

4/13/78

Docket No. 50-298

Nebraska Public Power District
ATTN: Mr. J. M. Pilant, Director
Licensing & Quality Assurance
P. O. Box 499
Columbus, Nebraska 68601

Gentlemen:

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The Commission has issued the enclosed Amendment No. 44 to Facility License No. DPR-46 for the Cooper Nuclear Station. This amendment consists of changes to the Technical Specifications in response to your request dated March 10, 1978.

The amendment involves changes to the Technical Specifications: (1) to waive, for the April 1978 refueling outage, the requirement to check or replace with bench checked valves one-half of the reactor coolant system relief and safety valves, and (2) to change the requirements for local leak rate testing of containment isolation valves and penetrations.

Since the requested change regarding local leak rate testing results in a Technical Specification requirement that differs from the Type C test requirements of 10 CFR 50, Appendix J, we have evaluated this request as an exemption from the requirements of Appendix J. Based on our evaluation, we have determined that this exemption is acceptable. Therefore, pursuant to 10 CFR Section 50.12, the exemption from the requirements of Appendix J of 10 CFR Part 50 for Type C testing is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by
Joe W. Reece

for Victor Stello, Jr., Director
Division of Operating Reactors
Office of Nuclear Reactor Regulation

AD/ET/DOR
BGrimes
4/11/78

Enclosures:

1. Amendment No. 44 to DPR-46
2. Safety Evaluation
3. Notice

3/29/78

*SEE PREVIOUS YELLOW FOR CONCURRENCES
ORB#3 SEP:OT STSG
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cc w/enclosures: see next page SURNAME	PSYB XRWButler 3/29/78	ORB#3 VRooney:acr 3/29/78	OELD VHarding 3/4/78	ORB#3 GLear 4/11/78	D/DOR VStello 4/12/78
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for
Victor Stello, Jr., Director
Division of Operating Reactors
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. to DPR-46

2. Safety Evaluation

3. Notice

OFFICE

SUBMIT ENCLOSURES:

see next page

DATE

SEP:OT	STSG/DOR	PSYB
MFLetcher	JWetmore	Grimes
ORB#3	ORB#3	D/DOR
SSheppard	OELD	
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WButler	VRooney:acr	GLear
3/ /78	3/ /78	3/ /78
		VStello
		3/ /78

Nebraska Public Power District - 2 -

cc w/enclosures:

Mr. G. D. Watson, General Counsel
Nebraska Public Power District
P. O. Box 499
Columbus, Nebraska 68601

Mr. Arthur C. Gehr, Attorney
Snell & Wilmer
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Phoenix, Arizona 85073

Cooper Nuclear Station
ATTN: Mr. L. Lessor
Station Superintendent
P. O. Box 98
Brownville, Nebraska 68321

Auburn Public Library
118 - 15th Street
Auburn, Nebraska 68305

Director
Nebraska Dept. of Environmental Control
P. O. Box 94877, State House Station
Lincoln, Nebraska 68509

Mr. William Siebert, Commissioner
Nemaha County Board of Commissioners
Nemaha County Courthouse
Auburn, Nebraska 68305

Chief, Energy Systems Analyses
Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
Room 645, East Tower
401 M Street, S. W.
Washington, D. C. 20460

U. S. Environmental Protection Agency
Region VII
ATTN: EIS COORDINATOR
1735 Baltimore Avenue
Kansas City, Missouri 64108



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

NEBRASKA PUBLIC POWER DISTRICT

DOCKET NO. 50-298

COOPER NUCLEAR STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 44
License No. DPR-46

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Nebraska Public Power District dated March 10, 1978, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

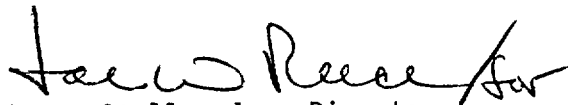
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C(2) of Facility License No. DPR-46 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 44, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Victor Stello, Jr., Director
Division of Operating Reactors
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 13, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Replace the following pages of the Technical Specifications contained in Appendix A of the above indicated license with the attached pages bearing the same numbers (except as otherwise indicated). Changed areas on the revised pages are reflected by a marginal line.

Remove

136
162

Insert

136
162

LIMITING CONDITIONS FOR OPERATION

3.6.D Safety and Relief Valves

1. During reactor power operating conditions and prior to reactor startup from a Cold Condition, or whenever reactor coolant pressure is greater than atmospheric and temperature greater than 212°F, all three safety valves and the safety modes of all relief valves shall be operable, except as specified in 3.6.D.2
2.
 - a. From and after the date that the safety valve function of one relief valve is made or found to be inoperable, continued reactor operation is permissible only during the succeeding thirty days unless such valve function is sooner made operable.
 - b. From and after the date that the safety valve function of two relief valves is made or found to be inoperable, continued reactor operation is permissible only during the succeeding seven days unless such valve function is sooner made operable.
3. If Specification 3.6.D.1 is not met, an orderly shutdown shall be initiated and the reactor coolant pressure shall be reduced to a cold shutdown condition within 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.D Safety and Relief Valves

1. *Approximately half of the safety valves and relief valves shall be checked or replaced with bench checked valves once per operating cycle. All valves will be tested every two cycles.

The set point of the safety valves shall be as specified in Specification 2.2.
2. At least one of the relief valves shall be disassembled and inspected each refueling outage.
3. The integrity of the relief safety valve bellows shall be continuously monitored.
4. The operability of the bellows monitoring system shall be demonstrated once every three months.
5. Once per operating cycle, with the reactor pressure ≥ 100 psig, each relief valve shall be manually opened until the main turbine bypass valves have closed to compensate for relief valve opening.

*These requirements are deferred until the next refueling outage following the April 1978 refueling outage.

3.7.A (cont'd)

4.7.A (cont'd)

repeated provided locally measured leakage reductions, achieved by repairs, reduced the containment's overall measured leakage rate sufficiently to meet the acceptance criteria.

- f. *With the exception of main steam isolation valves and main steam line and feedwater line bellows, (see below) local leak rate tests (LLRT's) shall be performed on the primary containment testable penetrations and isolation valves at a pressure of 58 psig during each reactor shutdown for refueling, or other convenient intervals, but in no case at intervals greater than two years. Bolted double-gasket seals shall be tested after each opening and during each reactor shutdown for refueling, or other convenient intervals, but in no case at intervals greater than two years.

- * The main steam isolation valves (MSIV's) shall be tested a pressure of 29 psig. If a total leakage rate of 11.5 scf/hr for any one MSIV is exceeded, repair and retest shall be performed to correct the condition.

- * Main steam line and feedwater line expansion bellows shall be tested at a pressure of 5 psig.

g. Continuous Leak Rate Monitor

When the primary containment is inerted, the containment shall be continuously monitored for gross leakage by review of the inerting system makeup requirements. This monitoring system may be taken out of service for maintenance but shall be returned to service as soon as practicable.

h. Drywell Surfaces

The interior surfaces of the drywell and torus shall be visually inspected each operating cycle for evidence of

* Exemption to Appendix J of 10 CFR 50.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NO. DPR-46
NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION
DOCKET NO. 50-298

Introduction

By letter dated March 10, 1978, Nebraska Public Power District (NPPD, the licensee) requested two changes to the Technical Specifications for the Cooper Nuclear Station (CNS). The changes would (1) waive the requirement for bench testing safety and relief valves (Specification 4.6.D.1) for the April 1978 refueling outage for CNS, and (2) alter the surveillance test interval for local leak rate testing (LLRT) of primary containment penetrations and isolation valves at CNS (Specification 4.7.A.2.f). The change involving LLRT's, which are the Type B and Type C tests identified in 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors", would result in a Technical Specification surveillance requirement which differs from that of paragraph III.D.3 of Appendix J for Type C test intervals. Therefore, this change would require an exemption from the requirements of Appendix J, 10 CFR 50. The Technical Specification changes proposed by the licensee are discussed separately in the following sections of this evaluation.

Background

NPPD has scheduled the next refueling outage for CNS to begin about April 2, 1978. This outage will mark the end of operating cycle 3 for CNS. The last refueling occurred in September/October 1977; and, thus, operating cycle 3 will be only of six months duration. The intent of the short six month cycle is to place CNS on a spring, rather than a fall, refueling outage schedule. In this way, CNS can be refueled and major maintenance can be performed immediately prior to NPPD's peak power demand period which is the summer irrigation months.

Safety and Relief Valves

Discussion/Evaluation

CNS Technical Specification 4.6.D.1 states, in part, that "approximately half of the safety valves and relief valves shall be checked or replaced with bench checked valves once per operating cycle. All valves will be tested every two cycles."

The licensee has requested that this requirement be waived until the next refueling outage following the April 1978 refueling. To justify this extension, NPPD notes that the present operating cycle is a short cycle of only six months duration and that all of the safety and relief valves were reworked and tested during the last refueling outage. Also, NPPD has stated that, since December 1974, no safety or relief valve failures have been experienced at CNS as a result of their valve improvement and surveillance program.

We have evaluated this proposed Technical Specification change. The extension of the requirement to bench check safety and relief valves by six months would have a negligible effect on the capability of these valves to perform their safety functions. This is because the Technical Specification surveillance interval is based on plant operating cycle duration which can vary greatly and may be as long as 18 or 24 months. Therefore, since the next operating cycle for CNS will be of 12 months duration, granting this proposed extension would result in an 18 month period between valve bench checks, and an interval between checks of 18 months has been previously considered and accepted in the development of this surveillance requirement.

Based on the above discussion, we have concluded that the proposed waiver of safety and relief valves bench checking for the April 1978 refueling outage is acceptable.

Local Leak Rate Testing

CNS Technical Specification 4.7.A.2.f states that "local leak rate tests (LLRT's) shall be performed on the primary containment testable penetrations and isolation valves at a pressure of 58 psig during each reactor shutdown for refueling, but in no case at intervals greater than two years. Bolted double-gasket seals shall be tested after each opening and during each reactor shutdown for refueling but in no case at intervals greater than two years."

LLRT's at CNS are synonymous with the Type B and Type C tests defined in 10 CFR 50, Appendix J.

In accordance with Appendix J, primary containment penetration bolted double gasket seals (Type B) shall be tested "during each reactor shutdown for refueling, or other convenient intervals, but in no case at intervals greater than 2 years". Appendix J requires containment isolation valves (Type C) to be tested "during each reactor shutdown for refueling but in no case at intervals greater than 2 years".

NPPD has requested to extend LLRT's from the April 1978 refueling outage to the next refueling outage because LLRT's were performed during the September/October 1977 refueling outage on all containment isolation valves, testable penetrations and bolted double-gasket seals. Approval of this extension would require an exemption from the Type C retest requirements of Appendix J for containment isolation valves because of the specific wording of the regulation.

We have evaluated the proposed Technical Specification change in light of the requirements of Appendix J. The frequency requirements for local leak rate testing in Appendix J are based on the expected duration of the intervals between refueling shutdowns which normally varies from approximately 12 to 18 months. Appendix J did not consider short operating cycles or unscheduled refuelings. However, the appropriate testing frequency is established by the maximum permissible duration between tests, i.e., something less than two years. It was not the intent of Appendix J to increase the frequency of leakage testing simply because refueling outages occurred more frequently since there is no correlation between fuel management practices (frequency of refueling) and the degradation of containment leakage performance.

Based on the above discussion, we have determined that the LLRT requirements in the CNS Technical Specifications should be made consistent with the Type B retest requirements of Appendix J, i.e., retest during each reactor shutdown for refueling, or other convenient intervals, but in no case at intervals greater than 2 years. In addition, we conclude that the resulting exemption from the requirements of Appendix J for Type C testing is acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

Based on the foregoing, we have determined that, pursuant to 10 CFR Section 50.12, the specific exemption for Type C retest requirements, as discussed above, can be granted without endangering life or property, or the common defense and security, and are otherwise in the public interest.

We have also concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: April 13, 1978

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-298NEBRASKA PUBLIC POWER DISTRICTNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSENOTICE OF GRANTING OF AN EXEMPTION FROM REGULATIONS
IN 10 CFR PART 50 APPENDIX J

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 44 to Facility Operating License No. DPR-46, issued to the Nebraska Public Power District (the licensee), which revised the Technical Specifications for operation of the Cooper Nuclear Station (the facility) located in Nemaha County, Nebraska. The amendment is effective as of its date of issuance.

The amendment involves changes in the facility Technical Specifications: (1) to waive, for the April 1978 refueling outage, the requirement to check, or replace with bench checked valves, one-half of the reactor coolant system relief and safety valves and (2) to change the requirements for local leak rate testing of containment isolation valves and penetrations. The latter change is an exemption from the requirement of 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Test Requirements for Water-Cooled Power Reactors".

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license

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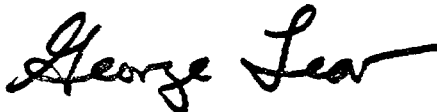
amendment and related letter to the licensee. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) and environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated March 10, 1978, (2) Amendment No. 44 to License No. DPR-46, and (3) the Commission's related Safety Evaluation and letter to the licensee dated April 13, 1978. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Auburn Public Library, 118 - 15th Street, Auburn, Nebraska 68305. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland this 13 day of April 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief
Operating Reactors Branch #3
Division of Operating Reactors