

ENCLOSURE 2

NRC DOCKET 50-321
OPERATING LICENSE DPR-57
EDWIN I. HATCH NUCLEAR PLANT UNIT 1
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

The proposed changes to Unit 1 Technical Specifications (Appendix "A" to Operating License DPR-57) would be incorporated as follows:

<u>Remove Page</u>	<u>Insert Page</u>
iv	iv
viii	viii
3.6-10a through 3.6-10g	3.6-10a through 3.6-10d
3.6-31	3.6-31
3.6-32	3.6-32
6-20	6-20

<u>Section</u>		<u>Section</u>	<u>Page</u>
<u>LIMITING CONDITIONS FOR OPERATION</u>		<u>SURVEILLANCE REQUIREMENTS</u>	
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 3.6-9
J.	Recirculation Pump Speeds	J.	Recirculation Pump Speeds 3.6-10
K.	Structural Integrity of Primary System Boundary	K.	Structural Integrity of Primary System Boundary 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>
4.2-7	Check, Functional Test, and Calibration Minimum Frequency For Neutron Monitoring Instrumentation Which Initiates Control Rod Blocks	3.2-40
4.2-8	Check, Functional Test, and Calibration Minimum Frequency for Radiation Monitoring Systems Which Limit Radioactivity Release	3.2-42
4.2-9	Check and Calibration Minimum Frequency for Instrumentation Which Initiates Recirculation Pump Trip	3.2-45
4.2-10	Check, Functional Test, and Calibration Minimum Frequency for Instrumentation Which Monitors Leakage into the Drywell	3.2-46
4.2-11	Check and Calibration Minimum Frequency for Instrumentation Which Provides Surveillance Information	3.2-48
4.2-12	Instrumentation Which Initiates the Disconnection of Offsite Power Sources	3.2-49a
4.2-13	Instrumentation Which Initiates Energization by Onsite Power Sources	3.2-49b
4.6-1	Inservice Inspection Program	3.6-11
3.7-1	Primary Containment Isolation Valves	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
6.2.2-1	Minimum Shift Crew Composition	6-3
6.9-1	Special Reporting Requirements	6-19

3/4.6.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.3 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 performance of the following inservice inspection program.

1. Visual Inspections

All safety-related snubbers shall be visually examined to verify snubber operability. Visual inspections shall be performed in accordance with the following schedule:

<u>No. Inoperable Snubbers per Inspection Period</u>	<u>Subsequent Visual Inspection Period**</u>
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 snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with 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 structure are secure, and (3) for mechanical snubbers where snubber movement can be manually induced, the snubbers shall be inspected as follows: (a) At each refueling,

*The applicable snubbers shall be identified in plant procedures.

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

3/4.6.L SNUBBERS

SURVEILLANCE REQUIREMENTS (Continued)

systems associated with the safety-related mechanical snubbers shall be inspected to determine if there has been a severe dynamic event.

(b) In the event of a severe dynamic event, snubbers in that system which experienced the event shall be inspected during the refueling outage to assure the snubbers have freedom of movement and are not frozen up. The inspection shall consist of verifying freedom of motion using one of the following: (i) Manually induced snubber movement; (ii) stroking the mechanical snubber through its full range of travel. If one or more mechanical snubbers are found to be frozen up during this inspection, those snubbers shall be replaced (or overhauled) before returning to power. Re-inspection shall subsequently be performed according to the schedule of 4.6.L.1, but the scope of the examination shall be limited to the systems associated with the safety-related mechanical snubbers. 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; and (2) the affected snubber is functionally tested in the "as found" condition and determined OPERABLE per Specification 4.6.L.4 or 4.6.L.5, as applicable. However, if a hydraulic snubber is found to contain less than the required minimum volume of reserve fluid or if visible signs of leakage are present, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval.

3. Functional Tests

At least once per 18 months during shutdown, a representative sample of 10% of the total of each type (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.4 or 4.6.L.5, an additional sample of at least 1/2 the size of the initial lot of that type of snubber shall be functionally tested.

Functional testing shall continue until no additional inoperable snubbers of a particular type are found within a sample or until all safety-related snubbers of that type 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

3/4.6.L SNUBBERS

SURVEILLANCE REQUIREMENTS (Continued)

representative sample shall include snubbers from the following three categories:

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 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.

4. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

*Permanent or other exemptions from functional testing for individual snubbers in those categories 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.L SNUBBERS

SURVEILLANCE REQUIREMENTS (Continued)

- 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.

5. 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 within the specified range of velocity or acceleration in both tension and compression.

6. Unit Outage Inaccessible Snubber Inspection

In the event that all inaccessible snubbers are inspected, functionally tested, and repaired as necessary during a unit outage, and that it is thus demonstrated that all inaccessible snubbers are operable, the schedule in Specification 4.6.L.1 may be re-entered on a 6-month inspection interval for the inaccessible snubbers.

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 6.10.2.1.

Concurrent with the inservice visual inspection performed during the first refueling outage following issuance of this amendment 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.

BASES

3/4.6.L SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-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.

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 the 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 the 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 the installed snubbers will be functionally tested during plant shutdowns at 18-month intervals. Observed failures of sample snubbers shall require functional testing of additional units.

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

BASES

3/4.6.L SNUBBERS (Continued)

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. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

ADMINISTRATIVE CONTROL

RECORD RETENTION (Continued)

- c. Records of radiation exposure for all individuals entering radiation control areas.
- d. Records of gaseous and liquid radioactive material released to the environs.
- e. Records of transient or operational cycles for those unit components identified in Table 5.7.1-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members for the unit staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PRB and SRB.
- l. Records of the service lives of all safety-related hydraulic and mechanical snubbers including the date at which the service life commences and associated installation and maintenance records.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted

*Health Physics personnel, or personnel escorted by Health physics personnel in accordance with approved emergency procedures, shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

ENCLOSURE 3

NRC DOCKET 50-366
OPERATING LICENSE NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNIT 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

The proposed change to Unit 2 Technical Specifications (Appendix "A" to Operating License NPF-5) would be incorporated as follows:

<u>Remove Page</u>	<u>Insert Page</u>
VIII	VIII
XIII	XIII
3/4 7-1' through 3/4 7-18	3/4 7-11 through 3/4 7-18
B 3/4 7-2	B 3/4 7-2
B 3/4 7-3	B 3/4 7-3
6-18	6-18

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.7 PLANT SYSTEMS</u>	
3/4.7.1	SERVICE WATER SYSTEMS
	Residual Heat Removal Service Water System..... 3/4 7-1
	Service Water Systems..... 3/4 7-3
3/4.7.2	MAIN CONTROL ROOM ENVIRONMENTAL CONTROL SYSTEM. 3/4 7-6
3/4.7.3	REACTOR CORE ISOLATION COOLING SYSTEM..... 3/4 7-9
3/4.7.4	SNUBBERS..... 3/4 7-11
3/4.7.5	SEALED SOURCE CONTAMINATION..... 3/4 7-19
3/4.7.6	FIRE SUPPRESSION SYSTEMS
	Fire Suppression Water System..... 3/4 7-21
	Sprinkler Systems..... 3/4 7-25
	Low Pressure CO ₂ Systems..... 3/4 7-27
	Fire Hose Stations..... 3/4 7-28
3/4.7.7	PENETRATION FIRE BARRIERS..... 3/4 7-30
3/4.7.8	SETTLEMENT OF CLASS I STRUCTURES..... 3/4 7-31
<u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	
3/4.8.1	A.C. SOURCES
	A.C. Sources-Operating..... 3/4 8-1
	A.C. Sources-Shutdown..... 3/4 8-9
3/4.8.2	ONSITE POWER DISTRIBUTION SYSTEMS
	A.C. Distribution - Operating..... 3/4 8-10
	A.C. Distribution - Shutdown..... 3/4 8-12
	D.C. Distribution - Operating..... 3/4 8-13
	D.C. Distribution - Shutdown..... 3/4 8-16
	A.C. Circuits Inside Primary Containment..... 3/4 8-17
	Primary Containment Penetration Conductor Overcurrent Protective Devices..... 3/4 8-18

INDEX

BASES

<u>SECTION</u>	<u>PAGE</u>
<u>PLANT SYSTEMS (Continued)</u>	
3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM.....	B 3/4 7-1
3/4.7.4 SNUBBERS.....	B 3/4 7-2
3/4.7.5 SEALED SOURCE CONTAMINATION.....	B 3/4 7-3
3/4.7.6 FIRE SUPPRESSION SYSTEMS.....	B 3/4 7-3
3/4.7.7 PENETRATION FIRE BARRIERS.....	B 3/4 7-4
3/4.7.8 SETTLEMENT OF CLASS I STRUCTURES.....	B 3/4 7-4
<u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	B 3/4 8-1
<u>3/4.9 REFUELING OPERATIONS</u>	
3/4.9.1 REACTOR MODE SWITCH.....	B 3/4 9-1
3/4.9.2 INSTRUMENTATION.....	B 3/4 9-1
3/4.9.3 CONTROL ROD POSITION.....	B 3/4 9-1
3/4.9.4 DECAY TIME.....	B 3/4 9-1
3/4.9.5 SECONDARY CONTAINMENT.....	B 3/4 9-1
3/4.9.6 COMMUNICATIONS.....	B 3/4 9-2
3/4.9.7 CRANE AND HOIST OPERABILITY.....	B 3/4 9-2
3/4.9.8 CRANE TRAVEL-SPENT FUEL STORAGE POOL.....	B 3/4 9-2
3/4.9.9 and 3/4.9.10 WATER LEVEL - REACTOR VESSEL AND WATER LEVEL - SPENT FUEL STORAGE POOL.....	B 3/4 9-2
3/4.9-11 CONTROL ROD REMOVAL.....	B 3/4 9-2
3/4.9-12 REACTOR COOLANT CIRCULATION.....	B 3/4 9-3
<u>3/4.10 SPECIAL TEST EXCEPTIONS</u>	
3/4.10.1 PRIMARY CONTAINMENT INTEGRITY.....	B 3/4 10-1
3/4.10.2 ROD SEQUENCE CONTROL SYSTEM.....	B 3/4 10-1
3/4.10-3 SHUTDOWN MARGIN DEMONSTRATIONS.....	B 3/4 10-1
3/4.10-4 RECIRCULATION LOOPS.....	B 3/4 10-1

PLANT SYSTEMS

3/4.7.4 SNUBBERS

LIMITING CONDITION FOR OPERATION

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

SURVEILLANCE REQUIREMENTS

4.7.4 Each snubber shall be demonstrated OPERABLE by performance of the following inservice inspection program and the requirements of Specification 4.0.5.

a. Visual Inspections

All safety-related snubbers shall be visually examined to verify snubber operability. Visual inspections shall be performed in accordance with the following schedule:

<u>No. Inoperable Snubbers per Inspection Period</u>	<u>Subsequent Visual Inspection Period**#</u>
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 snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

*The applicable snubbers shall be identified in plant procedures.

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

#The provisions of Specification 4.0.2 are not applicable.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

b. 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 structure are secure, and (3) for mechanical snubbers where snubber movement can be manually induced, the snubbers shall be inspected as follows: (a) At each refueling, systems associated with the safety-related mechanical snubbers shall be inspected to determine if there has been a severe dynamic event. (b) In the event of a severe dynamic event, snubbers in that system which experienced the event shall be inspected during the refueling outage to assure the snubbers have freedom of movement and are not frozen up. The inspection shall consist of verifying freedom of motion using one of the following: (i) Manually induced snubber movement; (ii) stroking the mechanical snubber through its full range of travel. If one or more mechanical snubbers are found to be frozen up during this inspection, those snubbers shall be replaced (or overhauled) before returning to power. Re-inspection shall subsequently be performed according to the schedule of 4.7.4.a, but the scope of the examination shall be limited to the systems associated with the safety-related mechanical snubbers. 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; and (2) the affected snubber is functionally tested in the "as found" condition and determined OPERABLE per Specification 4.7.4.d or 4.7.4.e, as applicable. However, if a hydraulic snubber is found to contain less than the required minimum volume of reserve fluid or if visible signs of leakage are present, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval.

c. Functional Tests

At least once per 18 months during shutdown, a representative sample of 10% of the total of each type (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.d or 4.7.4.e, an additional sample of at least 1/2 the size of the initial lot of that type of snubber shall be functionally tested.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Functional testing shall continue until no additional inoperable snubbers of a particular type are found within a sample or until all safety-related snubbers of that type 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 categories:

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 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.

*Permanent or other exemptions from functional testing for individual snubbers in those categories 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)

d. 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. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

e. 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.

f. Unit Outage Inaccessible Snubber Inspection

In the event that all inaccessible snubbers are inspected, functionally tested, and repaired as necessary during a unit outage, and that it is thus demonstrated that all inaccessible snubbers are operable, the schedule in Specification 4.7.4.a may be re-entered on a 6-month inspection interval for the inaccessible snubbers.

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 6.10.2.1.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Concurrent with the inservice visual inspection performed during the first refueling outage following issuance of this amendment 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.

(THIS PAGE LEFT BLANK INTENTIONALLY)

(THIS PAGE LEFT BLANK INTENTIONALLY)

(THIS PAGE LEFT BLANK INTENTIONALLY)

3/4.7 PLANT SYSTEMS

BASES

REACTOR CORE ISOLATION COOLING SYSTEM (Continued)

The surveillance requirements provide adequate assurance that RCIC will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage and to start cooling at the earliest moment.

3/4.7.4 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-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.

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 the 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 the 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 the installed snubbers will be functionally tested during plant shutdowns at 18-month intervals. Observed failures of sample snubbers shall require functional testing of additional units.

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

PLANT SYSTEMS

BASES

3/4.7.4 SNUBBERS (Continued)

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. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

3/4.7.5 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. Quantities of interest to this specification which are exempt from the leakage testing are consistent with the criteria of 10 CFR Part 30.11-20 and 70.19. Leakage from sources excluded from the requirements of this specification is not likely to represent more than one maximum permissible body burden for total body irradiation if the source material is inhaled or ingested.

3/4.7.6 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO₂, and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

ADMINISTRATIVE CONTROL

RECORD RETENTION (Continued)

- c. Records of radiation exposure for all individuals entering radiation control areas.
- d. Records of gaseous and liquid radioactive material released to the environs.
- e. Records of transient or operational cycles for those unit components identified in Table 5.7.1-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members of the unit staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PRB and the SRB.
- l. Records of the service lives of all safety-related hydraulic and mechanical snubbers, including the date at which the service life commences and associated installation and maintenance records.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or groups of individuals permitted

*Health Physics personnel, or personnel escorted by Health Physics personnel in accordance with approved emergency procedures, shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

ENCLOSURE 4

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

Pursuant to 10 CFR 50.92, Georgia Power Company has evaluated the attached proposed amendments for the two Hatch units and has determined that their adoption would not involve a significant hazard. The basis for this determination is as follows:

a. PROPOSED CHANGE

As requested by the NRC letter dated November 20, 1980, revise the Limiting Condition for Operation to require that mechanical, as well as hydraulic safety-related snubbers be operable.

BASIS

This change for both Hatch units constitutes an additional control not previously included in the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. This change does not create the possibility of an accident or malfunction of a different type than analyzed in the FSAR. The margin of safety as defined in the basis of any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (ii) of the "Examples of Amendments That Are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14870 of the April 6, 1983 issue of the Federal Register.

b. PROPOSED CHANGE

As allowed by Generic Letter 84-13, delete the listings of safety-related hydraulic snubbers from the Technical Specifications. Specify in the Limiting Condition for Operation the hydraulic and mechanical snubbers which are required to be operable.

This change for both Hatch units is purely administrative in nature. The change has no effect on which hydraulic snubbers are subject to the Technical Specification requirements. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. This change does not create the possibility of an accident or malfunction of a different type than

ENCLOSURE 4 (Continued)

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

BASIS (Continued)

any analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected by the change. The effect of the change is therefore within the acceptance criteria and the change is consistent with Item (i) of the "Examples of Amendments That Are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14870 of the April 6, 1983 issue of the Federal Register.

c. PROPOSED CHANGE

As requested by NRC letter dated November 20, 1980, revise the "Action" statement for the Snubbers Limiting Condition for Operation to require an engineering evaluation on the supported component or declare the supported system inoperable and follow the appropriate "Action" statement for that system if inoperable snubber(s) are not returned to operable status within the Technical Specification-allotted time.

BASIS

This change for both Hatch units constitutes an additional control not previously included in the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. This change does not create the possibility of an accident or malfunction of a different type than analyzed in the FSAR. The margin of safety as defined in the basis of any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (ii) of the "Examples of Amendments That Are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14870 of the April 6, 1983 issue of the Federal Register.

ENCLOSURE 4 (Continued)

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

d. PROPOSED CHANGE

As requested by NRC letter dated November 20, 1980, revise the "Action" statement for the Snubbers Limiting Condition for Operation such that if one or more inoperable snubber(s) is not replaced or returned to operable status within 72 hours, declare the supported system inoperable and follow the appropriate limiting condition for operation statement(s) for that system.

BASIS

Since snubber protection is only required during low probability events such as earthquakes or severe transients, changing of the Snubbers Limiting Condition for Operation such that the appropriate limiting condition for operation statement(s) is followed for the system on which the affected snubber(s) is located does not significantly affect the probability or consequences of an accident or malfunction of a different type than analyzed in the FSAR. This change does not create the possibility of an accident or malfunction of a different type than analyzed in the FSAR. The margin of safety as defined in the basis of any Technical Specification is not significantly affected. The effect of this change is therefore within the acceptance criteria of Item (vi) of the "Examples of Amendments That Are Not Likely to Involve Significant Hazards Consideration" listed on page 14870 of the April 6, 1983 issue of the Federal Register.

e. PROPOSED CHANGES

As requested by NRC letter dated November 20, 1980, revise snubber surveillance requirements to incorporate the following:

ENCLOSURE 4 (Continued)

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

e. PROPOSED CHANGES (Continued)

1. Revise snubber visual inspections and visual acceptance criteria to include the following:
 - a. Add visual inspections requirements for safety-related mechanical snubbers.
 - b. Add assurance that snubber attachments to foundation or supporting structure are secure.
 - c. Add requirement that safety-related mechanical snubbers be inspected to determine if there has been a severe dynamic event and perform specific actions if such an event has occurred.
 - e. Provide statement for determination of operability.
2. Revise functional test requirements to include the following:
 - a. Increase functional test sample size such that 10% of each type safety-related snubbers are examined at least once per 18 months during shutdown.
 - b. Change re-sample size for each snubber failing functional test to at least one-half the size of the initial sample size for the particular snubbers functionally tested.
 - c. Add the requirement that 25% of the representative sample for the functional test be selected from the three areas specified in Standard Technical Specification Section 4.7.9.c.
 - d. Add the requirement such that snubbers placed in the same location as snubbers which failed the previous functional test be tested during the next test period.
 - e. Add the requirement such that cause of failure will be evaluated for snubbers failing functional testing.
 - f. Add the requirement such that an engineering evaluation will be performed on components which are found to be supported by failed snubbers.

ENCLOSURE 4 (Continued)

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

e. PROPOSED CHANGES (Continued)

3. Add functional test acceptance criteria for safety-related mechanical snubbers.
4. Add statement such that in the event that all inaccessible snubbers are inspected, functionally tested, and repaired, as necessary, during a unit outage, and that it is thus demonstrated all inaccessible snubbers are operable, the visual examination scheduled may be reentered on a 6-month inspection interval. This addition will apply to Hatch Unit 2 only as this type statement is presently in the existing Hatch Unit 1 Technical Specifications and will be included in the proposed changes included herein.
5. Add requirement for service life monitoring of each safety-related snubber and retention of records thereof.

BASIS

These changes for both Hatch units constitute additional controls and/or limitations, as appropriate, not presently included in the Technical Specifications. These changes do not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. These changes do not create the possibility of an accident or malfunction of a different type than analyzed in the FSAR. The margin of safety, as defined in the basis for any Technical Specification is not affected. The effect of these changes is therefore within the acceptance criteria and these changes are consistent with Item (ii) of the "Examples of Amendment That Are Considered Not Likely to Involve Significant Hazards Consideration" listed on page 14870 of the April 6, 1983 issue of the Federal Register.

f. PROPOSED CHANGES

As necessitated by the NPC letter dated November 20, 1980, revise the following to reflect changes in snubber surveillance requirements:

1. Change "Table of Contents" and "List of Tables" pages, where appropriate, to correct, add, or delete tables, etc. resulting from these snubber surveillance changes.

ENCLOSURE 4 (Continued)

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REVISION TO PROPOSED SNUBBER TECHNICAL SPECIFICATIONS

f. PROPOSED CHANGES (Continued)

2. Change the bases sections to reflect the revised snubber inservice surveillance requirements.
3. Add record retention requirements for service life monitoring as a result of the revised snubber inservice surveillance in the administrative controls section of Technical Specifications.

BASIS

These changes to the Technical Specifications for both Hatch units are administrative in nature. These changes do not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. These changes do not create the possibility of an accident or malfunction of a different type than analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of these changes are therefore within the acceptance criteria and these changes are consistent with Item (i) of the "Examples of Amendments That Are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14870 of the April 6, 1983 issue of the Federal Register.