SOUTH CAROLINA ELECTRIC & GAS COMPANY
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O. W. DIXON, JR.
VICE PRESIDENT
NUCLEAR OPERATIONS

August 1, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Virgil C. Summer Nuclear Station
Docket No. 50/395
Operating License No. NPF-12
ASME Section XI
Hydrostatic Testing of
Feedwater System

Dear Mr. Denton:

South Carolina Electric and Gas Company (SCE&G) hereby requests relief from the ASME Code/Section XI hydrostatic testing requirements for the Virgil C. Summer Nuclear Station Unit No. 1 Feedwater System. Details of this relief request are contained in the attachment to this letter. The scope of this relief is the same as that which the NRC approved as a result of our previous request dated August 9, 1983.

This relief request is needed to support the Baffle-Plate Inspection to be performed during the refueling outage currently scheduled to begin in September 1984. An expeditious review by the NRC Staff with prompt Licensee response to Staff questions is essential to enable SCE&G to perform this inspection during the upcoming outage.

As required by Title 10 of the Code of Federal Regulations, Part 170 (10CFR170), a check in the amount of one hundred fifty dollars ($150.00) is enclosed. It is our understanding that in accordance with the revision to 10CFR170, SCE&G will be assessed in the future for the regulatory review required to process this relief request.

Should you have any questions, please advise.

Very truly yours,

O. W. Dixon, Jr.

APK/AMM/OWD/gj
Attachment:

cc: (see page #2)

Note: 2nd Dist
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F047 w/check $150
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50-395 P 840801
PDR

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ATTACHMENT

Mr. Harold R. Denton
ASME Section XI Hydrostatic Testing of Feedwater System
August 1, 1984

SYSTEM PRESSURE TESTING RELIEF REQUEST

SYSTEM: (FW) Feedwater System

CODE CLASS: 2

SYSTEM DRAWING NUMBER: D-302-083

SYSTEM FUNCTION

The Feedwater System provides a flow path for water to the Steam Generators (S/G) where heat is transferred by this water from the Reactor Coolant System.

BAFFLE INSPECTION

SCE&G intends to perform fiberoptics inspection of the installed steam generator preheater baffle. Access will be provided through an existing 2" half coupling. The 2" half coupling is part of a half coupling, valve and plug assembly installed during the fall 1983 Outage. Cutting and replacing the weld at the 2" half coupling will be performed in accordance with the ASME Code, Section XI, 1977 Edition through and including Summer 1978 Addenda.

SYSTEM TEST REQUIREMENT

Subsequent to repairs or modifications by welding which penetrate the pressure boundary on piping greater than one inch (1") diameter, conduct a hydrostatic test on piping where such repairs or modifications were performed.

Pursuant to ASME Code, Section XI, 1977 Edition through and including Summer 1978 Addenda, hydrostatic test pressure is 1.25 P_{sv} or 1470 PSI where P_{sv} is the lowest pressure setting among the main steam safety valves.

SYSTEM PRESSURE TESTING RELIEF REQUEST (cont'd)

BASIS FOR RELIEF

Performing the required hydrostatic test on the Feedwater piping subsequent to cutting and replacing the weld would be extremely difficult, impractical, and expensive due to the following:

1. The inability to maintain pressure due to potential leakage through the Feedwater Isolation Valves, Main Steam Isolation Valves, and other valves connected to the system.

2. Additional time and effort to pin or block main steam constant support and variable spring hangers.

3. Additional time and effort to remove the Main Steam Safety Valves and blank the inlet piping.

4. Potential for placing excess stress on Steam Generator shells.

5. Potential for damage to system instrumentation, or considerable time delay due to additional time and effort expended to isolate or remove instrumentation.

6. Potential for damage to the Main Steam System and its hangers due to static loads caused by water solid condition.

7. Potential for damage to Steam Generator tube bundles.

8. Isolation and preparation of this system would result in additional radiation exposure to personnel.

9. In addition to the above eight (8) reasons, the alternate examinations specified will provide a level of confidence and quality equal to or better than the required testing per the ASME Code.

SYSTEM PRESSURE TESTING RELIEF REQUEST (cont'd)

ALTERNATE EXAMINATION FOR MAIN FEEDWATER PIPING WELDS

Prior to declaring the Feedwater System operable, the following examinations will be performed to the affected Feedwater System piping welds -- except for Item 4, which will be completed at the end of the First Inservice Inspection Interval:

1. MT Examination on the root pass and final weld surface pursuant to ASME Code Section V, Article 7.

2. Visual examination.

3. Perform Inservice Leak Test at nominal operating pressure.

4. Perform Hydrostatic Test at the end of the Ten (10) Year Interval.

IMPLEMENTATION

The alternate examinations will be performed in accordance with approved written procedures by qualified personnel after the Baffle Inspection and before the system is declared operable.