UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO REQUESTS FOR RELIEF FROM INSERVICE INSPECTION REQUIREMENTS

Nebraska Public Power District

Cooper Nuclear Power Station

Docket No. 50-298

INTRODUCTION

Technical Specification 4.6.G for the Cooper Nuclear Power Station states that inservice examination of ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission. Certain requirements of later editions and addenda of Section XI are impractical to perform on older plants because of the plants' design, component geometry, and materials of construction. Thus, 10 CFR 50.55a(g)(6)(i) authorizes the Commission to grant relief from those requirements upon making the necessary findings.

By letters dated July 29, 1977, March 23, 1978, July 18, 1978, December 18, 1980 and March 29, 1982, Nebraska Public Power District submitted its inservice inspection program, revisions, or additional information related to requests for relief from certain Code requirements determined to be impractical to perform on the Cooper Nuclear Station during the inspection interval. The program is based on the 1974 Edition including Summer 1975 Addenda of Section XI of the ASME Code, and covers the last 80 months of the current 120-month inspection interval from November 1, 1977 to July 1, 1984.

EVALUATION

Requests for relief from the requirements of Section XI which have been determined to be impractical to perform have been reviewed by the Staff's contractor, Science Applications, Inc. The contractor's evaluations of the licensee's requests for relief and his recommendations are presented in the Technical Evaluation Report (TER) attached (ATTACHMENT 1). The staff has reviewed the TER and agrees with the evaluations and recommendations except in those cases where the recommendations to update to a later Edition of Section XI was equivalent to granting relief from the requirements of the 1974 Edition. A summary of the determinations made by the staff is presented in the following tables:

TABLE 1

CLASS 1 COMPONENTS

IWB-2600 ITEM NO.	IWB-2500 EXAM. CAT.	SYSTEM OR COMPONENT	AREA TO BE EXAMINED	REQUIRED METHOD	LICENSEE PROPOSED ALTERNATIVE EXAM.	RELIEF REQUEST STATUS
B1.1	B-A	Reactor Vessel	Circumferential and Longitudinal Welds in Beltline: VCB-BA-2, VLA-BA-1,2,3 VLB-BA-1,2,3	Volumetric	None	GRANTED PROVIDED ACCESSIBLE PARTS OF WELDS VLA-BA-1, 2, AND 3 ARE EXAMINED TO EXTENT PRACTICAL DURING NOZZLE EXAMINATIONS
B1.2	B-B	Reactor Vessel	Circumferential & Longitudinal Welds in Shell (other than Beltline & Flanges) and Meridional and Circumferential Seam Welds in Bottom Head and Closure Head: VCB-BB-1,3 VLC-BB-1,2,3 HMB-BB-1,2,3 4,5 & 6	Volumetric	None	GRANTED PROVIDED LENGTH OF ACCESSIBLE CATEGORY B-B WELDS SUBJECT TO EXAMINATION IS INCREASED TO MAXIMUM EXTENT PRACTICAL.
B1.4	B-D	Reactor Vessel Closure Head	Closure Head Nozzle Inner Radii: N6A N6B & N7	Volumetric	Surface	GRANTED
B1.8	B-G-1	Reactor Vessel	Closure Nuts, when removed	Volumetric and Surface	Surface Only	GRANTED

TABLE 1

CLASS 1 COMPONENTS

IWB-2600 ITEM NO.	IWB-2500 EXAM. CAT.	SYSTEM OR COMPONENT	AREA TO BE EXAMINED	REQUIRED METHOD	LICENSEE PROPOSED ALTERNATIVE EXAM.	RELIEF REQUEST STATUS
B4.5	B-J	Piping	Inaccessible Welds in Flued Heads	Volumetric	Visual During Hydrostatic Tests Pressure	GRANTED PROVIDED FIRST ACCESSIBLE WELD IN PROCESS PIPE OUTSIDE PENETRATION IS EXAMINED TO CODE REQUIPEMENTS
B4.9 B5.4 B6.4	B-K-1	Piping, Pumps Valves	Integrally-Welded Supports	Volumetric	Surface	GRANTED
B5.7	B-L-2	Pumps	Pump Casings Internal Surfaces	Visual	Examine During Maintenance	GRANTED- PROVIDED MAINTENANCE OCCURS PRIOR TO END OF INTERVAL
B6.7	B-M-2	Valves	Valve Bodies, Internal Pressure Boundary Surfaces	Visual	Examine During Maintenance	GRANTED PROVIDED MAINTENANCE OCCURS PRIOR TO END OF INTERVAL

TABLE 2

CLASS 2 COMPONENTS

IWC-2600 ITEM NO.	IWC-2520 EXAM. CAT.	SYSTEM OR COMPONENT	AREA TO BE EXAMINED	REQUIRED METHOD	LICENSEE PROPOSED ALTERNATIVE EXAM.	RELIEF REQUEST STATUS
C1.2	C-B	Residual Heat Removal Heat Exchangers	Nozzle-to-Vessel Welds: RHR-CB-2A & RHR-CB-2B	Volumetric	Surface Examination of Reinforcing Ring-to-Vessel Welds and Visual During Hydrostatic Tests	GRANTED
C1.4, C2.4, C3.4 & C4.2	C-D	Vessels, Piping, Pumps & Valves	Pressure-Retaining Bolting	Visual and Either Surface or Volumetric	Requirements of 1977 Edition, through Summer 1978 Addenda	GRANTED
C2.1	C-F	Piping	Inaccessible Weld in Floor Penetration: RHD-CF-9	Volumetric	Visual During Hydrostatic Test	GRANTED
C2.1	C-F	Nitrogen Primary Containment Isolation System	Fillet Welds: PNC-CG-20 PNC-CG-21 PNC-CG-23 PNC-CG-24	Volumetric	Surface	GRANTED

TABLE 3

CLASS 3 COMPONENTS

(No Relief Requests)

TABLE 4

PRESSURE TEST

SYSTEM OR COMPONENT	IWA-5000 IWB-5000 IWC-5000 & IWD-5000 TEST PRESSURE REQUIREMENT	LICENSEE PROPOSED ALTERNATIVE TEST PRESSURE	RELIEF REQUEST STATUS

(No Relief Requests)*

*Note: The licensee plans to submit additional relief requests relating to the system pressure testing program. The requests are not available at this time.

TABLE 5

ULTRASONIC EXAMINATION TECHNIQUE

SYSTEM OR COMPONENT	REQUIREMENT	LICENSEE PROPOSED ALTERNATIVE EXAMINATION METHOD	RELIEF REQUEST STATUS
Class 1 & 2 Piping	Article 5, (Relief is requested from 20% Recording Criteria	50% Recording Criteria	GRANTED PROVIDED ALL NON-GEOMETRIC INDICATIONS 20% DAC OR GREATER ARE RECORDED

TABLE 6

GENERAL RELIEF REQUESTS

ALL CLASSES/COMPONENTS

SYSTEM/COMPONENT	REQUIREMENT	LICENSEE ALTERNATE	RELIEF REQUEST STATUS
Class 1 Exempt Components	IWB-1220(b)(1) (Pressure Retaining Welds in CRDM Housing)	Exempt Under IWB-1220(b)(1) (Flow does not exceed 1.8" diameter pipe)	NOT REQUIRED COMPONENT EXEMPT PER 10 CFR 50.55a FOOTNOTE 2

Based on the review summarized, the staff concludes that relief granted from the examination requirements and alternate methods imposed through this document give reasonable assurance of the piping and component pressure boundary and support structural integrity, that granting relief where the Code requirements are impractical is authorized by law and will not endanger life or property, or the common defense and security, and is otherwise in the public interest considering the burden that could result if they were imposed on the facility.

Date: MAY 19 1983

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Attachment:
Technical Evaluation
Report