



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

March 6, 2023

Mr. G. T. Powell
President and Chief Executive Officer
STP Nuclear Operating Company
P.O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 – SUPPLEMENTAL
INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING
ACTION RE: PROPOSED ALTERNATIVE TO THE REQUIREMENTS OF THE
ASME CODE (EPID L-2023-LLR-0004)

Dear Mr. Powell:

By letter dated February 1, 2023, STP Nuclear Operating Company (STPNOC, the licensee) submitted a proposed alternative to certain American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," requirements at South Texas Project (STP), Units 1 and 2, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), "Acceptable level of quality and safety." Specifically, the licensee proposed (1) an alternative frequency for the concrete surface examinations to the requirements of IWL-2410(a) and (2) an alternative frequency for the examinations of unbonded post-tensioning systems to the requirements of IWL-2421(b).

The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this proposed alternative. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Pursuant to 10 CFR 50.55a(z)(1) and 10 CFR 50.55a(z)(2), the applicant shall demonstrate that the proposed alternatives would provide an acceptable level of quality and safety, or that compliance with the specified requirements of 10 CFR 50.55a would result in hardship or unusual difficulty without a compensating increase in the level of quality or safety.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed alternative in terms of regulatory requirements for the protection of public health and safety and the environment.

In order to make the application complete, the NRC staff requests that STPNOC supplement the application to address the information requested in the enclosure by April 4, 2023. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the

NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The time frame in this letter was discussed with Wendy Brost of your staff on March 6, 2023. Ms. Brost also indicated that a clarification call was not needed.

If you have any questions, please contact me at 301-415-6256 or via email at Dennis.Galvin@nrc.gov.

Sincerely,

/RA/

Dennis J. Galvin, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure:
Supplemental Information Needed

cc: Listserv

SUPPLEMENTAL INFORMATION NEEDED
PROPOSED ALTERNATIVE TO ASME CODE, SECTION XI REQUIREMENTS FOR
CONTAINMENT BUILDING INSPECTIONS
STP NUCLEAR OPERATING COMPANY
SOUTH TEXAS PROJECT, UNITS 1 AND 2
DOCKET NOS. 50-498 AND 50-499

By letter dated February 1, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23032A484), STP Nuclear Operating Company (STPNOC, the licensee) submitted a proposed alternative to certain American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," requirements at South Texas Project (STP), Units 1 and 2, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), "Acceptable level of quality and safety." Specifically, the licensee proposed (1) an alternative frequency for the concrete surface examinations to the requirements of IWL-2410(a) and (2) an alternative frequency for the examinations of unbonded post-tensioning systems to the requirements of IWL-2421(b).

Regarding the proposed alternative frequency to IWL-2410(a), the NRC staff determined that sufficient technical information was not provided to decide on the acceptability of the proposed alternative frequency. IWL-2410(a) requires concrete surface examinations on a 5-year frequency. IWL-2421(b) requires examinations of unbonded post-tensioning systems on a 10-year frequency for sites with multiple units. The letter dated February 1, 2023, proposes alternative frequencies to both the IWL-2410 and IWL-2421 examinations. An insufficient technical basis is provided for extending the interval for the concrete surface examinations required by IWL-2410, and it is unclear to the NRC staff how the proposed alternative frequency, especially the alternative frequency for concrete surface examinations, would provide an acceptable level of quality and safety, as required by 10 CFR 50.55a(z)(1). Relying on the Structures Monitoring Program inspections is not an adequate basis for extending the frequency of the concrete surface examinations required by the IWL-2410(a). In previous similar proposed alternatives, the NRC staff has relied on the 5-year concrete surface examinations to ensure the structural integrity of the concrete and to provide reasonable assurance that the proposed alternative frequency for the examinations of unbonded post-tensioning systems would continue to provide an acceptable level of quality and safety.

Please provide the following information to enable the NRC staff to determine the acceptability of the proposed alternative:

1. A technical basis for extending the interval for the concrete surface examinations required by IWL-2410.
2. A technical basis for extending the interval for the examinations of unbonded post-tensioning systems required by IWL-2420 if the concrete surface examinations interval required by IWL-2410 is also extended.
3. Any applicable precedents for the proposed alternative frequency for concrete surface examinations required by IWL-2410.

Enclosure

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ACTION RE: PROPOSED ALTERNATIVE TO THE REQUIREMENTS OF THE
ASME CODE (EPID L-2023-LLR-0004) DATED MARCH 6, 2023

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| NAME | DGalvin | PBlechman | ITseng |
| DATE | 3/2/2023 | 3/2/2023 | 3/1/2023 |
| OFFICE | NRR/DORL/LPL4/BC* | NRR/DORL/LPL4/PM | |
| NAME | JDixon-Herrity | DGalvin | |
| DATE | 3/1/2023 | 3/6/2023 | |

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