JULY 23 1979

Docket No. 50-298

Distribution
Docket
ORB #3
NRR Reading
Local PDR
NRC PDR
DEisenhut
BGrimes
RVollmer
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WGammill
JMiller
WRussell
SSheppard
TIppolito
VRooney
Atty, OELD
OI&E (5)
BJones (4)
BScharf (10)
STSG
BHarless
ACRS (16)
OPA (CMiles)
RDiggs
HDenton

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

Dear Mr. Pilant:

The Commission has issued the enclosed Amendment No. 58 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station, in response to your telecopied request of June 21, 1979, as modified by telephone discussions with your staff, and confirmed by your application dated June 21, 1979. The amendment was issued orally by telephone on June 22, 1979.

The amendment modifies the Technical Specifications to permit operation of the facility at less than 40% power for a period not to exceed 48 hours between June 22 and June 25, 1979, with the containment deinerted.

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

Sincerely,

V. Rooney for

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

7908220 576

Enclosures:
1. Amendment No. 58
2. Safety Evaluation
3. Notice

cc w/enclosures:
See page 2

W Gammill 7/18/79

L Laina's GDS 6-29-79

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OFFICE	ORB #3	ORB #3	AD:E&P	OELD	ORB #3	PSB
SURNAME	SSheppard	VRooney:mjf	See attached	DSwanson	TIppolito	
DATE	6/28/79	6/25/79	7/ /79	7/9/79	6/26/79	7/ /79

FILE WITH YELLOW COPY. author 6:10 pm 6-22-79

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

[redacted]

Docket No. 50-298

Mr. J. M. Pilant, Director
Licensing & Quality Assurance
Nebraska Public Power District
Post Office Box 499
Columbus, Nebraska 68601

Dear Mr. Pilant:

The Commission has issued the enclosed Amendment No. [redacted] to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The amendment consists of changes to the Technical Specifications in response to your request of June 21, 1979.

The amendment modifies the Technical Specifications to permit operation of the facility at less than 40% power for a period not to exceed 48 hours with the containment deinerted. ~~provided the~~ We have made a change in the Technical Specifications which you proposed; this change was discussed with and agreed to by your staff.

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

Brian Grimes
Assistant Director for
Engineering and Projects

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. [illegible] TO FACILITY
OPERATING LICENSE NO. DPR-46

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1. Introduction

By telecopied letter dated June 21, 1979, the Nebraska Public Power District (the licensee) proposed changes to the Technical Specifications of Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The proposed changes would permit the facility to be operated at a power level of about 40% for a 48 hour continuous period between the dates of June 22, 1979 and June 25, 1979 with the containment deinerted. We have made certain changes to the licensee's June 21 proposal which we have discussed with the licensee

DRAFT SAFETY EVALUATION REPORT

COOPER NUCLEAR POWER STATION

DATED JUNE 22, 1979

The licensee has requested ~~that~~ a temporary change to the Technical Specification requirements related to containment integrity. Specifically, the licensee has requested that the containment be deinerted to allow access between the dates of June 22, 1979 and July 25, 1979 for ~~a~~ one 48-hour period.

Evaluation

The following discusses the areas of safety they are affecting by ~~their~~ the licensee's request and our evaluation of these areas.

1. Deinerting the Containment -In early 1976, the licensee submitted a proposed combustible gas control system design that would not require inerting. This system design was predicated on a lower metal-water reaction which was being considered as part of a proposed change to the Commission's regulations. A new rule (i.e., 10 CFR 50.44), which became effective on November 27, 1978, would allow the assumed metal-water reaction to be based on the results of the Emergency Core Cooling System analyses requirements of 10 CFR 50.46.

   Although the staff has not completed its review of the proposed system design, the preliminary analyses, including the licensees' proposal to reduce power to apprimately 40%, indicate that inerting would not be required for Cooper Station under the provisions of the new rule, and that an air-dilution system would be an effective means of manually controlling combustible gas concentrations following a LOCA. Based on these analyses, we conclude that combustible gas control measures could be provided by means other than inerting.

2. Operating the Containment Purge Valves - We are presently reviewing the adequacy of containment purging for the Cooper Nuclear Power Station. We have not completed our review, however, the licensee has stated that there is adequate justification that the purge valves are designed to close following a LOCA. On this basis we conclude that the licensee can open the purge valves during the short time period that he needs for containment access.

3. Maintaining Delta P Control - The licensee has been operating the plant with a differential between drywell and wetwell to reduce effects of pool dynamics following a LOCA. The licensee have committed to maintain this Delta P except for very short time periods required for ingress and egress to the containment. This should be approximately 2 - 3 hours during a 48 hour time period. We have concluded that this short time period makes acceptably low the consequences of a LOCA while a Delta P is not maintained.

In addition to the above justifications, the Technical Specifications do allow deinerting and a lack of Delta P control for the same periods, i.e., approximately 48 hours under shutdown conditions followed by an immediate startup. Because of all of the above, including the low probability of a accident occurring during this time period, we conclude that the temporary change to the Technical Specification 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 Section 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

We have 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.

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

July 23, 1979

Docket No. 50-298

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

Dear Mr. Pilant:

The Commission has issued the enclosed Amendment No. 58 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station, in response to your telecopied request of June 21, 1979, as modified by telephone discussions with your staff, and confirmed by your application dated June 21, 1979. The amendment was issued orally by telephone on June 22, 1979.

The amendment modifies the Technical Specifications to permit operation of the facility at less than 40% power for a period not to exceed 48 hours between June 22 and June 25, 1979, with the containment deinerted.

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

Sincerely,

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:
1. Amendment No. 58
2. Safety Evaluation
3. Notice

cc w/enclosures:
See page 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
3100 Valley Center
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

Director, Technical Assessment Division
Office of Radiation Programs (AW-459)
US EPA
Crystal Mall #2
Arlington, Virginia 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. 58
License No. DPR-46

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Nebraska Public Power District (the licensee) dated June 21, 1979, 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. 58, 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 June 22, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 23, 1979

ATTACHMENT TO LICENSE AMENDMENT NO. 58

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

Remove	Insert
164	164

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.7.A (cont'd.)	4.7.A (cont'd.)
d. If specifications 3.7.A.4.a,b or c, cannot be met, the situation shall be corrected within 24 hours or the reactor will be placed in a cold shutdown condition within the subsequent 24 hours.	c. Once each operating cycle, each vacuum breaker valve shall be visually inspected to insure proper maintenance and operation of the position indication switch. The differential pressure setpoint shall be verified.
	d. Prior to reactor startup after each refueling, a leak test of the drywell to suppression chamber structure shall be conducted to demonstrate that the requirement of 3.7.A.4.c is met.
5. Oxygen Concentration	5. Oxygen Concentration
a. After completion of the startup test program and demonstration of plant electrical output, the primary containment atmosphere shall be reduced to less than 4% oxygen with nitrogen gas during reactor power operation with reactor coolant pressure above 100 psig, except as specified in 3.7.A.5.b.	a. The primary containment oxygen concentration shall be measured and recorded at least twice weekly.
b. Within the 24-hour period subsequent to placing the reactor in the Run mode following a shutdown, the containment atmosphere oxygen concentration shall be reduced to less than 4% by volume and maintained in this condition. De-inerting may commence 24 hours prior to a shutdown.	b. The quantity of liquid nitrogen in the liquid nitrogen storage tank shall be determined twice per week when the volume requirements of 3.7.A.5.c are in effect.
c. When the containment atmosphere oxygen concentration is required to be less than 4%, the minimum quantity of liquid nitrogen in the liquid nitrogen storage tank shall be 500 gallons.	
d. If the specifications of 3.7.A.5.a thru c cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 24 hours.	
e. The specifications of 3.7.A.5a thru d are not applicable during a 48 hour continuous period between the dates of June 22, 1979 and June 25, 1979.	
B. Standby Gas Treatment System	B. Standby Gas Treatment System
1. Except as specified in 3.7.B.3 below, both circuits of the standby gas treatment system and the diesel generators	1. At least once per operating cycle the following conditions shall be demonstrat 10
	a. Pressure drop across the combined HEPA filters and charcoal adsorber banks is

Amendment No. 58

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 58 TO FACILITY OPERATING LICENSE NO. DPR-46

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1. Introduction

By telecopied letter dated June 21, 1979, the Nebraska Public Power District (the licensee) proposed changes to the Technical Specifications of Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The proposed changes would permit the facility to be operated at a power level of about 40% for a 48 hour continuous period between the dates of June 22, 1979 and June 25, 1979 with the containment deinerted. We have made certain changes to the licensee's June 21 proposal which we have discussed with the licensee.

Evaluation

The following discusses the areas of safety they are affecting by the licensee's request and our evaluation of these areas.

1. Deinerting the Containment - In early 1976, the licensee submitted a proposed combustible gas control system design that would not require inerting. This system design was predicated on a lower metal-water reaction which was being considered as part of a proposed change to the Commission's regulations. A new rule (i.e., 10 CFR 50.44), which became effective on November 27, 1978, would allow the assumed metal-water reaction to be based on the results of the Emergency Core Cooling System analyses requirements of 10 CFR 50.46.

   Although the staff has not completed its review of the proposed system design, the preliminary analyses, including the licensee's proposal to reduce power to approximately 40%, indicate that inerting would not be required for Cooper Station under the provisions of the new rule, and that an air-dilution system would be an effective means of manually controlling combustible gas concentrations following a LOCA. Based on these analyses, we conclude that combustible gas control measures could be provided by means other than inerting.

2. Operating the Containment Purge Valves - We are presently reviewing the adequacy of containment purging for the Cooper Nuclear Power Station. We have not completed our review, however, the licensee has stated that there is adequate justification that the purge valves are designed to close following a LOCA. On this basis we conclude that the licensee can open the purge valves during the short time period that he needs for containment access.

3. Maintaining Delta P Control - The licensee has been operating the plant with a pressure differential between the drywell and wetwell to reduce the effects of pool dynamics following a LOCA. The licensee has committed to maintain this Delta P except for very short time periods required for ingress and egress to the containment. This should be approximately 2 - 3 hours during the 48 hour time period. We have concluded that this short time makes extremely unlikely the occurrence of a LOCA while a Delta P is not maintained.

In addition to the above justifications, the Technical Specifications do allow deinerting and a lack of Delta P control for the same periods, i.e., approximately 48 hours under shutdown conditions followed by an immediate startup. Because of all of the above, including the low probability of an accident occurring during this time period, we conclude that the temporary change to the Technical Specifications 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 Section 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

We have 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: July 23, 1979

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-298

NEBRASKA PUBLIC POWER DISTRICT

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 58 to Facility Operating License No. DPR-46, issued to Nebraska Public Power District, which revised the Technical Specifications for operation of the Cooper Nuclear Station, located in Nemaha County, Nebraska. The amendment is effective June 22, 1979.

The amendment modified the Technical Specifications to permit operation of the facility at less than 40% power for a period not to exceed 48 hours between June 22 and June 25, 1979, with the containment deinerted.

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 amendment. 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 Section 51.5(d)(4), an 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 formal application for amendment dated June 21, 1979, (2) Amendment No. 58 to License No. DPR-46, and (3) the Commission's related Safety Evaluation. 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 single 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 23rd day of July, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION

Vernon L. Rooney, Acting Chief
Operating Reactors Branch #3
Division of Operating Reactors