

Exhibit B

Prairie Island Nuclear Generating Plant

License Amendment Request Dated January 10, 1992

Proposed Changes Marked Up
On Existing Technical Specification Pages

Exhibit B consists of existing and new Technical Specification pages with the proposed changes highlighted on those pages. The existing pages affected by this License Amendment Request are listed below:

TS-xii
TS.4.13-1
TS.4.13-2
TS.4.13-3
B.4.13-1

TECHNICAL SPECIFICATIONSLIST OF TABLES

<u>TS TABLE</u>	<u>TITLE</u>
3.5-1	Engineered Safety Features Initiation Instrument Limiting Set Points
3.5-2	Instrument Operating Conditions for Reactor Trip
3.5-3	Instrument Operating Conditions for Emergency Cooling System
3.5-4	Instrument Operating Conditions for Isolation Functions
3.5-5	Instrument Operating Conditions for Ventilation Systems
3.5-6	Instrument Operating Conditions for Auxiliary Electrical System
3.9-1	Radioactive Liquid Effluent Monitoring Instrumentation
3.9-2	Radioactive Gaseous Effluent Monitoring instrumentation
3.14-1	Safety Related Fire Detection Instruments
3.15-1	Event Monitoring instrumentation - Process & Containment
3.15-2	Event Monitoring instrumentation - Radiation
4.1-1	Minimum Frequencies for Checks, Calibrations and Test of Instrument Channels
4.1-2A	Minimum Frequencies for Equipment Tests
4.1-2B	Minimum Frequencies for Sampling Tests
4.2-1	Special Inservice Inspection Requirements
4.4-1	Unit 1 and Unit 2 Penetration Designation for Leakage Tests
4.10-1	Radiation Environmental Monitoring Program (REMP) Sample Collection and Analysis
4.10-2	RFMP - Maximum Values for the Lower Limits of Detection
4.10-3	RFMP - Reporting Levels for Radioactivity Concentrations in Environmental Samples
4.12-1	Steam Generator Tube Inspection
4.13-1	Snubber Visual Inspection Interval
4.17-1	Radioactive Liquid Effluent Monitoring Instrumentation Surveillance Requirements
4.17-2	Radioactive Gaseous Effluent Monitoring instrumentation Surveillance Requirements
4.17-3	Radioactive Liquid Waste Sampling and Analysis Program
4.17-4	Radioactive Gaseous Waste Sampling and Analysis Program
5.5-1	Anticipated Annual Release of Radioactive Material in Liquid Effluents From Prairie Island Nuclear Generating Plant (Per Unit)
5.5-2	Anticipated Annual Release of Radioactive Nuclides in Gaseous Effluent From Prairie Island Nuclear Generating Plant (Per Unit)
6.1-1	Minimum Shift Crew Composition

4.13 SNUBBERSApplicability

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 safety related snubbers. These requirements augment the inspections required by Section XI of the ASME Code.

- A. ~~Visual inspection of snubbers shall be conducted in accordance with the following schedule:~~

No. of Snubbers Found Inoperable per <u>Inspection Period</u>	Next Required <u>Inspection Period</u>
0	18 months \pm 25%
1	12 months \pm 25%
2	6 months \pm 25%
3,4	124 days \pm 25%
5,6,7	62 days \pm 25%
8 or more	31 days \pm 25%

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

As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

Snubbers ~~may be~~ are categorized ~~in two groups~~, as "accessible" or "inaccessible" based on their accessibility for inspection during reactor operation. ~~These two groups~~ Each of these categories (~~inaccessible and accessible~~) may be inspected independently according to the ~~above~~ schedule determined by Table TS.4.13-1.

The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table TS.4.13-1.

- B. Visual inspections shall verify that (1) ~~that there are~~ the snubber has no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure functional, and (3) ~~in those locations where snubber movement can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen up~~ fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified acceptable ~~may be determined operable~~ for the purpose of establishing the next visual inspection interval, ~~by~~ provided that:

- a. ~~Clearly establish~~ cause of the rejection is clearly established and recorded for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and
- b. ~~Functionally testing~~ The affected snubber is functionally tested in the as-found condition and ~~finding it~~ determined OPERABLE per Specification 4.13.D.

~~However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be considered inoperable for purposes of establishing the next visual inspection interval. All hydraulic snubbers found connected to an inoperable common hydraulic fluid reservoir shall be considered as inoperable snubbers counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the applicable action statement requirements shall be met.~~

- C. Except as specified below, functional testing of snubbers shall be conducted at least once per 18 months, ~~during cold shutdown~~. Ten percent of the total of each type snubber shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria in Specification 4.13.D below, an additional ten percent of that type of snubber shall be functionally tested until no more failures are found or all snubbers of that type have been tested.

The representative sample selected for functional testing shall include the various configurations, operating environments, and the range of size and capacity of the snubbers. Twenty-five percent of the sample shall include snubbers from the following three categories.

- a. The first snubber away from a reactor vessel nozzle
- b. Snubbers within five feet of heavy equipment (valve, pump, machine, motor, etc.)
- c. Snubbers within ten feet of the discharge of a safety/relief valve

Snubbers identified as "High Radiation Area" or "Difficult to Remove" are exempt from functional testing provided a justifiable basis for exemption is presented for Commission review; snubber life testing is performed to qualify snubber operability for all design conditions; or snubbers of the same type, configuration, and similar service have been tested for a ten year period and no failures have occurred. In such exempt cases, a qualitative test report shall be on file to substitute for the required functional testing.

In addition to the regular sample and specified re-sampling, 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.

~~4.13.C. Cont.~~

If any snubber selected for functional testing either fails to lockup or fails to move (i.e., frozen in place) the case shall be evaluated and all snubbers subject to the same defect shall be functionally tested. This testing is in addition to the regular sample and specified re-samples.

D. Hydraulic snubber functional tests shall verify that:

- a. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
- b. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.
- E. An engineering evaluation shall be performed for all components supported by inoperable snubbers. The purpose of this engineering evaluation shall be to determine if the components were adversely affected by the inoperable snubber(s) to ensure that the components remain capable of meeting the designed service.
- F. The installation and maintenance records for each snubber shall be reviewed at least once every 18 months to verify that the indicated service life will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned to extend its service life beyond the date of the next scheduled service life review. This re-evaluation, replacement, or reconditioning shall be indicated in the records.

TABLE TS.4.13-1

SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 and 2)	Number of Unacceptable Snubbers		
	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, that decision must be made and documented before any inspection and that decision shall be used as the basis upon which to determine the next inspection interval for that category.

Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.

Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.

Note 4: If the number of unacceptable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.

Note 5: If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C but greater than the number in Column E, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.

Note 6: All inspection intervals up to and including 48 months may be adjusted a maximum of plus or minus 25%.

4.13 SNUBBERS

Bases

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an 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 verified by inservice 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.

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.

To provide assurance of snubber functional reliability, a representative sample of 10% of the installed snubbers will be functionally tested ~~during plant shutdowns~~ at 18 month intervals. Observed failures of these sample snubbers shall require functional testing of additional units.

The service life of a snubber is evaluated via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc...). 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.

All safety-related snubbers installed or planned for use at Prairie Island are hydraulic snubbers. No mechanical snubbers are used.

Exhibit C

Prairie Island Nuclear Generating Plant

License Amendment Request Dated January 10, 1992

Revised Technical Specification Pages

Exhibit C consists of revised and new pages for the Prairie Island Nuclear Generating Plant Technical Specification with the proposed changes incorporated. The revised and new pages are listed below:

TS-xii
TS.4.13-1
TS.4.13-2
TS.4.13-3
TABLE TS.4.13-1 (Page 1 of 2)
TABLE TS.4.13-1 (Page 2 of 2)
B.4.13-1

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3.5-6	Instrument Operating Conditions for Auxiliary Electrical System
3.9-1	Radioactive Liquid Effluent Monitoring Instrumentation
3.9-2	Radioactive Gaseous Effluent Monitoring instrumentation
3.14-1	Safety Related Fire Detection Instruments
3.15-1	Event Monitoring instrumentation - Process & Containment
3.15-2	Event Monitoring instrumentation - Radiation
4.1-1	Minimum Frequencies for Checks, Calibrations and Test of Instrument Channels
4.1-2A	Minimum Frequencies for Equipment Tests
4.1-2B	Minimum Frequencies for Sampling Tests
4.2-1	Special Inservice Inspection Requirements
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4.10-3	RFMP - Reporting Levels for Radioactivity Concentrations in Environmental Samples
4.12-1	Steam Generator Tube Inspection
4.13-1	Snubber Visual Inspection Interval
4.17-1	Radioactive Liquid Effluent Monitoring Instrumentation Surveillance Requirements
4.17-2	Radioactive Gaseous Effluent Monitoring instrumentation Surveillance Requirements
4.17-3	Radioactive Liquid Waste Sampling and Analysis Program
4.17-4	Radioactive Gaseous Waste Sampling and Analysis Program
5.5-1	Anticipated Annual Release of Radioactive Material in Liquid Effluents From Prairie Island Nuclear Generating Plant (Per Unit)
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6.1-1	Minimum Shift Crew Composition

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Objective

To verify the OPERABILITY of hydraulic snubbers.

Specification

The following surveillance requirements apply to all safety related snubbers. These requirements augment the inspections required by Section XI of the ASME Code.

- A. As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

Snubbers are categorized as "accessible" or "inaccessible" based on their accessibility for inspection during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table TS.4.13-1.

The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table TS.4.13-1.

- B. Visual inspections shall verify that (1) the snubber has no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are functional, and (3) fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified acceptable for the purpose of establishing the next visual inspection interval, provided that:
- a. The cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and
 - b. The affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.13.D.

All hydraulic snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the applicable action statement requirements shall be met.

- C. Except as specified below, functional testing of snubbers shall be conducted at least once per 18 months. Ten percent of the total of each type snubber shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria in Specification 4.13.D below, an additional ten percent of that type of snubber shall be functionally tested until no more failures are found or all snubbers of that type have been tested.

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- D. Hydraulic snubber functional tests shall verify that:
- a. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
 - b. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

- E. An engineering evaluation shall be performed for all components supported by inoperable snubbers. The purpose of this engineering evaluation shall be to determine if the components were adversely affected by the inoperable snubber(s) to ensure that the components remain capable of meeting the designed service.
- F. The installation and maintenance records for each snubber shall be reviewed at least once every 18 months to verify that the indicated service life will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned to extend its service life beyond the date of the next scheduled service life review. This re-evaluation, replacement, or reconditioning shall be indicated in the records.

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Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.

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4.13 SNUBBERS

Bases

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