NRC FORM 195
(2-76)

U.S. NUCLEAR REGULATORY COMMISSION

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

DOCKET NUMBER: 50-269/270/287

FILE NUMBER

TO:	FROM:	DATE OF DOCUMENT
Mr B C Rusche	Duke Pwr Co Charlotte, NC W O Parker	3-1-77
		DATE RECEIVED 3-7-77

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DESCRIPTION	ENCLOSURE
Ltr notarized 3-1-77...trans the following: 2p PLANT NAME: Oconee 1-3	Amdt to OL/Change to Tech Specs: Consisting of revisions to testing requirements for reactor core internal vent valves...... 2p DO NOT REMOVE

SAFETY — FOR ACTION/INFORMATION — ENVIRO 3-7-77 ehf

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NRC FORM 195 (2-76)

DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

March 1, 1977

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

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.

William O. Parker, Jr.

MST:ge
Attachments

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

William O. Parker, Jr., Vice President

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

Vivian B. Robkins

Notary Public

My Commission Expires:

February 15, 1982

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 value body and disc sealing faces and evaluating any observed surface irregularities.

b. Verifying that the value 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	B Type
Weld Material	HAZ Material
HAZ Material	Baseline 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.