



Proposed Vogtle Electric Generating Plant Units 3 & 4 License Amendment Request

Revise Technical Specifications to Adopt TSTF-577,
"Revised Frequencies for Steam Generator Tube Inspections"

Presubmittal Meeting: March 7, 2024

Agenda

- Background
- TSTF-577 Topics:
 - Safety Evaluation for NUREG-2194
 - VEGP 3&4 Differences from NUREG-2194 Markups
- Vogtle Electric Generating Plant (VEGP) Units 3&4 (& AP1000) Operating Experience
- Proposed VEGP Units 3&4 LAR
- Discussion

Background:

- TSTF-577 [ML21060B434] included Standard Technical Specification (STS) changes for:
 - NUREG-1430, B&W Improved STS
 - NUREG-1431, Westinghouse Improved STS
 - NUREG-1432, Combustion Engineering STS
 - NUREG-2194, AP1000 STS
- NRC approved TSTF-577 with Safety Evaluation (SE) issued April 14, 2021 [ML21099A086], but only included NUREGs -1430, -1431, and -1432 in the SE; however, the attached Model SE did include support for AP1000

Revise Technical Specifications to Adopt TSTF-577

TSTF-577 Topics

- NRC Safety Evaluation noted that “*changes to NUREG-2194 will be evaluated in a separate safety evaluation (SE)*”
 - However, the attached Model SE did include an appropriate Technical Evaluation for AP1000
- VEGP Variations from TSTF-577 for NUREG-2194
 - NUREG-2194 TS 5.5.4 was based on TSTF-449 & TSTF-510. Current VEGP 3&4 TS 5.5.4 are based on TSTF-449 (without inclusion of TSTF-510); therefore, variations from TSTF-577 markups for NUREG-2194 will identify the TSTF-510 differences in the LAR.
 - {*Note: TSTF-577 includes NUREG-1431 markups based on TSTF-449, which align more closely with VEGP 3&4, so the issued NRC Safety Evaluation inherently considers the VEGP variations*}
 - VEGP 3&4 TS 5.5.4.d.1 phrase “following installation” was modified to “following SG installation” (adding “SG”) for clarity. Missing “SG” was based on incomplete incorporation of TSTF-449 and will be an identified difference in the LAR.

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VEGP Units 3&4 (& AP1000) Operating Experience:

- VEGP 3&4 TS 5.5.4.d.1 requires an 100% tube inspection during the first refueling outage
- TSTF-577 identifies:
 - The AP1000 SGs are fundamentally the same as other Westinghouse SG designs utilizing Alloy 690TT tubing. The AP1000 Model Delta-125 SG is similar to an upgraded Model Delta-75 SG that has been used in operation as a replacement SG.
- NRC Safety Evaluation for TSTF-577 identifies:
 - Alloy 690TT SG tubing have been in service for more than 30 years.
- NRC Model Safety Evaluation for TSTF-577 identifies:
 - The international experience of the AP1000 steam generators is bounded by the degradation identified in operating steam generators in the US ... Therefore, the inspection and reporting criteria for Alloy 690TT tubing is equally applicable to the AP1000 SGs
- SNC Evaluates Ongoing Industry SG Inspection Operational Experience

Proposed VEGP Units 3&4 LAR:

To be submitted as a Consolidated Line Item Improvement (CLIIP) LAR based on TSTF-577

- LAR will identify variations from NUREG-2194 basis
- LAR will request 6-Month Review
- Note that the TSTF-577 Model Application and Model Safety Evaluation include NUREG-2194 for AP1000. The LAR will acknowledge the lack of the SE specific to AP1000, but not as a TSTF-577 variation. This will be addressed as an administrative issue noting that approval of the Amendment for VEGP Units 3 & 4 would provide the TSTF-577 SE for future applications of TSTF-577 for AP1000.

Discussion