UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
OMAHA PUBLIC POWER DISTRICT	)	Docket No. 50-285
	)	
(Fort Calhoun Station, Unit 1)	)	

EXEMPTION

I.

The Omaha Public Power District (OPPD/the licensee) is the holder of Facility Operating License No. DPR-40, which authorizes operation of the Fort Calhoun Station, Unit 1 (the facility), at steady state reactor core power levels not in excess of 1500 megawatts thermal. This facility is a pressurized water reactor located in Washington County, Nebraska. The license provides, among other things, that Fort Calhoun Station, Unit 1, is subject to all rules, regulations, and Orders of the Commission now or hereafter in effect.

By letter dated January 26, 1983, the licensee (Omaha Public Power District) of Fort Calhoun Station, Unit No. 1, requested an exemption from the requirements of Appendix J for Type C leakage tests on the containment isolation valve (check valve CH-198) associated with the charging pump discharge header (penetration M-3). Subsequently, by letter dated November 27, 1985, the licensee proposed technical specification changes to reflect the requested exemption.

The justification for not performing Type C tests on this valve was that, following a loss-of-coolant accident (LOCA), all the charging pumps would remain operational or would be automatically started and aligned to the

boric acid storage tanks, which would provide a source of supply to the pumps for approximately 80 minutes. After the tanks were empty, all these pumps would be shutdown and a 14-ft water head (equivalent to approximately 6 psig) would exist on the suction side of the charging pumps for the duration of the accident. The containment pressure (as originally calculated and presented in the previous facility's Updated Safety Analysis Report) would be reduced from the calculated peak pressure of 60 psig to approximately 2 psig within 50 minutes. Thus, the fluid in the suction side of the charging pumps would provide a seal barrier against any potential leakage of the containment atmosphere through this penetration.

Based on the supporting documentation from the November 27, 1985, letter, the Commission in a Safety Evaluation (SE) dated January 10, 1986, concluded that containment isolation valve CH-198 met all requirements provided in Section III.C.2.(b) of 10 CFR Part 50 Appendix J for valves pressurized with fluid from a water seal system. Accordingly, the Commission concluded that the proposed technical specification was acceptable and no exemption was needed.

By letter dated February 14, 1991, the licensee notified the Commission of a revised containment pressure analysis indicating that for certain accident scenarios the post-LOCA containment pressure would remain above 6 psig for the initial 24 hours and would remain above the water head existing in the charging pump system for the duration of the accident. Therefore, penetration M-3 would be a potential leakage path. Consequently, the exclusion of penetration M-3 from the Appendix J Type C test requirement was invalidated. In Licensee Event Report (LER) 91-03, dated March 6, 1991, the

licensee provided the detailed interim corrective actions taken and the history of subsequent changes (e.g., containment spray nozzle blockage, containment spray pump power, containment spray pump run-out, degraded containment air cooler performance, etc.) that led to the revised containment pressure analyses.

By letter dated May 1, 1992, the licensee stated that the final corrective actions, which will require operator actions and associated procedures to isolate this potential containment leakage path, had been implemented.

II.

The licensee revised the appropriate emergency operating procedures (EOPs) and abnormal operating procedures (AOPs) to ensure that penetration M-3 would be maintained with water at a pressure higher than the containment pressure for the duration of a postulated accident. The plant EOPs and AOPs now require alignment of either charging pump or high-pressure safety injection pump discharge through penetration M-3 into a cold leg following a LOCA. The implementation of these procedures with specified operator actions will assure that fluid pressure through penetration M-3 will always be above the post-LOCA containment pressure, and therefore, will prevent any potential containment leakage through penetration M-3.

III.

The Commission has reviewed the licensee's rationale for excluding the containment isolation valve (CH-198) from the Type C tests and the operator actions described in the plant EOPs and AOPs. The underlying purpose of

Section III.C.2(b) of 10 CFR Part 50 Appendix J is to ensure that valves that are sealed with fluid from a seal system shall be pressurized with that fluid to a pressure not less than 1.10 Pa. Based on its review, the Commission finds the basis for the exclusion of the containment isolation valve associated with penetration M-3 acceptable. The special circumstances required by 10 CFR 50.12(a)(2)(ii) are present since the application of the Type C Testing requirements to the valve associated with penetration M-3 is not required to achieve the underlying purpose of the rule. The Commission further considers the issue of Type C testing requirements for the above cited containment isolation valve resolved.

However, the licensee should recognize that granting the exemption for the containment isolation valve (CH-198) from Type C testing requirements does not mean that the licensee can delete it as a containment isolation valve, because a water seal in a penetration is not accepted as a containment isolation barrier.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest and hereby grants an exemption from the requirements of Section III of Appendix J to 10 CFR Part 50 to the extent discussed in Section I above.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the quality of the human environment (58 FR 5765).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:
Jack W. Roe, Director
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 6th day of April 1993

OFC	LA:PD4-1	I:PD4-1	PM:PD4-1	D:PD4-1	OGC	ADR4/5	D:DRPW
NAME	PNoonan	CYates	SBloom:pk	GHubbard	CMarco objection	MVirgilio	JRoe
DATE	3/11/93	3/16/93	2/11/93	2/17/93	3/5/93	4/3/93	4/5/93

OFFICIAL RECORD COPY FILE NAME: FC79675.EXE

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the quality of the human environment (58 FR 5765).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jack W. Roe

Jack W. Roe, Director
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 6th day of April 1993