP floor value approach was used in the peer reviewed model; however, exceptions were justified. These exceptions have been replaced with the recommended floor value.
10	No change required	N/A	N/A
11.e	No change required	N/A	N/A
11.h	No change required	N/A	N/A
12.e	No change required	N/A	N/A
13.f	No change required	N/A	N/A
13.i	No change required	N/A	N/A
<b>15.b.01.b.ii</b>	<b>A surrogate MCR abandonment CCDP limit is no longer used in the compliant model.</b>	<b>No</b>	<b>The revised delta risk is included in the table in PRA RAI 3.a and in the updated Attachment W Tables.</b>
16.c	No change required	N/A	N/A
16.d	No change required	N/A	N/A