Zeleznock, Karen

From:	Williams, Shawn
Sent:	Wednesday, May 29, 2019 2:21 PM
To:	Coleman, Jamie Marquess
Cc:	Sparkman, Wesley A.
Subject:	Joseph M. Farley Nuclear Plant, Units 1 and 2 - Request for Additional Information Regarding Relief Request FNP-ISI-ALT-05-04, Version 1.0 (L-2019-LLR-0020)
Attachments:	FNP-ISI-ALT- 05-04 RAI.DOCX

Dear Ms. Coleman,

By letter dated March 8, 2019, Southern Nuclear Operating Company, Inc., proposed alternatives to the tendon and concrete IWL examinations for the Joseph M. Farley Nuclear Plant, Unit 1 and 2 containments.

The U.S. Nuclear Regulatory Commission staff has determined that the attached additional information is needed in order to complete its review. Please respond within 30 days of the date of this e-mail.

If you have any questions, please contact me at 301-415-1009 or Shawn.Williams@nrc.gov.

Sincerely,

Shawn A. Williams, Senior Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364
Enclosure: Request for Additional Information

cc w/encl: Listserv

REQUEST FOR ADDITIONAL INFORMATION (RAI)
JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2
PROPOSED ALTERNATIVE FNP-ISI-ALT-05-04, VERSION 1.0
INITIAL EXAMINATION OF CONTAINMENT TENDONS AFFECTED BY
POST-TENSIONING SYSTEM REPAIR/REPLACEMENT ACTIVITIES
SOUTHERN NUCLEAR OPERATING COMPANY, INC.
DOCKET NOS. 50-348 AND 50-364

RAI No. 1

Regulatory Basis:

Pursuant to 10 CFR 50.55a(g)(4), throughout the service life of a pressurized water-cooled nuclear power facility, components that are classified as American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 must meet the requirements, except the design and access provisions and preservice examination requirements, set forth in the ASME Code, Section XI, to the extent practical, within the limitations of design, geometry, and materials of construction of the components.

Further, these regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval, and subsequent intervals, comply with the requirements in the latest edition and addenda of Section XI of the ASME Code, incorporated by reference in paragraph (b) of 10 CFR 50.55a, on the date 12 months prior to the start of the 120 month interval, subject to the limitations and modifications listed therein.

Alternatives to requirements under 10 CFR 50.55a(g) may be authorized by the U.S. Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.55a(z)(1) or 10 CFR 50.55a(z)(2). In proposing alternatives or requests for relief, the licensee must demonstrate that: (1) the proposed alternatives would provide an acceptable level of quality and safety; or (2) compliance with the specified requirements would result in hardship or unusual difficulty, without a compensating increase in the level of quality and safety.

ASME Code Section XI, 2007 Edition including Addenda through 2008, Subsection IWL-2500, "Examination Requirements," states that examination shall be performed in accordance with the requirements of Table IWL-2500-1.

ASME Code Section XI, 2007 Edition including Addenda through 2008, Subsection IWL-2521.2 "Tendons Affected by Repair/Replacement Activities," require augmented examination of tendons affected by post-tensioning system repair/replacement activities. Table IWL-2521-2 requires an initial examination of tendons affected by post-tensioning system repair/replacement activities within one year (+/- 3 months) following the completion of repair/replacement activities.

IWL-2420 describes the inservice inspection schedule for unbonded post-tensioning systems and requires their examination at 1, 3, and 5 years following the completion of the Structural Integrity Test and every 5 years thereafter.

Background

By letter dated March 8, 2019 (Agencywide Documents Access and Management System Accession No. ML19067A213), Southern Nuclear Operating Company (SNC, the licensee),

submitted proposed alternative FNP-ISI-ALT-05-04, Version 1.0, to the inservice inspection (ISI) requirements of the ASME Code, Section XI. This proposed alternative relates only to the initial augmented examination requirements pursuant to ASME Section XI, Table IWL-2521-2, for Unit 1 containment tendons affected by repair/replacement activities during the Fifth ISI Interval which began December 1, 2017, and is scheduled to end on November 30, 2027.

Up to fifteen horizontal tendons (H1AC, H1BC, H3BC, H5BC, H7BC, H9AB, H13BC, H15AB, H15BC, H29AC, H31AC, H37AB, H7AC, H9AC, and H15AC) were affected by post-tensioning repair/replacement activities. This proposed alternative will allow the deferral of performing the initial IWL inspection of the augmented scope of the tendons affected by the H11AB failure extent of condition. The 1-year (+/- 3 months) inspection prescribed in Table IWL-2521-2 will instead be performed during the next regularly scheduled IWL examination (July 2026, +/- 1 year), a deferral of almost 7 years.

Request

The NRC staff has reviewed the request and determined that additional information is necessary to complete the review. The NRC staff requests that SNC provide the required horizontal tendon force, according to the FNP Unit 1 current licensing basis (CLB), along with the minimum predicted tendon force values expected at the next regularly scheduled FNP Unit 1 ASME IWL examination scheduled for July 2026 for these tendons. SNC is also requested to provide the minimum predicted tendon force values expected in July 2027 which would ensure that the minimum predicted tendon force remain greater than required CLB values, which would allow SNC to utilize the +/- 1 year grace period permitted by IWL-2420(c), if needed for scheduling optimization.