



SNC Pre-Submittal Meeting for License Amendment Request to Relocate Augmented Piping Inspection Program Details from Technical Specifications to a Licensee Controlled Document

November 2021





Meeting Purpose and Agenda

- The purpose for this meeting is to discuss proposed amendment request to revise both Farley and Vogtle Technical Specification (TS) 5.5.16 to relocate program details from the plant's Technical Specifications.
- This meeting will cover the following topics:
 - Background
 - Proposed License Amendment Request
 - Evaluation
 - Precedent
 - Schedule

The image features a complex, abstract background composed of several overlapping geometric shapes in various shades of gray. The shapes include triangles, rectangles, and trapezoids, creating a layered, three-dimensional effect. The word "Background" is written in a bold, black, sans-serif font, positioned in the upper-left quadrant of the image. The overall composition is minimalist and modern, with a focus on geometric forms and tonal values.

Background



Background

- TS 5.5.16 for Farley and Vogtle provides details of an augmented inservice inspection program for high energy lines outside of containment.
 - Applies to welds in piping systems or portions of piping systems located outside of containment where protection from the consequences of postulated ruptures is not provided.
 - Farley main steam lines
 - Vogtle main steam and main feedwater lines
- Established to meet design criteria in BTP MEB 3-1 (now BTP 3-4) during initial licensing of Farley and Vogtle.

The background consists of several overlapping, semi-transparent gray geometric shapes, including triangles and rectangles, creating a layered, abstract effect. The text is centered over these shapes.

Proposed License Amendment Request



Proposed License Amendment Request

Reason for the change

- The proposed changes are requested to relocate details from the TS to the plant's Updated Final Safety Analysis Reports (UFSARs) and to provide a consistent program description for this augmented inspection program.
- The relocation of program details does not change the inspection program.
- These details are design criteria and are more appropriately contained in the respective plant's UFSARs.



Farley Technical Specification 5.5.16

Current TS 5.5.16

The three main steamlines from the rigid anchor points of the containment penetrations downstream to and including the main steam header shall be inspected. The extent of the inservice examinations completed during each inspection interval (IWA 2400, ASME Code, 1974 Edition, Section XI) shall provide 100 percent volumetric examination of circumferential and longitudinal pipe welds to the extent practical. The areas subject to examination are those defined in accordance with examination category C-G for Class 2 piping welds in Table IWC-2520.

Proposed TS 5.5.16

In accordance with the augmented inservice inspection program for high energy lines outside of containment, examinations of welds in the main steam lines of each unit shall be performed to provide assurance of the continued integrity of the piping systems over their service lifetime. These requirements apply to welds in piping systems or portions of systems located outside of containment where protection from the consequences of postulated ruptures is not provided by a system of pipe whip restraints, jet impingement barriers, protective enclosures and/or other measures designed specifically to cope with such ruptures.



Vogtle Technical Specification 5.5.16

Current TS 5.5.16

This program shall provide for the inspection of the four Main Steam and Feedwater lines from the containment penetration flued head outboard welds, up to the first five-way restraint. The extent of the inservice examinations completed during each inspection interval (ASME Code Section XI) shall provide 100% volumetric examination of circumferential and longitudinal welds to the extent practical. This augmented inservice inspection is consistent with the requirements of NRC Branch Technical Position MEB 3-1, "Postulated Break and Leakage Locations in Fluid System Piping Outside Containment," November 1975 and Section 6.6 of the FSAR.

Proposed TS 5.5.16

In accordance with the augmented inservice inspection program for high energy lines outside of containment, examinations of welds in the main steam and main feedwater lines of each unit shall be performed to provide assurance of the continued integrity of the piping systems over their service lifetime. These requirements apply to welds in piping systems or portions of systems located outside of containment where protection from the consequences of postulated ruptures is not provided by a system of pipe whip restraints, jet impingement barriers, protective enclosures and/or other measures designed specifically to cope with such ruptures.

The image features a complex, abstract geometric composition of overlapping gray shapes. The shapes include triangles, rectangles, and trapezoids in various shades of gray, creating a layered, architectural effect. The word "Evaluation" is positioned in the upper-left quadrant of the image, centered within a dark gray triangular area. The overall aesthetic is minimalist and modern.

Evaluation



Evaluations Performed

- This proposed TS change will relocate TS details, and requires:
 - no physical plant modifications,
 - no change to augmented inspection program,
 - no change to scope of augmented inspection program or its regulatory basis.
- Requested change is evaluated against the technical specification criteria in 10 CFR 50.36(c), criteria 1 through 8. Existing TSs which do not satisfy these specified criteria may be relocated to licensee-controlled documents.



Technical Specification Criteria – Safety Limits

(1) Safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain physical barriers that guard against the uncontrolled release of radioactivity.

- The details in TS 5.5.16 are not safety limits or limiting safety system settings. They describe an augmented inspection program for certain secondary system high energy piping.
- This proposed TS change does not meet the Safety Limits criterion.



Technical Specification Criteria – Limiting Condition for Operation

- (2) *Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility.*
 - *Criterion 1 - Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.*
 - *Criterion 2 - A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier*
 - *Criterion 3 - A structure, system or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.*
 - *Criterion 4 - A structure, system or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.*
- No requirement for a structure, system or component is being relocated from the TS.
- This proposed TS change does not meet the limiting Condition for Operation criterion.



Technical Specification Criteria – Surveillance Requirements, Design Features

(3) Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

- These surveillance requirements are linked to Limiting Conditions for Operation. TS 5.5.16 is not a Limiting Condition for Operation.
- Therefore, this proposed TS change does not meet the Surveillance Requirements criterion.

(4) Design features to be included are those features of the facility such as materials of construction and geometric arrangements, which if altered or modified, would have a significant effect on safety...

- The details located in TS 5.5.16 are not design features. They describe augmented inspection requirements.
- Therefore, this proposed TS change does not meet the design features criterion.



Technical Specification Criteria – Administrative Controls

(5) Administrative controls are the provisions relating to organization and management, operating procedure, record keeping, review and audit, and reporting necessary to assure the operation of the facility in a safe manner.

- The details located in TS 5.5.16 are not administrative controls. The TS will remain in the Administrative Controls section of each plant's TS, but the details will be relocated.

(6) Decommissioning applies only to nuclear power plants that have submitted decommissioning certifications

(7) Initial notifications are made to the NRC Operations Center

(8) Licensees must submit Licensee Event Reports in accordance with 10 CFR 50.73 when required.

- These criteria do not apply to the relocation of information from the TS to the UFSAR.



Technical Specification Criteria

Conclusion

- The details contained in TS 5.5.16 do not satisfy the 10CFR50.36(c) categories and criteria for inclusion of information in TS. Thus, relocation of the detailed information from TS 5.5.16 to the UFSAR of each plant is appropriate.

An abstract geometric composition consisting of several overlapping, semi-transparent gray shapes. The shapes are arranged in a way that creates a sense of depth and movement. A large, light gray shape is on the left, with a darker gray shape overlapping it from the top-left. Another dark gray shape overlaps the light gray shape from the bottom-left. A vertical, medium gray shape is on the right, overlapping the light gray shape. A dark gray triangle overlaps the bottom-right corner of the light gray shape. The word "Precedent" is written in a dark gray, sans-serif font on the light gray shape on the left.

Precedent



Precedent

- Surry Power Station license amendment request:
 - Proposed the relocation of two TSs containing augmented inspection requirements
 - Added an augmented inspection program description to the Administrative Controls section
 - Provided a description of the program that did not include detailed information about how the program requirements were met.
- Letter from Virginia Electric and Power Company to NRC, Proposed License Amendment Request, Relocation of Augmented Inspection Requirements from TS 4.2 and TS 4.15 to Technical Requirements Manual, dated April 11, 2014 (ML14112A073)
- Letter from NRC to Virginia Electric Power Company, Surry Power Station Unit Nos 1 and 2, Issuance of Amendments Regarding Relocation of Augmented Inspection Requirements, dated April 28, 2015 (ML15099A679)

The image features a complex, abstract geometric composition of overlapping gray shapes. The shapes include triangles, rectangles, and trapezoids in various shades of gray, creating a layered, architectural effect. The word "Schedule" is prominently displayed in a bold, black, sans-serif font on the left side of the image, partially overlapping one of the gray shapes. The overall aesthetic is modern and minimalist.

Schedule

Schedule

- Submit LAR – 1st Quarter 2022
- Request approval – 1 year from acceptance





Questions?