



DEC 23 2009

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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Salem Nuclear Generating Station, Units 1 and 2
Facility Operating License Nos. DPR-70 and DPR-75
NRC Docket Nos. 50-272 and 50-311

Subject: Response to Request for Additional Information Related to Relief
Requests S1-I3R-93, S2-I3R-94, AND SC-I3R-95 (TACs: ME1478,
ME1479, ME1480, ME1481)

Reference: 1) Letter from Jeffrie Keenan (PSEG Nuclear, LLC) to USNRC, dated
June 11, 2009
2) Email from USNRC to Jeffrie Keenan (PSEG Nuclear LLC), dated
November 23, 2009

In Reference 1, PSEG Nuclear LLC submitted relief requests S1-I3R-93, S2-I3R-94,
and SC-I3R-95 as alternatives to certain requirements specified in Section XI of the
American Society of Mechanical Engineers *Boiler and Pressure Vessel Code* for Salem
Nuclear Generating Station (Salem), Unit Nos. 1 and 2. In Reference 2, the NRC
requested additional information. Attachment 1 to this letter provides the requested
information. There are no regulatory commitments in this letter.

Should you have any questions regarding this submittal, please contact Mrs. Erin West
at 856-339-5411.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrie Keenan", is written over the typed name and title.

Jeffrie Keenan
Manager - Licensing

ADD
NR

Attachments:

1. Response to Request for Additional Information

cc: S. Collins, Regional Administrator – NRC Region I
R. Ennis, Project Manager - Salem, USNRC
NRC Senior Resident Inspector - Salem
P. Mulligan, Manager IV, NJBNE
L. Marabella, Corporate Commitment Tracking Coordinator
H. Berrick, Commitment Tracking Coordinator

ATTACHMENT 1

Salem Generating Stations Facility Operating License Nos. DPR-70 and DPR-75 NRC Docket Nos. 50-272 and 50-311

Response to Request for Additional Information Related to Relief Requests S1-I3R-93, S2-I3R-94, AND SC-I3R-95 (TACs: ME1478, ME1479, ME1480, ME1481)

In Reference 1, PSEG proposed alternatives to certain requirements specified in Section XI of the American Society of Mechanical Engineers *Boiler and Pressure Vessel Code* for Salem Nuclear Generating Station, Unit Nos. 1 and 2. In Reference 2, the NRC requested additional information.

NRC Request for Additional Information

Table 3, "Details of TWCF [through-wall cracking frequency] Calculation for 42 EFPY [effective full power years] of Operation," of Relief Request S1-I3R-93 for Salem Unit No. 1 and Table 3, "Details of TWCF Calculation for 50 EFPY of Operation," of Relief Request S2-I3R-94 for Salem Unit No. 2 contain values for copper (Cu), nickel (Ni), and chemistry factor (CF). These compositions are not all consistent with docketed NRC records. Identify a docketed reference containing these values, or provide a technical basis for the change from previous composition values.

PSEG's Response

The values for copper (Cu), nickel (Ni), and chemistry factor (CF) used in the TWCF calculations for Salem Units 1 and 2 are consistent with the values in Table 4.2.3-1 (Unit 1) and Table 4.2.3-2 (Unit 2) of the license renewal application (Reference 1) with one exception. The chemistry factor (CF) value for the Salem Unit 1 circumferential weld (9-042), is identified in S1-I3R-93 as 196.6 F whereas the value identified in Reference 3 is 188.5. As identified in S1-I3R-93, the Regulatory Guide 1.99, Revision 2, position for the chemistry factor is Position 1.1. For Position 1.1, the chemistry factor is calculated based on the copper and nickel content of the material using Tables 1 and 2 of R.G. 1.99. Per Table 1 of R.G. 1.99, Revision 1, for welds, the chemistry factor that corresponds to the copper and nickel values in S1-I3R-93 and Reference 3 is 188.5 F. Therefore, the value of 188.5 F in Reference 3 is the appropriate value. The use of 196.6 F in the TWCF calculations in Table 3 of S1-I3R-93 is conservative. Even with the use of the more conservative CF value, intermediate shell plate B-2402-1 is the controlling material for RT_{MAX-CW} . Therefore, the use of either CF value would have no impact on the value of TWCF calculated for Salem Unit 1.

References

- 1) Letter from Jeffrie Keenan (PSEG Nuclear, LLC) to USNRC, dated June 11, 2009
- 2) Email from USNRC to Jeffrie Keenan (PSEG Nuclear LLC), dated November 23, 2009
- 3) Letter from Carl Fricker (PSEG Nuclear, LLC) to USNRC, dated August 18, 2009