

30-269/270/287

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FILE NUMBER

TO: Mr B C Rusche

FROM: Duke Pwr Co
Charlotte, NC
W O ParkerDATE OF DOCUMENT
3-1-77

DATE RECEIVED 3-7-77

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DESCRIPTION

Ltr notarized 3-1-77...trans the following:

2p

PLANT NAME: Oconee 1-3

ENCLOSURE

Amdt to OL/Change to Tech Specs: Consisting
of revisions to testing requirements for
reactor core internal vent valves.....

2p

NOT REMOVED

SAFETY

FOR ACTION/INFORMATION

ENVIRO

3-7-77

chf

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST. :

Schwenger (5)
Zech
Sheppard

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST. :

INTERNAL DISTRIBUTION

REG FILE

NRC PDR

I & E (2)

OELD

GOSSICK & STAFF

MIPC

CASE

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HARLESS

SYSTEMS SAFETY

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KIRKHOOD

OPERATING REACTORS

STELLO

SITE SAFETY &

ENVIRO ANALYSIS

DENTON & MULLER

ENVIRO TECH.

ERNST

BALLARD

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GAMMILL

STAPP

HULMAN

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VOLLMER

BUNCH

J. COLLINS

KREGER

PROJECT MANAGEMENT

BOYD

P. COLLINS

HOUSTON

PETERSON

MELTZ

HELTEMES

SKOVHOLT

REACTOR SAFETY

ROSS

NOVAK

ROSZTOCZY

CHECK

AT & I

SALTZMAN

RUTBERG

OPERATING TECH.

EISENHUT

SHAO

BAER

BUTLER

GRIMES

EXTERNAL DISTRIBUTION

CONTROL NUMBER

LPDR: Waltham, SC

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ACRS / 6 CYS HOLDING/ SENT AS CAT B

NAT. LAB:

REG V. IE

LA PDR

CONSULTANTS:

BROOKHAVEN NAT. LAB.

ULRIKSON (ORNL)

2413

269
Ap 2
6D

DUKE POWER COMPANY

POWER BUILDING

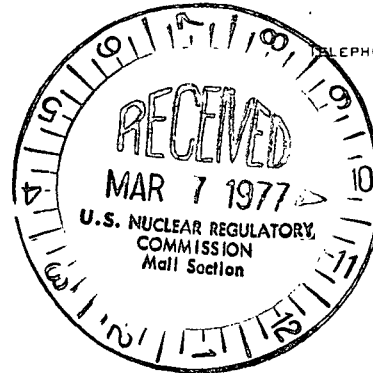
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

March 1, 1977

TELEPHONE: AREA 704
373-4083

Mr. Benard C. Rusche, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555



Re: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287

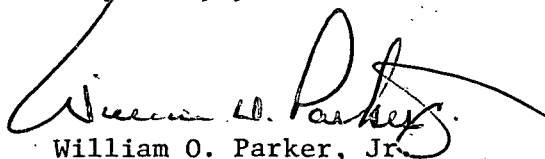
Regulatory Docket File

Dear Mr. Rusche:

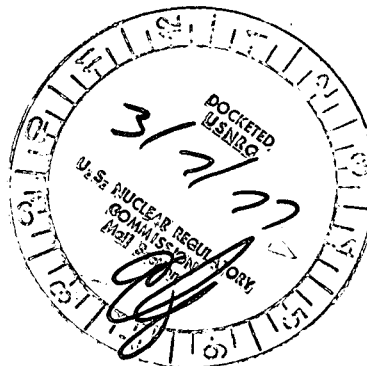
Your letter of October 12, 1976 requested the submittal of Technical Specifications establishing requirements for the testing of reactor core internal vent valves. The purpose of such specifications is to assure that vent valves operate as required to prevent vapor lock in the reactor vessel following a postulated reactor coolant inlet pipe rupture. In response to this request and pursuant to 10CFR50, §50.90, an amendment to the Oconee Nuclear Station Technical Specifications, Appendix A to Facility Operating Licenses DPR-38, -47, and -55 is requested. The proposed specification, provided in the attached pages, allows for surveillance and testing of reactor internals vent valves during each refueling outage. This proposal is similar in scope to the model specification provided by your letter of October 12, 1976, with the following exceptions. The model specification proposed criteria requiring that vent valves start to open with a maximum differential pressure of 0.15 psid and are fully open with a maximum pressure of 0.30 psid. In the proposed specification, however, the criterion has been changed to require that the valve can be fully opened with a force equivalent to or less than 1.0 psid. This limit is justified by a recent review of the Oconee ECCS analysis (BAW-10103 Topical Report, June, 1975) conducted by the Oconee NSSS vendor, the Babcock & Wilcox Company. The results of this review provide conservative assurance that during the reflooding phase following a cold leg pipe rupture, a minimum pressure differential of 1.0 psid will be maintained across the vent valves throughout the transient. Therefore, the pressure differential required to fully open the vent valves must be shown to be no more than 1.0 psid as indicated in the proposed specification.

Additionally, it is proposed that Specification 4.2.12 which previously required inspection and testing of vent valves to a lesser extent, be deleted. A replacement page showing this proposed change is also attached.

Very truly yours,


William O. Parker, Jr.

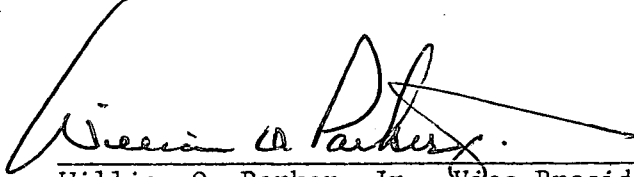
MST:ge
Attachments



2413

March 1, 1977

WILLIAM O. PARKER, JR., being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this request for amendment of the Oconee Nuclear Station Facility Operating Licenses DPR-38, DPR-47, and DPR-55; and that all statements and matters set forth therein are true and correct to the best of his knowledge.



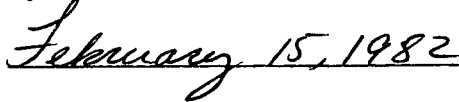
William O. Parker, Jr., Vice President

Subscribed and sworn to before me this 1st day of March, 1977.



Notary Public

My Commission Expires:



4.20 REACTOR VESSEL INTERNALS VENT VALVES

Applicability

Applies to reactor vessel internals vent valves used to prevent vapor lock in the reactor vessel following a postulated reactor coolant inlet pipe rupture.

Objective

To verify that the reactor vessel internals vent valves operate as required.

Specification

At least once each refueling cycle, each reactor vessel internals vent valve shall be demonstrated operable by:

- a. Conducting a remote visual inspection of visually accessible surfaces of the valve body and disc sealing faces and evaluating any observed surface irregularities.
- b. Verifying that the valve is not stuck in an open position, and
- c. Verifying that the valve can be fully opened with force equivalent to or less than 1.00 psid.

Bases

The internals vent valves are provided to relieve the pressure generated by steaming in the core following a LOCA so that the core remains sufficiently covered. Inspection and manual actuation of the internals vent valves (1) assures operability, (2) assures that the valves are not open during normal operation, and (3) demonstrates that the valves are fully open at the forces equivalent to the differential pressures justifiable by the ECCS analysis.

4.2.10 For Unit 1, Cycle 3 operation, the surveillance capsules will be removed from the reactor vessel and the provisions of Specification 4.2.9 will be revised prior to Cycle 4 operation. For Unit 2, Cycle 2 operation, the surveillance capsules will be removed from the reactor vessel and the provisions of Specification 4.2.9 will be revised prior to Cycle 3 operation. For Unit 3, Cycle 2 operation, the surveillance capsules will be removed from the reactor vessel and the provisions of Specification 4.2.9 will be revised prior to Cycle 3 operation.

4.2.11 During the first two refueling periods, two reactor coolant system piping elbows shall be ultrasonically inspected along their longitudinal welds (4 inches beyond each side) for clad bonding and for cracks in both the clad and base metal. The elbows to be inspected are identified in B&W Report 1364 dated December 1970.

Bases

The surveillance program has been developed to comply with Section XI of the ASME Boiler and Pressure Vessel Code, Inservice Inspection of Nuclear Reactor Coolant Systems, 1970, including 1970 winter addenda, edition. The program places major emphasis on the area of highest stress concentrations and on areas where fast neutron irradiation might be sufficient to change material properties.

The reactor vessel specimen surveillance program for Unit 1 and Unit 2 is based on equivalent exposure times of 1.8, 19.8, 30.6 and 39.6 years. The contents of the different type of capsules are defined below.

A Type

Weld Material
HAZ Material
Baseline Material

B Type

HAZ Material
Baseline Material

For Unit 3, the Reactor Vessel Surveillance Program is based on equivalent exposure times of 1.8, 13.3, 26.7, and 30.0 years. The specimens have been selected and fabricated as specified in ASTM-E-185-72.

Early inspection of Reactor Coolant System piping elbows is considered desirable in order to reconfirm the integrity of the carbon steel base metal when explosively clad with sensitized stainless steel. If no degradation is observed during the two annual inspections, surveillance requirements will revert to Section XI of the ASME Boiler and Pressure Vessel Code.