

NRR-DMPSPEm Resource

From: Orenak, Michael
Sent: Thursday, August 30, 2018 8:02 AM
To: Lowery, Ken G.
Cc: jamiemco@southernco.com
Subject: RAIs for VEGP-ISI-RR-05 and VEGP-ISI-RR-06
Attachments: RAI for VEGP-ISI-RR-05.docx; RAI for VEGP-ISI-RR-06.docx

Ken,

By letter dated May 24, 2018, Southern Nuclear Operating Company (SNC) requested relief from certain requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, during the third inservice inspection interval at the Vogtle Electric Generating Plant, Units 1 and 2. Relief Request VEGP-ISI-RR-05 pertains to the examination coverage of some Class 2 pressure vessel shell welds and nozzle-to-shell welds. Relief request VEGP-ISI-RR-06 pertains to examination coverage of the Class 1 and 2 piping welds.

The U.S. Nuclear Regulatory Commission staff reviewed the relief requests and determined that the additional information in the attachment is needed to complete its review. During a call and via email on August 29, 2018, you stated that SNC would respond within 45 days of the date of this email.

Please contact me if you have any questions.

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From: Orenak, Michael

Created By: Michael.Orenak@nrc.gov

Recipients:
"jamiemco@southernco.com" <jamiemco@southernco.com>
Tracking Status: None
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Tracking Status: None

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REQUEST FOR ADDITIONAL INFORMATION

RELIEF REQUEST VEGP-ISI-RR-05 REGARDING EXAMINATION COVERAGE FOR

CERTAIN CLASS 2 PRESSURE VESSEL WELDS

SOUTHERN NUCLEAR OPERATING COMPANY

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

DOCKET NUMBERS 50-424 AND 50-425

By letter dated May 24, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18144B012), Southern Nuclear Operating Company (SNC, the licensee) requested relief from certain requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI. This relief request, VEGP-ISI-RR-05, pertains to examination coverage of some Class 2 pressure vessel shell welds and nozzle-to-shell welds achieved during the third inservice inspection (ISI) interval at the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2.

The U.S. Nuclear Regulatory Commission staff reviewed the submittal and determined that the following additional information is needed to complete its review.

Request for Additional Information (RAI) 1

Table RR-5 lists an achieved coverage of 32.5 percent for the Vogtle, Unit 1, boron injection tank head-to-vessel shell weld. This lack of required coverage appears to be due primarily to ultrasonic examination from only one side of the weld. The reported coverage achieved during the second ISI interval (ADAMS Accession No. ML003762772) for the same component was 57 percent. Please provide a justification for the reduced inspection coverage for this component while all other components have the same or increased inspection coverage.

RAI 2

Under Item 6, "Proposed Alternative and Basis for Use," the licensee states that an acceptable level of quality and safety will be maintained; however, no supporting argument was provided to justify that reasonable assurance of structural integrity or leak tightness continues to exist. Please provide the following:

- a. A confirmation that, for each affected component weld having less than 61 percent coverage, the peak stress in the ultrasonic testing (UT) missed region is likely to be similar to or less than the peak stress in the UT covered region. This confirmation should be based on stress reports for the affected components.
- b. Past plant-specific and fleet operating experience, if available, regarding leakage and UT indications detected from all affected component welds that required flaw evaluations or repairs.

REQUEST FOR ADDITIONAL INFORMATION

RELIEF REQUEST VEGP-ISI-RR-06 REGARDING WELD EXAMINATION COVERAGE

SOUTHERN NUCLEAR OPERATING COMPANY

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

DOCKET NOS. 50-424 AND 50-425

By letter dated May 24, 2018 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML18144B012), Southern Nuclear Operating Company (the licensee) requested relief in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(5)(iii) from the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI. Relief request VEGP-ISI-RR-06 pertains to examination coverage of the Class 1 and 2 piping welds at the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2.

To complete its review, the NRC staff requests the following additional information.

1. Please specify the piping system (e.g., reactor coolant system, residual heat removal, safety injection) to which each weld listed in Table RR-6 belongs.
2. Given the susceptibility of Category R-A, Item No. R1.11, welds to thermal fatigue, the reduced coverage obtained, and for assurance of structural integrity of the unexamined volume of the weld, please provide the available cumulative fatigue usage factor for the Class 1 welds.
3. Has the system leakage test performed in accordance with IWB-5000 for Class 1 welds, or IWC-5000 for Class 2 welds, identified any through-wall leaks? If so, please discuss the root cause, the corrective actions, and the extent of condition evaluation.