UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 22, 2018

Ms. Cheryl A. Gayheart
Regulatory Affairs Director
Southern Nuclear Operating Company, Inc.
P. O. Box 1295, Bin 038
Birmingham, AL 35201-1295

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2 – ONLINE REFERENCE PORTAL FOR LICENSE AMENDMENT REQUEST TO ADOPT NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805 (EPID L-2018-LLA-0107)

Dear Ms. Gayheart:

By application dated April 4, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18096A936), Southern Nuclear Operating Company (SNC or the licensee) submitted a license amendment request for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2. In the license amendment request, SNC proposes 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 an alternative to compliance with existing fire protection program requirements.

To improve the efficiency of the U.S. Nuclear Regulatory Commission (NRC) reviews, the NRC staff and SNC staff have discussed the use of an online reference portal that would allow the NRC staff and contractors limited read-only access to the basis documents and other reference materials cited in the application. In a meeting summary dated December 20, 2011 (ADAMS Accession No. ML113340218), the NRC staff described the portal process for NFPA 805 reviews. The online reference portal would allow the NRC staff to audit basis documents to determine whether the information included in the documents support the application. Documents identified as necessary for analysis of the application will be identified by the NRC staff. The licensee will be formally requested to submit those documents on the NRC docket. Use of the online reference portal is acceptable, as long as the following conditions are met:

- The online reference portal will be password-protected and passwords will be assigned to those directly involved in the review on a need-to-know basis;
- The online reference portal will be sufficiently secure to prevent staff from printing, saving, or downloading any documents; and
- Conditions of use of the online reference portal will be displayed on the login screen and will require concurrence by each user.

The NRC staff requests that the portal be populated with the documents listed in the enclosure to this letter. This will help the NRC staff in preparing for any site audits and will enhance the effectiveness of the staff's review of the application.

A list of the NRC staff and contractors requiring portal access will be transmitted separately. Please provide access to the portal, including usernames and passwords, to the designated NRC staff and contractors as soon as possible upon receipt of the list. The conditions associated with the online reference portal must be maintained throughout the duration of the review process. Please also provide written confirmation that SNC agrees to the terms and conditions set forth in this letter.

If you have any questions, please contact me at (301) 415-4032.

Sincerely,

James R. Hall

James R. Hall, Senior Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosure:
Generic List of SharePoint Portal
Requested Documents for NFPA 805

cc: Listserv

GENERIC LIST OF SHAREPOINT PORTAL REQUESTED DOCUMENTS FOR NFPA 805

1. National Fire Protection Association (NFPA) Code Deviations and Justifications

2. All applicable Probabilistic Risk Assessment (PRA) Peer Review Reports

3. All site calculations referenced in the License Amendment Request

4. Credited Fire Protection (FP) System and Feature Drawings

    a. Layout Drawings: fire barriers, installed fire detection and suppression systems, fire areas, fire zones, stairwells, fire doors, fire dampers, etc.

    b. Piping and Instrumentation Diagrams (P&IDs): FP Water System

    c. System Descriptions for Fire Suppression, Water Supply, and Detection (including incipient or very early warning fire detection)

    d. Hydraulic Calculations for Fire Service and Fire Suppression System Water Demand (if used to support non-fire water use in Title 10 of the *Code of Federal Regulations*, paragraph 50.48(c)(2)(vii))

5. Drawings related to systems credited in the Nuclear Safety Capability Assessment (NSCA) as well as those required to fully understand plant response:

    a. P&IDs: Reactor Coolant System, Main Steam, Main Feedwater, Circulating Water, Service Water, etc.

    b. Safe Shutdown/NSCA Logic Diagrams (if used)

    c. Electrical Distribution System One-Lines (alternating current and direct current)

6. Those documents that fulfill the NFPA 805 requirement for "Design Basis Document (DBD)"

    a. Fire Area Calculations (e.g. Fire Safety Analyses, Fire Risk Analyses, Plant Change Evaluations, Fire Risk Evaluations)

    b. NSCA Calculation (Safe Shutdown/Circuit Analysis)

    c. Multiple Spurious Operation Expert Panel Report

    d. Thermo-hydraulic Analysis serving as the basis for Variance from Deterministic Requirements (VFDR) and recovery action timing

    e. Evaluation of Recovery Actions for feasibility

    f. Fire Hazards Analysis (if separate from the fire area calculations)

g. Non-Power Operation Calculation(s)

h. Radioactive Release Calculation(s)

i. Pre-fire Plans

7. Fire PRA Calculations

a. Plant Boundary/Partitioning Methods and Results (TASK 1)

b. Component Selection Calculation (TASK 2)

c. Cable Selection and Circuit Analysis (TASKS 3, 9, and 10)

d. Ignition Frequency Calculation (TASK 6)

e. Fire PRA Quantification Calculations (TASK 5) including:

i. Seismic Fire Interactions (TASK 13) Methodologies and results (including assumptions)

ii. Screening Methodologies and Results (TASKS 4 and 7) (including assumptions)

iii. Fire Risk Quantifications (TASK 14) Methodologies and Results (including assumptions)

iv. Multi-compartment Screening and Analysis

v. Post-fire Human Reliability Analysis Methodologies and Results (including assumptions) (TASK 12)

vi. Detailed proposed modification descriptions (Engineering Change Requests/Records) sufficient to comprehend potential impact/improvement to Fire PRA

f. NFPA 805 Application Calculation (provides all the delta risk calculations for VFDRs)

g. Control Room Risk Calculation

h. Uncertainty and Sensitivity Calculations (TASK 15)

i. Fire Modeling Calculations used to support the Fire PRA (zone of influence (ZOI), hot gas layer, bounding, detailed fire modeling, etc.)

ii Plant Specific Verification and Validation (V&V) Analysis

iii. Non-public V&V References (e.g., Electric Power Research Institute (EPRI) Fire Modeling, Generic Treatment)

iv. Fire Modeling Assumptions and Calculations performed to support target selection (e.g.; ZOI, secondary fires, transient combustible/ignition sources) including those that deviate from NUREG/CR-6850 (TASKS 8 and 11)

8. Fire Modeling used in the Fire Modeling Performance-based Approach

   a. Plant Specific V&V Analysis performed

   b. Non-public V&V References (e.g., EPRI Fire Modeling, Generic Treatments)

   c. Fire Modeling Assumptions and Calculations performed to support Performance-Based Evaluations (e.g., ZOI, secondary fires, transient combustible/ignition sources) considered outside NUREG/CR 6850 Assumptions and Parameters (TASKS 8 and 11)

   d. Hot Gas Layer Determination Calculations (including assumptions)

9. Fire Protection Program Manual

10. Fire Protection Quality Assurance Program (including FP Structure System Components and FP Features)

11. NFPA 805 Monitoring Program Calculations and Procedures

12. Technical Requirements Manual

13. Updated Final Safety Analysis Report (UFSAR) Changes (including current UFSAR Section 9.5.1, "Fire Protection Program," and Section 7.4, "Systems Required for Safe Shutdown")

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ADAMS Accession No. ML18228A835 ***via e-mail**

OFFICE	DORL/LPL2-1/PM	DORL/LPL2-1/LA	DRA/APLB/BC*	DORL/LPL2-1/BC	DORL/LPL2-1/PM
NAME	JHall	KGoldstein	GCasto	MMarkley	JHall
DATE	8/20/18	08/20/18	8/21/18	8/22/18	8/22/18

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