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Docket Nos. 50-282
and 50-306

AUG 1 1 1976

Northern States Power Company
ATTN: Mr. L. O. Mayer
Manager of Nuclear Support Services
414 Nicollet Mall, 8th Floor
Minneapolis, Minnesota 55401

Gentlemen:

In response to your request dated April 30, 1976, the Commission has issued the enclosed Amendment Nos. 14 and 8 to Facility Operating License Nos. DPR-42 and DPR-60 for the Prairie Island Nuclear Generating Plant Unit Nos. 1 and 2, respectively.

The amendments consist of changes in the Technical Specifications that add new sections 3.12 and 4.13 which identify safety related shock suppressors and include requirements regarding operability and surveillance of these shock suppressors (snubbers). Some minor modifications to the proposed Technical Specifications have been made as discussed with your staff.

Copies of the related Safety Evaluation and the Federal Register Notice also are enclosed.

Sincerely,

Original Signed by:
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Enclosures:
1. Amendment No. 14 to License No. DPR-42
2. Amendment No. 8 to License No. DPR-60
3. Safety Evaluation
4. Federal Register Notice

Cleared w/ V. Stello thru Pat Fling 8/2/76 at 9:35 - OK to go. 8/2

cc w/enclosures:
See next page

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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 14
License No. DPR-42

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

   A. The application for amendment by Northern States Power Company (the licensee) dated April 30, 1976, 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.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the Technical Specifications

Date of Issuance: August 11, 1976

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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 8
License No. DPR-60

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

   A. The application for amendment by Northern States Power Company (the licensee) dated April 30, 1976, 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.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 11, 1976

ATTACHMENT TO LICENSE AMENDMENT NOS. 14 AND 8

FACILITY OPERATING LICENSE NOS. DPR-42 AND DPR-60

DOCKET NOS. 50-282 AND 50-306

Replace the following existing pages of the Technical Specifications contained in Appendix A with the attached revised pages bearing the same numbers, except as otherwise indicated. Changed areas on these pages are shown by marginal lines.

Remove	Insert
Pages TS-i	Pages TS-i
TS-iii	TS-iii
TS-iv	TS-iv
	TS.3.12-1 (new page)
	Table TS.3.12-1, page 1 of 4 (new page)
	Table TS.3.12-1, page 2 of 4 (new page)
	Table TS.3.12-1, page 3 of 4 (new page)
	Table TS.3.12-1, page 4 of 4 (new page)
	TS.4.13-1 (new page)
	TS.4.13-2 (new page)
	TS.4.13-3 (new page)

TECHNICAL SPECIFICATIONS

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LIST OF TABLES

LIST OF TABLES (contd)

LIST OF FIGURES

3.12 SHOCK SUPPRESSORS (SNUBBERS)

Applicability

Applies to the operability of safety related snubbers.

Objective

To define those conditions of snubber operability necessary to assure safe reactor operation.

Specification

A. During all modes of operation, except Cold Shutdown and Refueling Shutdown, all safety related snubbers listed in Table TS.3.12-1 shall be operable except as noted in 3.12.B through 3.12.D below.

B. From and after the time that a snubber is determined to be inoperable, continued reactor operation is permissible only during the succeeding 72 hours unless the snubber is sooner made operable or replaced.

C. If the requirements of 3.12.A and 3.12.B cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 36 hours.

D. If a snubber listed in Table TS.3.12-1 is determined to be inoperable while the reactor is in the shutdown or refueling mode, the snubber shall be made operable or replaced prior to reactor startup.

E. Snubbers may be added to safety related systems without prior license amendment to Table TS.3.12-1 provided that a revision to Table TS.3.12-1 is included with the next license amendment request.

Basis

Shock Suppressors (Snubbers)

Snubbers are designed to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient, while allowing normal thermal motion during startup and shutdown. The consequence of an inoperable snubber is an increase in the probability of structural damage to piping as a result of a seismic or other event initiating dynamic loads. It is therefore required that all snubbers required to protect the primary coolant system or any other safety system or component be operable during reactor operation.

Because the snubber protection is required only during low probability events, a period of 72 hours is allowed for repairs or replacements. In case a shutdown is required, the allowance of 36 hours to reach a cold shutdown condition will permit an orderly shutdown consistent with standard operating procedures. Since plant startup should not commence with knowingly defective safety related equipment, Specification 3.12.D prohibits startup with inoperable snubbers.

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	Accessible or Inaccessible (A or I)	Snubbers Especially Difficult to Remove	In High Radiation Areas During Shutdown
	UNIT I				
MSH-48	Main and Auxiliary Steam	739'-1-11/16"	A	X	
MSH-62		735'-6"	A		
MSH-62		735'-6"	A		
MSH-63		755'-8"	A		
MSH-64		743'-0'1/16"	A		
MSH-65		748'-3-1/4"	A		
MSH-66		753'-0"	A		
MSH-67		743'-0"	A		
MSH-68		755'-8"	A		
MSH-68		755'-8"	A		
MSH-69		748'-1-1/2"	A		
MSH-69		748'-1-1/2"	A	X	
MSDH-25		736'-6-7/16"	A	X	
MSDH-26		756'-7-1/4"	A		
MSDH-29		756'-7-1/4"	A		
MSDH-30		736-6-7/16"	A		
CWH-436		736'-10-9/16"	A		
AFSH-22		733'-4-1/4"	A		
AFSH-22		733'-4-1/4"	A		
AFSH-36		745'-7-1/4"	A		
AFSH-39		699'-10-1/4"	A		
AFSH-48		699'-6-1/4"	A		
	UNIT II				
MSH-23	Main and Auxiliary Steam	739'-1-3/16"	A	X	
MSH-54		756'-0-1/16"	I		
MSH-54		756'-0-1/16"	I		
MSH-75		744-0-5/16"	A		
MSH-76		748'-1-1/2"	A	X	
MSH-76		748'-1-1/2"	A		
MSH-77		748'-3-1/4"	A		
MSH-78		743'-1"	A		
MSH-79		753'-0"	A		
MSH-80		755'-0"	A		
MSH-81		735'-9"	A		
MSH-81		735'-9"	A		
MSH-82		755'-8"	A		
MSH-82		755'-8"	A		
MSH-83		761'-0-13/16"	I		
MSDH-17		739'-0"	A	X	
MSDH-18		759'-0"	A	X	
MSDH-19		739'-0"	A		
MSDH-20		759'-0"	A		

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	Accessible or Inaccessible (A or I)	Snubbers Especially Difficult to Remove	In High Radiation Areas During Shutdown
	UNIT II				
AFSH-2	Main and Auxiliary Steam	749'-4"	A		
AFSH-19	↓	745'-7-1/4"	A		
AFSH-20	↓	745'-7-1/4"	A		
AFSH-24	↓	745'-6"	A		
AFSH-29	↓	721'-1-9/16"	A		
AFSH-29	↓	721'-1-9/16"	A		
AFSH-33	↓	707'-5"	A		
AFSH-39	↓	696'-6-1/4"	A		
AFSH-40	↓	696'-6-1/4"	A		
AFSH-46	↓	750'-7"	A		
	UNIT I				
SIRH-9	Safety Injection	718'-6"	I		
SIRH-11	↓	718'-6"	I		
SIRH-17	↓	730'-0"	I		
SIRH-18	↓	730'-0"	I		
SIRH-22	↓	711'-4"	I		
SIRH-23	↓	711'-4"	I		
SIH-53	↓	731'-0-3/8"	A		
RSIH-92	↓	714'-11"	I		
RSIH-93	↓	714'-11"	I		
RSIH-95	↓	711'-2"	I		
RSIH-96	↓	711'-2"	I		
RSIH-98	↓	701'-2"	I		
RSIH-163	↓	717'-9"	I		
RSIH-167	↓	717'-9"	I		
RSIH-414	↓	716'-10"	I		
RSIH-442	↓	717'-9-1/2"	I		
RSIH-476	↓	707'-1-3/4"	I		
RHRRH-5	↓	723'-4-1/4"	I		
RHRRH-41	↓	698'-11"	I		
CVCH-180	↓	728'-4-1/8"	A		
	UNIT II				
SIH-43	Safety Injection	720'-0"	A		
SIH-49	↓	737'-3"	A		
SIH-53	↓	710'-3"	A		
SIRH-4	↓	711'-6-1/8"	I		
SIRH-4	↓	711'-3"	I		
SIRH-7	↓	716'-3-1/16"	I		
SIRH-18	↓	722'-6"	I		
RSIH-265	↓	699'-9"	I		
RSIH-268	↓	713'-9-3/16"	I		
RSIH-343	↓	719'-8-11/16"	I		
RHRRH-28	↓	707'-4-5/16"	I		

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	Accessible or Inaccessible (A or I)	Snubbers Especially Difficult to Remove	In High Radiation Area During Shutdown
	UNIT I				
RHRRH-15	Reactor Coolant	705'-6"	I		
RHRRH-27	↓	705'-6"	I		
RHRRH-29	↓	705'-6"	I		
RHRRH-29	↓	705'-6"	I		
RPCH-146	↓	714'-4"	I		
RPCH-147	↓	714'-7"	I		
	UNIT II				
RHRPH-2	Reactor Coolant	699'-0"	I		
RHRRH-4	↓	705'-11-5/16"	I		
RHRRH-9	↓	705'-11-5/16"	I		
RHRRH-15	↓	699'-0"	I		
RCVCH-1396	↓	702'-10"	I		
RCVCH-1505	↓	708-5-13/16"	I		
	UNIT I				
CWH-380	Cooling Water	707'-9-3/8"	A		
CWH-385	↓	709'-0-3/8"	A		
CWH-395	↓	745'-6-1/16"	A		
	UNIT II				
CWH-39	Cooling Water	710'-6"	A		
CWH-40	↓	708'-7"	A		
CWH-44	↓	730'-11"	A		
	UNIT I				
AFWH-72	Feedwater	752'-0"	I		
AFWH-82	↓	728'-11"	A		
AFWH-84	↓	728'-11"	A		
	UNIT II				
FWH-72	Feedwater	751'-0"	I		
FWH-72	↓	751'-0"	I		
AFWH-80	↓	706'-7-3/4"	A		
	UNIT I				
25.12620.003 - 1	Steam Generator	760'-9-1/2"	I	X	
25.12620.003 - 2	↓	760'-9-1/2"	I	X	
25.12620.003 - 3	↓	760'-9-1/2"	I	X	
25.12620.003 - 4	↓	760'-9-1/2"	I	X	
25.12620.003 - 5	↓	760'-9-1/2"	I	X	
25.12620.003 - 6	↓	760'-9-1/2"	I	X	
25.12620.003 - 7	↓	760'-9-1/2"	I	X	
25.12620.003 - 8	↓	760'-9-1/2"	I	X	

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	Accessible or Inaccessible (A or I)	Snubbers Especially Difficult to Remove	In High Radiation Area During Shutdown
	UNIT II				
25.12620.003 - 9	Steam Generator	760'-9-1/2"	I	X	
25.12620.003 - 10		760'-9-1/2"	I	X	
25.12620.003 - 11		760'-9-1/2"	I	X	
25.12620.003 - 12		760'-9-1/2"	I	X	
25.12620.003 - 13		760'-9-1/2"	I	X	
25.12620.003 - 14		760'-9-1/2"	I	X	
25.12620.003 - 15		760'-9-1/2"	I	X	
25.12620.003 - 16		760'-9-1/2"	I	X	

4.13 SHOCK SUPPRESSORS (SNUBBERS)

Applicability

Applies to periodic testing and surveillance requirements of safety related hydraulic snubbers.

Objective

To verify the integrity and operability of hydraulic snubbers.

Specification

The following surveillance requirements apply to all hydraulic snubbers listed in Table TS.3.12-1:

A. All hydraulic snubbers whose seal material has been demonstrated by operating experience, lab testing, or analysis to be compatible with the operating environment shall be visually inspected. This inspection shall include, but not necessarily be limited to, inspection of the hydraulic fluid reservoir, fluid connections, and linkage connections to the piping and anchor to verify snubber operability in accordance with the following schedule:

Number of Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required Inspection Interval
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
≥8	31 days ± 25%

The required inspection interval shall not be lengthened more than one step at a time.

Snubbers may be categorized in two groups, "accessible" or "inaccessible" based on their accessibility for inspection during reactor operation. These two groups may be inspected independently according to the above schedule.

B. All hydraulic snubbers whose seal materials have not been demonstrated to be compatible with the operating environment shall be visually inspected for operability every 31 days.

C. The initial inspection for Unit 1 shall be performed in March 1977 (based on the refueling inspection performed in March 1976 which indicated that there were no failed snubbers). The initial inspection for Unit 2 shall be six months from the date of issuance of these Specifications. For the purpose of entering the table above, Unit 1 shall be assumed to be on a 1 year inspection interval and Unit 2 shall be assumed to be on a 6 month inspection interval.

D. Once each refueling cycle, a representative sample of 10 hydraulic snubbers or approximately 10% of the hydraulic snubbers, whichever is less, shall be functionally tested for operability including verification of proper piston movement, lock up and bleed. For each unit and subsequent unit found inoperable, an additional 10% or ten hydraulic snubbers shall be so tested until no more failures are found or all units have been tested. Those snubbers designated in Table 3.12-1 as being in High Radiation Areas or especially difficult to remove need not be selected for functional tests. provided operability was previously verified. Snubbers of rated capacity greater than 50,000 lb need not be functionally tested.

E. Snubbers may be reclassified as being in or out of high radiation areas in Table TS.3.12-1 based on the most recent radiation survey provided that a revision to Table TS.3.12-1 is included with the next license amendment request.

Basis

All safety related hydraulic snubbers are visually inspected for overall integrity and operability. The inspection will include verification of proper orientation, adequate hydraulic fluid level and proper attachment of snubber to piping and structures.

The inspection frequency is based upon maintaining a constant level of snubber protection. Thus the required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during a required inspection determines the time interval for the next required inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

Experience at operating facilities has shown that the required surveillance program should assure an acceptable level of snubber performance provided that the seal materials are compatible with the operating environment.

Snubbers containing seal material which has not been demonstrated by operating experience, lab tests or analysis to be compatible with the operating environment should be inspected more frequently (every month) until material compatibility is confirmed or an appropriate changeout is completed.

Examination of defective snubbers at reactor facilities and material tests performed at several laboratories (Reference 1) has shown that millable gum polyurethane deteriorates rapidly under the temperature and moisture conditions present in many snubber locations. Although molded polyurethane exhibits greater resistance to these conditions, it also may be unsuitable for application in the higher temperature environments. Data are not currently available to precisely define an upper temperature limit for the molded polyurethane. Lab tests and in-plant experience indicate that seal materials are available, primarily ethylene propylene compounds, which should give satisfactory performance under the most severe conditions expected in reactor installations.

To further increase the assurance of snubber reliability, functional tests should be performed once each refueling cycle. These tests will include stroking of the snubbers to verify proper piston movement, lock-up and bleed. Ten percent or ten snubbers, whichever is less, represents an adequate sample for such tests. Observed failures on these samples should require testing of additional units. Snubbers of rated capacity greater than 50,000 lb are exempt from the functional testing requirements because of the impracticability of testing such large units.

(1) Report H R Erickson, Bergen Paterson to K R Goller, NRC, October 7, 1974
Subject: Hydraulic Shock Sway Arrestors

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 14 AND 8 TO FACILITY OPERATING LICENSE NOS. DPR-42 AND DPR-60

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1 AND 2

DOCKET NOS. 50-282 AND 50-306

INTRODUCTION

By letter dated April 30, 1976, the Northern States Power Company (NSP) requested an amendment to Facility License Nos. DPR-42 and DPR-60 for Prairie Island Nuclear Generating Plant (PINGP) Units No. 1 and No. 2. The amendment involved new sections to the Appendix A Technical Specifications which (1) tabulate the shock suppressors required to protect safety related components and systems and (2) specify requirements for operability and surveillance of the shock suppressors. Minor changes to the proposed amendment were discussed with the licensee and will be incorporated into the technical specifications.

DISCUSSION

During the summer of 1973, inspections at two reactor facilities revealed a high incidence of inoperable hydraulic shock suppressors (snubbers) manufactured by Bergen Paterson Pipesupport Corporation. As a result of those findings, the Office of Inspection and Enforcement required each operating reactor licensee to immediately inspect all Bergen Paterson snubbers utilized on safety systems and to reinspect them 45 to 90 days after the initial inspection. Snubbers supplied by other manufacturers were to be inspected on a lower priority basis.

Since a long term solution to eliminate recurring failures was not immediately available, the Division of Reactor Licensing sent a letter dated October 2, 1973, to operating facilities utilizing Bergen Paterson snubbers specifying continuing surveillance requirements and requesting a submittal within one year of proposed Technical Specifications for a snubber surveillance program. The PINGP did not have any of the Bergen Paterson snubbers, however, an inspection of the snubbers in the PINGP was requested as indicated above. In addition, by letter dated July 11, 1975, we transmitted to NSP model technical specifications relating to hydraulic snubbers and requested an application to amend the PINGP Technical Specifications to incorporate these model technical specifications. NSP did this by letter dated September 12, 1975, which indicated that the model technical specifications were generally acceptable. As a result of comments that we received from licensees and further consideration by ourselves, we have revised the model technical specifications to provide some relaxation and clarification of the requirements. The revisions consist of: (1) deleting the requirement for periodic disassembly and inspection of snubbers; and to clarify the intent of the specifications, (2) specifying that the visual inspection of snubbers should include the fluid reservoir, fluid connections, and any linkage connections to associated piping and anchors, and (3) enlarging the scope of Table 3.6.1 in the model technical specifications to identify safety related snubbers that are (a) in high radiation areas, (b) especially difficult to remove, (c) inaccessible during normal operation, and (d) accessible during normal operation. A copy of the revised model technical specifications and bases were enclosed in our letter of December 17, 1975.

EVALUATION

Snubbers are designed to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient while allowing normal thermal movement during startup and shutdown.

The consequence of an inoperable snubber is an increase in the probability of structural damage to piping resulting from a seismic or other postulated event which initiates dynamic loads. It is, therefore, necessary that snubbers installed to protect safety system piping be operable during reactor operation and be inspected at appropriate intervals to assure their operability.

Examination of defective snubbers at reactor facilities has shown that the high incidence of failures observed in the summer of 1973 was caused by severe degradation of seal materials and subsequent leakage of the hydraulic fluid. The basic seal materials used in Bergen Paterson snubbers were two types of polyurethane; a millable gum polyester type containing plasticizers and an unadulterated molded type. Material tests performed at several laboratories (Reference 1) established that the millable gum polyurethane deteriorated rapidly under the temperature and moisture conditions present in many snubber locations. Although the molded polyurethane exhibited greater resistance to these conditions, it also may be unsuitable for application in the higher temperature environments.

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(1) Report H. R. Erickson, Bergen Paterson to K. R. Goller, NRC, October 7, 1974, Subject: Hydraulic Shock Sway Arrestors

Data are not currently available to precisely define an upper temperature limit for the molded polyurethane. The investigation indicated that seal materials are available, primarily ethylene propylene compounds, which should give satisfactory performance under the most severe conditions expected in reactor installations.

An extensive seal replacement program has been carried out at many reactor facilities. Experience with ethylene propylene seals has been very good with no serious degradation reported thus far. Although the seal replacement program has significantly reduced the incidence of snubber failures, some failures continue to occur. These failures have generally been attributed to faulty snubber assembly and installation, loose fittings and connections and excessive pipe vibrations. The failures have been observed in both PWRs and BWRs and have not been limited to units manufactured by Bergen Paterson. Because of the continued incidence of snubber failures, we have concluded that snubber operability and surveillance requirements should be incorporated into the Technical Specifications. We have further concluded that these requirements should be applied to all safety related snubbers, regardless of manufacturer, in all light water cooled reactor facilities.

The proposed Technical Specifications and Bases, as modified, provide additional assurance of satisfactory snubber performance and reliability. The specifications require that snubbers be operable during reactor operation and prior to startup. Because snubber protection is required only during low probability events, a period of 72 hours is allowed for repair or replacement of defective units before the reactor must be shut down. The licensee will be expected to commence repair or replacement of a failed snubber expeditiously. However, the allowance of 72 hours is consistent with that provided for other safety-related equipment and provides for remedial action to be taken in accordance with 10 CFR 50.36(c)(2). Failure of a pipe, piping system, or major component would not necessarily result from the failure of a single snubber to operate as designed, and even a snubber devoid of hydraulic fluid would provide support for the pipe or component and reduce pipe motion. The likelihood of a seismic event or other initiating event occurring during the time allowed for repair or replacement is very small. Considering the large size and difficult access of some snubber units, repair or replacement in a shorter time period is not practical. Therefore, the 72 hour period provides a reasonable and realistic period for remedial action to be taken.

An inspection program is specified to provide additional assurance that the snubbers remain operable. The inspection frequency is based upon maintaining a constant level of snubber protection. Thus the required inspection interval varies inversely with the observed snubber failures. The longest inspection interval allowed in the Technical Specifications after a record of no snubber failures has been established as nominally 18 months. Experience at operating facilities has shown that the required surveillance program should provide an acceptable level of snubber performance provided that the seal materials are compatible with the operating environment. Snubbers containing seal material which has not been demonstrated to be compatible with the operating environment are required to be inspected every 31 days until the compatibility is established or an appropriate seal change is completed.

To further increase the level of snubber reliability, the Technical Specifications require functional tests once each refueling cycle. The tests will verify proper piston movement, lock up and bleed.

We have concluded that the proposed additions to the Technical Specifications, as modified, increase the probability of successful snubber performance, increase reactor safety and we therefore find them accceptable.

ENVIRONMENTAL CONSIDERATION

We have determined that the amendments do 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 amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration, or environmental appraisal need not be prepared in connection with the issuance of these amendments.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the changes do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the changes do 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: August 11, 1976

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-282 AND 50-306

NORTHERN STATES POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 14 and 8 to Facility Operating License Nos. DPR-42 and DPR-60, issued to the Northern States Power Company (the licensee), which revised Technical Specifications for operation of Unit Nos. 1 and 2 of the Prairie Island Nuclear Generating Plant (the facilities) located in Goodhue County, Minnesota. The amendments are effective as of their date of issuance.

The amendments specify operability and surveillance requirements for shock suppressors (snubbers) to protect the primary coolant system and all other safety related systems and components of the facilities.

The application for the amendments 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 these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated April 30, 1976, (2) Amendment No. 14 and 8 to License Nos. DPR-42 and DPR-60, respectively, and (3) the Commission's concurrently issued 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 Environmental Conservation Library of the Minneapolis Public Library, 300 Nicollet Mall, Minneapolis, Minnesota 55401. 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 11th day of August, 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors