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

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
RELIEF REQUEST RR-07, REACTOR VESSEL NOZZLE INSERVICE INSPECTION (RR-07) (NRR 95000.")

South Carolina Electric & Gas Company (SCE&G) hereby submits the attached request for relief from performing Reactor Vessel Nozzle Examinations per the schedule required by the 1989 ASME, Section XI, Code. This request updates the relief request submitted in our letters dated November 30, 1992 and January 29, 1993 (1-RPV-1), and approved by NRC letter dated June 14, 1993 (TAC No. M85660).

The purpose of this update is to include the inspections associated with the nozzle weld inspections which were not addressed in the previous relief request. In order to apply the relief to all subsequent intervals, SCE&G amended its submittal by the letter dated January 29, 1993; however, we did not revise the component list to adequately reflect the use of the relief request for subsequent intervals. Specifically, the Reactor Nozzle-to-Vessel inspection was included but the associated inspection of the Reactor Nozzle-Inner Radius was inadvertently omitted.

Obviously, the Reactor Nozzle-Inner Radius must be a part of the relief to maintain consistency with the basis for our approved relief request. Therefore, a brief summary of our Reactor Vessel Nozzle Examinations is given to illustrate the logic of our improved inspection. The Reactor Vessel Outlet Nozzles and related inspections were performed in the first period of the first interval. This consisted of inspections to the Nozzle-to-Vessel, the Nozzle Inner Radius, and the Nozzle-to-Safe End Inspections for the Reactor Vessel Outlet. In the third period of the first interval (RF-7) we completed the Nozzle-to-Vessel, Nozzle Inner Radius, and Nozzle-to-Safe End inspections on the inlet nozzles; and repeated those inspections on the outlet nozzles. This inspection of the outlet nozzles, combined with the requested alternate test represents an additional inspection of the outlet nozzles.

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Accordingly, we are requesting to perform all Reactor Vessel Nozzle Examinations during the third period of the second and subsequent intervals to be consistent with the intent of the relief request approved previously by the NRC. This request is also consistent with ASME approved Code Case N-521.

This update of the Relief Request clarifies SCE&G's intent to perform an inspection of 100% of Table IWB-2500-1, Items B3.90 and B3.100 welds as well as Item B5.10 welds in the third period of the second and subsequent inspection intervals. SCE&G is submitting the attached relief request in accordance with 10CFR50.55a(a) (3) (ii).

In order to support the scheduling of activities for the upcoming outage of the VCSNS, SCE&G requests the NRC response and approval of this request by March 21, 1996.

Should you have any questions, please call Michael J. Zaccone at (803) 345-4328.

Very truly yours,

Gary J. Taylor

MJZ/GJT/ews
Attachment

c: O. W. Dixon
J. L. Skolds
R. R. Mahan (w/o Attachment)
R. J. White
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NSRC
RTS (NRR 950002)
Central File System
File (810.19-2)

Relief Request RR-07, Reactor Vessel Nozzle Inservice Inspection (RR-07)

Components: Reactor Vessel Nozzle Welds - Code Class 1

Weld	Category	Item No.
Reactor Nozzle-to-Vessel	B-D	B3.90
Reactor Nozzle-Inner Radius	B-D	B3.100
Reactor Nozzle-to-Safe End	B-F	B5.10

Code Requirement:

ASME Boiler and Pressure Vessel Code, Section XI, 1989 Edition, Table 1WB-2500-1, Category B-D: Items B3.90, and B3.100 require the following inspection in the second interval:

All nozzles which apply to Items B3.90 and B3.100 are to have volumetric examinations performed each inspection interval such that at least 25% but not more than 50% (credited) of the nozzles shall be examined by the end of first inspection period and the remainder by the end of third inspection period of each inspection interval.

ASME Boiler and Pressure Vessel Code, Section XI, 1989 Edition Table IWB-2500-1, Category B-F, Item B5.10 requires the Reactor Vessel Nozzles safe end welds to be inspected during the category B-D: Item B3.90 and B3.100 inspections.

Alternate Test:

Perform 100% of Reactor Vessel Nozzle related inspections during the third period of the second and subsequent inspection intervals.

Basis for Relief:

- An inspection was performed on the outlet nozzles during the third period of the first interval (RF-7), and represents an additional set of data above that required by the Code.
- Performing 100% of the nozzle inspections during the same outage allows all data to be extracted using one ultrasonic testing acquisition system. This provides a data base which will increase the reliability of the data analysis as it relates to the condition of both the inlet and outlet nozzles.
- By performing these inspections in the third period, they can be scheduled to coincide with the reactor vessel inspection and thereby be performed with the lower internals removed. This prevents the possibility of the remote examination equipment causing damage to the lower internals.

- Since RF-7, the ASME has approved Code Case N-521 which states that these inspections may be deferred to the third period provided the following conditions are met:

  - No inservice repairs or replacements by welding have ever been performed on any of the Nozzle-to-Vessel Welds, Inside Radius Sections, or Nozzle-to-Safe End Welds.

  - None of the Nozzle-to-Vessel Welds, Inside Radius Sections, or Nozzle-to-Safe End Welds contains identified flaws or relevant conditions that currently require successive inspections in accordance with IWB-2420(b).

  - The unit is not in the first inspection interval.

  V. C. Summer meets all of the above conditions.

- Performing the alternate test avoids the following hardships:

  - A predicted dose for performance of examinations in both the first and third period of the second and subsequent intervals of 2.5 REM per interval.

  - The additional manpower, cost, and critical path outage time associated with the performance of remote examinations in the first period of the second and subsequent intervals with the lower intervals installed.

In summary, the alternate test provides for an additional inspection of the outlet nozzles and increases the relevance of future data acquisition. The criteria for applying the alternative rules in lieu of Table IWB-2500-1 are met as delineated in Code Case N-521. The alternate test eliminates the hardship of performing two remote examinations in the reactor vessel without adversely affecting the level of quality and safety in the plant.