

October 7, 1981

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. 74 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. This amendment consists of changes to the Technical Specifications in response to your application dated April 9, 1981, subsequent discussions between the NRC staff and your staff, and your revised application dated July 15, 1981.

The amendment contains several changes, clarifications, and improvements in the operability and surveillance requirements for hydraulic snubbers and adds similar new requirements for mechanical snubbers.)

Your amendment application contains proposed Technical Specifications in response to our letter of November 20, 1980 concerning Technical Specifications for snubber surveillance. The staff has reviewed your application and determined that it is in conformance with the most recent Standard Technical Specifications (STS-NUREG-0123, Rev. 3). Minor changes to your proposal were discussed with your staff, and your revised amendment request of July 15, 1981 is responsive to our requests. We, therefore, find the enclosed Technical Specification changes acceptable.

Consequently, the Technical Specification changes associated with snubber surveillance are acceptable as an administrative change implementing a previously reviewed and approved action by the Commission.

CP  
1

We have evaluated the potential for environmental impact of plant operation in accordance with the enclosed amendment and 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.

OFFICE							
SURNAME	B110230629	B11007					
DATE	PDR	ADDCK	05000298				
	P		PDR				

Mr. J. M. Pilant

2

October 7, 1981

Since the amendment applies only to administrative details, it does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin, and therefore does not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of the related Notice of Issuance is also enclosed.

Sincerely,

~~ORIGINAL SIGNED BY~~

Byron L. Siegel, Project Manager  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

- 1. Amendment No. 74
- 2. Notice

cc: w/enclosures  
See next page

Distribution:

- Docket File
- NRC PDR
- Local PDR
- ORB#2 Reading
- D. Eisenhut
- S. Norris
- B. Siegel
- OELD
- IE (4)
- G. Deegan (4)
- B. Scharf (10)
- J. Wetmore
- ACRS (10)
- OPA (Clare Miles)
- R. Diggs
- NSIC
- TERA
- ASLAB
- Gray File
- H. Shaw

FR NOTICE  
+  
AMENDMENT  
ONLY

OFFICE	ORB#2	ORB#2	ORB#2	ADP	OELD	
SURNAME	SNorris	BSiegel:pbe	Tippolito	Novak	[Signature]	
DATE	9/22/81	9/22/81	9/22/81	9/22/81	9/23/81	

Mr. J. M. Pilant  
Nebraska Public Power District

cc:

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

Mr. Dennis Dubois  
USNRC  
Resident Inspector  
P. O. Box 218  
Brownsville, NE 68321

U. S. Environmental Protection Agency  
Region VII Office  
ATTN: EIS COORDINATOR  
324 East 11th Street  
Kansas City, MO 64106



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. 74  
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 July 15, 1981 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 Operating 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. 74, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

8110230632 811007  
PDR ADOCK 05000298  
PDR

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

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Dated: October 7, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 74

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Revise Appendix A as follows:

<u>Remove</u>	<u>Insert</u>
137a	137a
137b	137b
137c	137c
137d	137d
137e	137e
-	137f
-	137g
-	137h
-	137i
-	137j
-	137k
-	137l
153a	153a
-	153b
229	229

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.6.H Shock Suppressors (Snubbers)

1. During all modes of operation except Cold Shutdown and Refuel, all safety related snubbers shall be operable except as noted in 3.6.H.2 through 3.6.H.5 below.
2. The snubbers listed in Tables 3.6.1, 3.6.2, and 3.6.3 are required to protect the primary coolant system or other safety related systems or components. All others are therefore exempt from these specifications.
3. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.6.H.4 on the supported component or declare the supported system or subsystem inoperable and follow the appropriate ACTION statement for that system.
4. If a snubber is determined to be inoperable while the reactor is in the shutdown or refuel mode, the snubber shall be made operable or replaced prior to reactor startup.
5. Snubbers may be added to, removed, or substituted for, by analysis, from safety related systems without prior License Amendment to Tables 3.6.1, 3.6.2, and 3.6.3, provided that a revision to these tables is included with a subsequent License Amendment request.

4.6.H Shock Suppressors (Snubbers)

The following surveillance requirements apply to all snubbers listed in Tables 3.6.1, 3.6.2, and 3.6.3.

1. All snubbers shall be visually inspected 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 or more	31 days + 25%

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

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

2. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting

4.6.H Shock Suppressors (Snubbers)  
(cont'd)

structure are secure. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; or (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specifications 4.6.H.6 or 4.6.H.7 as applicable. However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers.

3. At least once per 18 months during shutdown, a representative sample, 10% of the total of each type of snubber in use in the plant, shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria of Specification 4.6.H.5 or 4.6.H.6, an additional 10% of that type of snubber shall be functionally tested.
4. The representative sample selected for functional testing shall include various configuration, operating environments and the range of size and capacity of snubbers. Tables 3.6.1, 3.6.2, and 3.6.3 may be used jointly or separately as the basis for the sampling plan.

4.6.H Shock Suppressors (Snubbers)  
(cont'd)

In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested. Test results of these snubbers may not be included for the resampling.

Permanent or other exemptions from functional testing for individual snubbers, in high radiation zones or that are difficult to remove may be granted by the Commission only if a justifiable basis for exemption is presented and/or snubber life destructive testing was performed to qualify snubber operability for all design conditions at either the completion of their fabrication or at a subsequent date.

If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design deficiency all snubbers of the same design and subject to the same defect shall be tested or inspected to determine if the defect is present. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

For the snubber(s) found inoperable, an engineering evaluation shall be performed to determine the need for further action or testing on affected components.

4.6.H Snock Suppressors (Snubbers)  
(cont'd)

5. Hydraulic Snubbers Functional  
Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension.

6. Mechanical Snubbers Functional  
Test Acceptance Criteria

The mechanical snubber functional test shall verify that:

1. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force.
2. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
3. Snubber release rate, where required, is within the specified range in compression or tension.

7. Snubber Service Life Monitoring

A record of the service life of each snubber, the date at which the designated service life commences and the installation and maintenance records on which the designated service life is based shall be maintained as required by Specification 6.6.2.J.

4.6.H Snock Suppressors (Snubbers)  
(cont'd)

Concurrent with the first in-service visual inspection and at least once per 18 months thereafter, the installation and maintenance records of each snubber listed in Tables 3.6.1, 3.6.2, and 3.6.3 shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. This reevaluation, replacement or reconditioning shall be indicated in the records.

Table 3.6.1

SAFETY RELATED HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS)

<u>Snubber No.</u>	<u>Location</u>	<u>Elevation</u>
BS-S-1	Torus Area	870'
BS-S-2	Torus Area	889'
BS-S-3	Torus Area	890'
BS-S-113A	Torus Area	890'
BS-S-113B	Torus Area	891'
BS-S-116A	Torus Area	889'
BS-S-116B	Torus Area	889'
BS-S-125A	Torus Area	892'
BS-S-125B	Torus Area	891'
CS-S-1	S.E. Quad	918'
CS-S-2	S.E. Quad	929'
CS-S-3	S.E. Quad	946'
CS-S-6	S.E. Quad	918'
CS-S-7	S.E. Quad	929'
CS-VE-7	S.E. Quad	894'
CS-S-10	Rx Bldg, 931'	946'
CS-S-11	Rx Bldg, 931'	946'
CU-S-89	S.E. Torus Area	893'
HP-S-4	S.W. Quad	872'
HP-S-11	S.W. Quad	869'
HP-S-15	S.W. Quad	874'
HP-S-18A	HPCI Rm	865'
HP-S-22A	HPCI Rm	865'
MS-S-1	S.W. Quad	864'
MS-S-2	S.W. Quad	868'
MS-S-3	S.W. Quad	880'
MS-S-4	S.W. Quad	873'
MS-S-7A	S.W. Quad	874'
MS-S-7B	S.W. Quad	874'
MS-S-8	Torus Area	885'
MS-S-10	Torus Area	899'
MS-S-11	Torus Area	897'
MS-S-11A	Torus Area	897'
MS-S-12	Torus Area	888'
MS-S-12A	Torus Area	889'
MS-S-13	"B" RHR Hx Rm	904'
MS-S-13A	"B" RHR Hx Rm	905'
MS-S-13B	"B" RHR Hx Rm	911'
MS-S-14	"B" RHR Hx Rm	923'
MS-S-15	"B" RHR Hx Rm	934'
MS-S-15A	"B" RHR Hx Rm	934'
MS-S-16	Torus Area	885'
MS-S-16A	Torus Area	881'
MS-S-16B	Torus Area	881'

Table 3.5.1

SAFETY RELATED HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS) (Cont'd)

Snubber No.	Location	Elevation
MS-S-17	"A" RHR Hx Rm	904'
MS-S-18	"A" RHR Hx Rm	905'
MS-S-19	"A" RHR Hx Rm	923'
MS-S-20	"A" RHR Hx Rm	934'
MS-S-20A	"A" RHR Hx Rm	934'
MS-S-23	Torus Area	898'
MS-S-24	Torus Area	898'
MS-S-25	N.E. Quad	877'
MS-S-26	N.E. Quad	879'
MS-S-75	"A" RHR Hx Rm	932'
MS-S-76	"B" RHR Hx Rm	932'
MS-S-111A	"A" RHR Hx Rm	923'
RCC-S-3	Rx Bldg, 931'	945'
RCC-S-4	Rx Bldg, 931'	943'
RCC-S-20	Rx Bldg, 931'	953'
RCC-S-21	Rx Bldg, 931'	953'
RCC-S-22	Rx Bldg, 931'	953'
RF-S-1	N.E. Quad	898'
RF-S-1A	N.E. Quad	896'
RF-S-2	N.E. Torus Area	896'
RF-S-3	HPCI Rm	870'
RF-S-4	S.W. Torus Area	894'
RF-S-5	S.W. Torus Area	897'
RF-S-6	S.W. Torus Area	891'
RF-S-45C	N.E. Quad	882'
RF-S-45D	N.E. Quad	882'
RF-S-46A	N.E. Quad	882'
RF-S-51A	N.E. Torus	897'
RF-S-51B	N.E. Torus	897'
RH-S-20	Rx Bldg, 903'	912'
RH-S-21	Rx Bldg, 903'	911'
RH-S-22	Torus Area	895'
RH-S-23	Torus Area	892'
RH-S-24	Torus Area	897'
RH-S-25	N. RHR Hx Rm	927'
RH-S-25A	Rx Bldg, 903'	922'
RH-S-26	N. RHR Hx Rm	929'
RH-S-27A	"A" RHR Hx Rm	933'
RH-S-29	Rx Bldg, 903'	904'
RH-S-30A	Torus Area	898'
RH-S-30E	Torus Area	898'
RH-S-32	Torus Area	894'
RH-S-33D	Torus	892'

Table 3.6.1

SAFETY RELATED HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS) (Cont'd)

Snubber No.	Location	Elevation
RH-S-34	Rx Bldg, 903'	919'
RH-S-35	S. RHR Hx Rm	912'
RH-S-36	S. RHR Hx Rm	914'
RH-S-37	S. RHR Hx Rm	916'
RH-S-38	S. RHR Hx Rm	930'
RH-S-39	S. RHR Hx Rm	927'
RH-S-40	S. RHR Hx Rm	915'
RH-S-41	S.W. Quad	873'
RH-S-42	S.W. Quad	874'
RH-S-43	Torus Area	897'
RH-S-44	S.W. Quad	884'
RH-S-45	S.W. Quad	884'
RH-S-48	N.W. Quad	884'
RH-S-49	N.W. Quad	885'
RH-S-51	N. RHR Hx Rm	914'
RH-S-52	N. RHR Hx Rm	915'
RH-S-54	N.W. Quad	873'
RH-S-55	N.W. Quad	874'
RH-S-56	N. RHR Hx Rm	927'
RH-S-57	N. RHR Hx Rm	927'
RH-S-59	Torus Area	896'
RH-S-65	S.W. Quad	887'
RH-S-66	Rx Bldg, 903'	907'
RH-S-76A	Torus Area	898'
RH-S-76B	Torus Area	898'
RH-S-77	Torus Area	890'
RH-S-78A	Torus Area	897'
RH-S-78B	Torus Area	897'
RH-S-80	N.W. Quad	889'
RH-S-96A	Rx Bldg, 903'	920'
RH-S-98	N.W. Quad	891'
RH-S-103A	S.W. Quad	876'
RH-S-107A	N.W. Quad	876'
SW-H-23A	Intake Str.	904'
SW-H-23D	Intake Str.	904'
SW-H-23E	Intake Str.	904'
SW-H-23H	Intake Str.	904'

Table 3.6.2

ACCESSIBLE SAFETY RELATED MECHANICAL SHOCK SUPPRESSORS (SNUBBERS)

<u>Snubber No.</u>	<u>Location</u>	<u>Elevation</u>
MS-S-9A	Torus Area	894'
MS-S-9B	Torus Area	894'
RH-S-58	"A" RHR Hx Rm	921'
RF-S-51C	N.E. Torus Area	899'
SW-H-23B	Intake Str.	904'
SW-H-23C	Intake Str.	904'
SW-H-23F	Intake Str.	904'
SW-H-23G	Intake Str.	904'

Table 3.6.3

INACCESSIBLE SAFETY RELATED MECHANICAL SHOCK SUPPRESSORS (SNUBBERS)

<u>Snubber No.</u>	<u>Location</u>	<u>Elevation</u>
CS-S-4	Drywell	947'
CS-S-5	Drywell	951'
CS-S-8	Drywell	947'
CS-S-9	Drywell	951'
CU-S-3A	Drywell	925'
CU-S-3B	Drywell	925'
MS-S-21	Drywell	920'
MS-S-22	Drywell	919'
MS-S-63	Drywell	921'
MS-S-149A	Steam Tunnel, Rx Bldg	918'
RF-S-8	Drywell	924'
RF-S-9	Drywell	924'
RF-S-10	Drywell	928'
RF-S-11	Drywell	924'
KS-S-12	Drywell	924'
RF-S-13	Drywell	928'
RF-S-14	Drywell	925'
RF-S-15	Drywell	922'
RF-S-16	Drywell	923'
RF-S-17	Drywell	927'
RF-S-18	Drywell	924'
RF-S-19	Drywell	924'
RH-S-3	Rx Under Sniield Plug	972'
RH-S-4	Rx Cavity	972'
RH-S-5	Drywell	921'
RH-S-6	Drywell	920'
RH-S-7	Drywell	921'
RH-S-8A	Drywell	918'
RH-S-8B	Drywell	918'
RH-S-9	Drywell	915'
RH-S-10	Drywell	911'
RH-S-11	Drywell	916'
RH-S-13	Drywell	922'
RH-S-14	Drywell	921'
RH-S-15	Drywell	922'
RH-S-16	Drywell	917'
RH-S-17	Drywell	917'
RH-S-18	Drywell	916'
RH-S-19	Drywell	916'
RH-S-67	Drywell	917'
RH-S-68	Drywell	917'
RH-S-69A	Drywell	915'
RH-S-69B	Drywell	915'
RH-S-70	Drywell	916'

Table 3.6.3

INACCESSIBLE SAFETY RELATED MECHANICAL SHOCK SUPPRESSORS (SNUBBERS)  
(Cont'd)

Snubber No.	Location	Elevation
KH-S-71	Drywell	914'
RH-S-72	Drywell	914'
RH-S-72A	Drywell	914'
RH-S-73	Drywell	916'
SS-A2	Drywell	923'
SS-A3	Drywell	922'
SS-B2	Drywell	924'
SS-B3	Drywell	922'
SS-C2	Drywell	924'
SS-C3	Drywell	922'
SS-D2	Drywell	923'
SS-D3	Drywell	923'
SS-7A1	Drywell	914'
SS-7A2	Drywell	914'
SS-7B1	Drywell	914'
SS-7B2	Drywell	914'
SS-8A1	Drywell	917'
SS-8A2	Drywell	917'
SS-1A	Drywell	891'
SS-2A	Drywell	898'
SS-3A1	Drywell	904'
SS-3A2	Drywell	904'
SS-4A	Drywell	909'
SS-5A	Drywell	898'
SS-1B	Drywell	891'
SS-2B	Drywell	898'
SS-3B1	Drywell	904'
SS-3B2	Drywell	904'
SS-4B	Drywell	909'
SS-5B	Drywell	898'
VR-S-1	Drywell	902'
VR-S-2	Drywell	919'
VR-S-3	Drywell	899'
VR-S-4	Drywell	918'
VR-S-5A	Drywell	903'
VR-S-5B	Drywell	903'
VR-S-6	Drywell	905'
VR-S-7A	Drywell	898'
VR-S-7B	Drywell	893'
VR-S-8	Drywell	899'

Table 3.6.3

INACCESSIBLE SAFETY RELATED MECHANICAL SHOCK SUPPRESSORS (SNUBBERS)  
(Cont'd)

Snubber No.	Location	Elevation
VR-H-61D	Drywell	897'
VR-H-62C	Drywell	899'
VR-H-63B	Drywell	897'
VR-H-63C	Drywell	898'
VR-55-9-Y	Drywell	919'
VR-55-9-Z	Drywell	919'
VR-55-23-X	Drywell	906'
VR-55-23-Y	Drywell	907'
VR-55-26-Z	Drywell	906'
VR-56-12-Y	Drywell	913'
VR-56-26-Y	Drywell	916'
VR-56-24-X	Drywell	907'
VR-56-24-Z	Drywell	910'
VR-57-12-Y	Drywell	922'
VR-58-12-Y	Drywell	924'
VR-59-7-X	Drywell	920'
VR-59-7-Z	Drywell	920'
VR-60-7-X	Drywell	920'
VR-60-7-Z	Drywell	920'
VR-61-8-X	Drywell	919'
VR-61-8-Y	Drywell	919'
VR-61-8-Z	Drywell	919'
VR-61-17-X	Drywell	915'
VR-61-17-Z	Drywell	915'
VR-62-8-X	Drywell	922'
VR-62-8-Y	Drywell	915'
VR-62-8-Z	Drywell	915'
VR-62-17-X	Drywell	915'
VR-62-17-Z	Drywell	915'
VR-S-14	Drywell	896'
VR-S-32	Drywell	897'
VR-S-43	Drywell	894'
VR-S-51	Drywell	896'
VR-S-87A	Drywell	894'
VR-S-87B	Drywell	894'
VR-S-88	Drywell	894'
VR-H-62B	Drywell	899'
VR-H-64D	Drywell	899'

BASES:

3.6.H and 4.6.H

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 relatively low probability events, a period of 72 hours is allowed for repairs or replacement. Since plant startup should not commence with knowingly defective safety related equipment, Specification 3.6.H.4 prohibits startup with inoperable snubbers.

All safety related snubbers are visually inspected for overall integrity and operability.

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.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and/or verified by functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions, such as temperature, radiation and vibration.

BASES (cont'd)

When a snubber is found inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

In cases where the cause of failure has been identified, additional snubbers, having a high probability for the same type of failure or that are being used in the same application that caused the failure, shall be tested. This requirement increases the probability of locating inoperable snubbers without testing 100% of the snubbers.

Hydraulic snubbers and mechanical snubbers may each be treated as a different entity for the above surveillance programs.

To further increase the assurance of snubber reliability, functional tests should be performed once each refueling cycle. Ten percent of each type of snubber represents an adequate sample for such tests. Observed failures on these samples should require testing of additional units. Snubbers in high radiation areas or those especially difficult to remove need not be selected for functional tests provided operability was previously verified.

The service life of a snubber is evaluated via manufacturer input and consideration of the snubber service conditions. The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life.

6.6.2.G (cont'd)

usage evaluation per the ASME Boiler and Pressure Vessel Code Section III was performed<sup>1</sup> for the conditions defined in the design specification. The locations to be monitored shall be:

- a. The feedwater nozzles
- b. The shell at or near the waterline
- c. The flange studs

2. Monitoring, Recording, Evaluating, and Reporting

- a. Operational transients that occur during plant operations will, at least annually, be reviewed and compared to the transient conditions defined in the component stress report for the locations listed in 1 above, and used as a basis for the existing fatigue analysis.
- b. The number of transients which are comparable to or more severe than the transient evaluated in the stress report Code fatigue usage calculations will be recorded in an operating log book. For those transients which are more severe, available data, such as the metal and fluid temperatures, pressures, flow rates, and other conditions will be recorded in the log book.
- c. The number of transient events that exceed the design specification quantity and the number of transient events with a severity greater than that included in the existing Code fatigue usage calculations shall be added. When this sum exceeds the predicated number of design condition events by twenty-five<sup>2</sup>, a fatigue usage evaluation of such events will be performed for the affected portion of the RCPB.

H. Records of individual plant staff members showing qualifications, training and retraining.

I. Records for Environmental Qualification which are covered under the provisions of paragraph 6.8.

J. Records of the service lives of all hydraulic and mechanical snubbers, listed on Tables 3.6.1, 3.6.2, 3.6.3 including the date at which the service life commences and associated installation and maintenance records.

6.6.3 Records and logs relating to the following items shall be kept for two years.

A. The test results, in units of microcuries, for leak tests of sources performed pursuant to Specification 3.8.A.

B. Records of annual physical inventories verifying accountability of the sources on record.

1. See paragraph N-415.2, ASME Section III, 1965 Edition.

2. The Code rules permit exclusion of twenty-five (25) stress cycles from secondary stress and fatigue usage evaluation. (See paragraphs N-412(t)(3) and N-417.10(f) of the Summer 1968 Addenda to ASME Section III, 1968 Edition.)

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

The amendment contains several changes, clarifications, and improvements in the operability and surveillance requirements for hydraulic snubbers and adds similar new requirements for mechanical snubbers.

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.

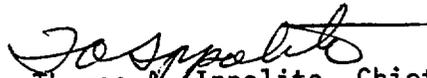
The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4), an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with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

8110230633 811007  
PDR ADOCK 05000298  
PDR

For further details with respect to this action, see (1) the application for amendment dated July 15, 1981, (2) Amendment No. 74 to License No. DPR-46, and (3) the Commission's letter to the licensee dated October 7, 1981. 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 68304. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C., Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 7th day of October 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing