

ENCLOSURE

EDWIN I. HATCH NUCLEAR PLANT - UNITS 1,2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:  
REVISIONS TO SNUBBER VISUAL INSPECTION INTERVALS  
IN ACCORDANCE WITH GENERIC LETTER 90-09

PAGE CHANGE INSTRUCTIONS

The proposed changes to the Plant Hatch Units 1 and 2 Technical Specifications will be incorporated as follows:

	<u>Page</u>	<u>Instruction</u>
UNIT 1:	iv	Replace
	ix	Replace
	3.6-10a	Replace
	3.6-10b	Replace
	3.6-10c	Replace
	3.6-10d	Replace
	3.6-10e	Add
	3.6-10f	Add
UNIT 2:	3/4 7-11	Replace
	3/4 7-12	Replace
	3/4 7-13	Replace
	3/4 7-14	Replace
	3/4 7-15	Replace
	3/4 7-16	Replace
	3/4 7-17	Replace

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# TABLE OF CONTENTS

Section	Section	Page
LIMITING CONDITIONS FOR OPERATION		SURVEILLANCE REQUIREMENTS
3.6. PRIMARY SYSTEM BOUNDARY	4.6. PRIMARY SYSTEM BOUNDARY	3.6-1
A. Reactor Coolant Heatup and Cooldown	A. Reactor Coolant Heatup and Cooldown	3.6-1
B. Reactor Vessel Temperature and Pressure	B. Reactor Vessel Temperature and Pressure	3.6-1
C. Reactor Vessel Head Stud Tensioning	C. Reactor Vessel Head Stud Tensioning	3.6-2
D. Idle Recirculation Loop Startup	D. Idle Recirculation Loop Startup	3.6-2
E. Recirculation Pump Start	E. Recirculation Pump Start	3.6-3
F. Reactor Coolant Chemistry	F. Reactor Coolant Chemistry	3.6-4
G. Reactor Coolant Leakage	G. Reactor Coolant Leakage	3.6-7
H. Safety and Relief Valves	H. Safety and Relief Valves	3.6-9
I. Jet Pumps	I. Jet Pumps	3.6-9b
J. Recirculation System	J. Recirculation System	3.6-9c
K. Structural Integrity	K. Structural Integrity	3.6-10
L. Snubbers	L. Snubbers	3.6-10a
3.7. CONTAINMENT SYSTEMS	4.7. CONTAINMENT SYSTEMS	3.7-1
A. Primary Containment	A. Primary Containment	3.7-1
B. Standby Gas Treatment System	B. Standby Gas Treatment System	3.7-10
C. Secondary Containment	C. Secondary Containment	3.7-12
D. Primary Containment Isolation Valves	D. Primary Containment Isolation Valves	3.7-13
3.8. RADIOACTIVE MATERIALS	4.8. RADIOACTIVE MATERIALS	3.8-1
A. Miscellaneous Radioactive Materials Sources	A. Miscellaneous Radioactive Materials Sources	3.8-1
3.9. AUXILIARY ELECTRICAL SYSTEMS	4.9. AUXILIARY ELECTRICAL SYSTEMS	3.9-1
A. Requirements for Reactor Startup	A. Auxiliary Electrical Systems Equipment	3.9-1

LIST OF TABLES  
(Concluded)

<u>Table</u>	<u>Title</u>	<u>Page</u>
4.6-1	Snubber Visual Inspection Interval	3.6-10e
3.7-1	Primary Containment Isolation Valves Which Receive a Primary Containment Isolation Signal	3.7-16
3.7-2	Testable Penetrations with Double O-Ring Seals	3.7-21
3.7-3	Testable Penetrations with Testable Bellows	3.7-22
3.7-4	Primary Containment Testable Isolation Valves	3.7-23
3.13-1	Fire Detectors	3.13-2
3.13-2	Fire Hose Stations	3.13-9
3.14.1-1	Radioactive Liquid Effluent Monitoring Instrumentation	3.14-2
3.14.2-1	Radioactive Gaseous Effluent Monitoring Instrumentation	3.14-7
4.14.1-1	Radioactive Liquid Effluent Monitoring Instrumentation Surveillance Requirements	3.14-4
4.14.2-1	Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements	3.14-11
4.15.1-1	Radioactive Liquid Effluent Sampling and Analysis Program	3.15-2
4.15.2-1	Radioactive Gaseous Waste Sampling and Analysis Program	3.15-10
3.16.1-1	Radiological Environmental Monitoring Program	3.16-4
3.16.1-2	Reporting Levels for Radioactivity Concentrations in Environmental Samples	3.16-7
4.16.1-1	Lower Limit of Detection	3.16-8
6.2.2-1	Minimum Shift Crew Composition	6-4
6.9.1.7-1	Environmental Radiological Monitoring Program Summary	6-18
6.9.2-1	Special Reporting Requirements	6-19

### 3.6.L. SNUBBERS

#### LIMITING CONDITION FOR OPERATION

3.6.L. All snubbers\* shall be OPERABLE. The only snubbers excluded from this requirement are those installed on non-safety related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

APPLICABILITY: Conditions 1, 2, and 3.

#### ACTION:

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.L.4. on the supported component or declare the supported system inoperable and follow the appropriate limiting condition of operation statement(s) for that system.

#### SURVEILLANCE REQUIREMENTS

4.6.L. Each snubber shall be demonstrated OPERABLE by the performance of the following augmented inservice inspection program.

##### 1. Inspection Types

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

##### 2. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.6-1. The visual inspection interval for each category of snubber shall be determined based upon the criteria provided in Table 4.6-1 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before Amendment \_\_\_\_.

##### 3. Visual Inspection Acceptance Criteria

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 (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be

\*The applicable snubbers shall be identified in plant procedures.

### 3/4.6.L. SNUBBERS

#### SURVEILLANCE REQUIREMENTS (Continued)

4.6.L.3. generically acceptable; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.6.L.5 or 4.6.L.6. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable and may be reclassified as acceptable for determining the next inspection interval provided that criterion (1) and (2) above are met. 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 ACTION requirements shall be met.

#### 4. Functional Tests

At least once per 18 months during shutdown, a representative sample of 10% of the total of each category (hydraulic or mechanical) safety-related 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.L.5. or 4.6.L.6., an additional sample of at least 1/2 the size of the initial lot of that category of snubber shall be functionally tested.

Functional testing shall continue until no additional inoperable snubbers of a particular category are found within a sample or until all safety-related snubbers of that category have been functionally tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers. The representative sample shall be selected randomly from the total population of safety-related snubbers. At least 25% of the snubbers in the representative sample shall include snubbers from the following three groups:

1. The first snubber away from each reactor vessel nozzle,
2. Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc.), and
3. Snubbers within 10 feet of the discharge from a safety-relief valve.

Snubbers identified in plant procedures as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample\*. The populations of

\*Permanent or other exemptions from functional testing for individual snubbers in those groups 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.



### 3/4.6.1. SNUBBERS

#### SURVEILLANCE REQUIREMENTS (Continued)

safety-related hydraulic and safety-related mechanical snubbers may be used jointly or separately as the basis for the sampling plan.

In addition to the regular sample, snubbers placed in the same location as snubbers which failed the previous functional test shall be retested during the next test period. Test results of these snubbers shall not be included in the sampling plan.

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 subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test criteria.

For the snubber(s) found inoperable, an engineering evaluation shall be performed on the components which are supported by the snubber(s). The purpose of this engineering evaluation shall be to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

#### 5. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test 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.

#### 6. Mechanical Snubbers Functional Test Acceptance Criteria

The mechanical snubber functional test shall verify that:

- a. The snubber operates freely over the stroke in both tension and compression.
- b. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force.
- c. Activation (restraining action) is achieved with the specified range of velocity or acceleration in both tension and compression.

### 3/4.6.L. SNUBBERS

#### SURVEILLANCE REQUIREMENTS (Continued)

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##### 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 6.10.2.n.

Concurrent with the inservice visual inspection performed during the first refueling outage following issuance of amendment 112 and at least once per 18 months thereafter, the installation and maintenance records for each safety-related snubber shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded by more than 10% prior to the next scheduled snubber service life review. If the indicated service life will be exceeded by more than 10% 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. The results of the reevaluation may be used to justify a change to the service life of the snubber. This reevaluation replacement or reconditioning shall be indicated in the records.

Table 4.6-1

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

TABLE NOTATION

- 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.



Table 4.6-1 (Continued)

TABLE NOTATION (Cont.)

- 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 B, 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: The provisions of Definition II., Surveillance Frequency, are applicable for all inspection intervals up to and including 48 months.

## PLANT SYSTEMS

### 3/4.7.4 SNUBBERS

#### LIMITING CONDITION FOR OPERATION

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3.7.4 All snubbers\* shall be operable. The only snubbers excluded from this requirement are those installed on non-safety related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

APPLICABILITY: Conditions 1, 2, and 3.

#### ACTION:

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 4.7.4.d on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

#### SURVEILLANCE REQUIREMENTS

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4.7.4 Each snubber shall be demonstrated OPERABLE by the performance of the following augmented inservice inspection program in addition to the requirements of Specification 4.0.5.

a. Inspection Types

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

b. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.7-1. The visual inspection interval for each category of snubber shall be determined based upon the criteria provided in Table 4.7-1 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before Amendment \_\_\_\_.

c. Visual Inspection Acceptance Criteria

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

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\*The applicable snubbers shall be identified in plant procedures.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

4.7.4.c. 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 (1) 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 (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specifications 4.7.4.e or 4.7.4.f. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable and may be reclassified as acceptable for determining the next inspection interval, provided that criterion (1) and (2) above are met. 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 ACTION requirements shall be met.

#### d. Functional Tests

At least once per 18 months during shutdown, a representative sample of 10% of the total of each category (hydraulic or mechanical) safety-related 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 4.7.4.e or 4.7.4.f, an additional sample of at least 1/2 the size of the initial lot of that category of snubber shall be functionally tested.

Functional testing shall continue until no additional inoperable snubbers of a particular category are found within a sample or until all safety-related snubbers of that category have been functionally tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers. The representative sample shall be selected randomly from the total population of safety-related snubbers. At least 25% of the snubbers in the representative sample shall include snubbers from the following three groups:

1. The first snubber away from each reactor vessel nozzle,
2. Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc.), and

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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3. Snubbers within 10 feet of the discharge from a safety relief valve.

Snubbers identified in plant procedures as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample\*. The populations of safety-related hydraulic and safety-related mechanical snubbers may be used jointly or separately as the basis for the sampling plan.

In addition to the regular sample, snubbers placed in the same location as snubbers which failed the previous functional test shall be retested during the next test period. Test results of these snubbers shall not be included in the sampling plan.

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 subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test criteria.

For the snubber(s) found inoperable, an engineering evaluation shall be performed on the components which are supported by the snubber(s). The purpose of this engineering evaluation shall be to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

#### e. 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.

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\*Permanent or other exemptions from functional testing for individual snubbers in those groups 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.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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2. 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.

#### f. Mechanical Snubbers Functional Test Acceptance Criteria

The mechanical snubber functional test shall verify that:

1. The snubber operates freely over the stroke in both tension and compression.
2. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force.
3. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

#### g. 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 6.10.2.n.

Concurrent with the inservice visual inspection performed during the first refueling outage following issuance of amendment 51 and at least once per 18 months thereafter, the installation and maintenance records for each safety-related snubber shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded by more than 10% prior to the next scheduled snubber service life review. If the indicated service life will be exceeded by more than 10% 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. The results of the reevaluation may be used to justify a change to the service life of the snubber. This reevaluation, replacement or reconditioning shall be indicated in the records.



Table 4.7-1

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
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300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

TABLE NOTATION

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.



Table 4.7-1 (Continued)

TABLE NOTATION (Cont.)

- 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 B, 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: The provisions of Specification 4.0.2 are applicable for all inspection intervals up to and including 48 months.

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