UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

PUBLIC SERVICE COMPANY OF COLORADO

DOCKET 50-267

FORT ST. VRAIN NUCLEAR GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 39
License DPR-34

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

   A. The application for amendment by Public Service Company of Colorado (the licensee) dated May 20, 1983, as supplemented by letter dated September 28, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License DPR-34 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.D.(2) is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 39 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Eric H. Johnson

Eric H. Johnson, Chief
Reactor Project Branch 1

Attachment:
Changes to the Technical Specifications

Date of Issuance: January 25, 1984

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE DPR-34

DOCKET 50-267

Replace the following pages of the Appendix A Technical Specifications with the attached pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
4.3-7	4.3-7
4.3-8	4.3-8
4.3-9	4.3-9
4.3-10	4.3-10
4.3-11	4.3-11
4.3-12	4.3-12
—	4.3-13
—	4.3-14
—	4.3-15
—	4.3-16
5.3-9	5.3-9
5.3-10	5.3-10
5.3-11	5.3-11
5.3-12	5.3-12
5.3-13	5.3-13
5.3-14	5.3-14
5.3-15	5.3-15
5.3-16	5.3-16
5.3-17	5.3-17
—	5.3-18
—	5.3-19
—	5.3-20
—	5.3-21

Specification LCO 4.3.10 - Shock Suppressors (Snubbers) - Limiting Condition for Operation

a) The reactor shall not be operated at power unless all hydraulic and mechanical shock suppressors (snubbers) on Class I piping systems (listed in Tables 4.3.10-1 and 4.3.10-2) are operable except as noted in b) through d) of this LCO.

b) With one or more snubbers inoperable in a Class I system or subsystem, within 72 hours replace or restore the inoperable snubber(s) to operable status and perform an engineering evaluation per Specification SR 5.3.8.c) on the supported component or declare the supported system inoperable and follow the appropriate action statement for that system.

c) If the requirements of a) and b) of this LCO cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a low power condition within 36 hours.

d) If a shock suppressor is determined to be inoperable while the reactor is in the shutdown or refueling mode, the suppressor shall be made operable or replaced prior to reactor operation at power.

e) Shock suppressors may be added to Class I systems without prior License Amendment to Table 4.3.10-1 or

4.3.10-2, provided a revision to Table 4.3.10-1 or 4.3.10-2 is included with a subsequent License Amendment request.

Basis for Specification LCO 4.3.10

Shock suppressors (snubbers) are designed to prevent unrestrained pipe motion under dynamic loads, as might occur during an earthquake, while allowing normal thermal motion during startup and shutdown. The consequence of an inoperable snubber is an increase in the probability of structural damage to piping resulting from the dynamic loads produced by a seismic event. It is therefore necessary that all snubbers required to protect the Class I systems, subsystems, or components be operable during reactor power operation.

Because snubber protection is required only during relatively low probability events, a period of 72 hours is allowed for repair or replacement. In case a shutdown is required, the allowance of 36 hours to reach a low power condition will permit an orderly power reduction consistent with standard operating procedures. Since reactor operation at power should not be conducted with defective safety-related equipment, reactor power operation is prohibited with inoperable snubbers, except as stated above.

TABLE 4.3.10-1

CLASS I HYDRAULIC SNUBBERS

Turbine Water Drain Snubbers

TWDS-1	TWDS-7
TWDS-2	TWDS-8
TWDS-3	TWDS-9
TWDS-4	TWDS-10
TWDS-5	TWDS-12
TWDS-6	TWDS-13
	TWDS-14

Cold Reheat Snubbers - Circulators

CRS-C1-1	CRS-C3-1
CRS-C1-2	CRS-C3-2
CRS-C1-3	CRS-C3-3
CRS-C1-4	CRS-C3-4
CRS-C1-5	CRS-C3-5
CRS-C1-6	CRS-C3-6
CRS-C2-1	CRS-C4-1
CRS-C2-2	CRS-C4-2
CRS-C2-3	CRS-C4-3
CRS-C2-4	CRS-C4-4
CRS-C2-5	CRS-C4-5
CRS-C2-6	CRS-C4-6

TABLE 4.3.10-1 (continued)

CLASS I HYDRAULIC SNUBBERS (continued)

Cold Reheat Snubbers

CRS-29	CRS-377	CRS-591	CRS-870
CRS-31	CRS-378	CRS-632	CRS-871
CRS-72	CRS-379	CRS-636	CRS-872
CRS-76	CRS-381	CRS-664	CRS-879
CRS-104	CRS-382	CRS-674	CRS-880
CRS-114	CRS-386	CRS-707	CRS-881
CRS-144	CRS-388	CRS-742	CRS-902
CRS-146	CRS-389	CRS-751	CRS-910
CRS-187	CRS-420	CRS-752	CRS-911
CRS-191	CRS-421	CRS-765	CRS-921
CRS-219	CRS-422	CRS-766	CRS-931
CRS-229	CRS-431	CRS-768	CRS-951
CRS-262	CRS-445	CRS-769	CRS-955
CRS-297	CRS-446	CRS-821	CRS-962
CRS-317-1	CRS-474	CRS-822	CRS-964
CRS-317-2	CRS-476	CRS-827	CRS-967
CRS-320	CRS-517	CRS-828	CRS-969
CRS-321	CRS-521	CRS-829	CRS-972
CRS-323	CRS-549	CRS-831	CRS-976
CRS-324	CRS-556-1	CRS-832	CRS-977
CRS-371	CRS-556-2	CRS-836	CRS-978
CRS-372	CRS-589	CRS-838	

Boiler Feed Snubbers-Steam Generators

BFS-B1-1	BFS-B1-4	BFS-B2-1	BFS-B2-4
BFS-B1-2	BFS-B1-5	BFS-B2-2	BFS-B2-5
BFS-B1-3	BFS-B1-6	BFS-B2-3	BFS-B2-6

TABLE 4.3.10-1 (continued)

CLASS I HYDRAULIC SNUBBERS (continued)

Hot Reheat Snubbers

HRS-23	HRS-193	HRS-348	HRS-507
HRS-24	HRS-194	HRS-349	HRS-515
HRS-26	HRS-196	HRS-351	HRS-520
HRS-58	HRS-201	HRS-356	HRS-525
HRS-59	HRS-202	HRS-357	HRS-540
HRS-61	HRS-205	HRS-378	HRS-546
HRS-69	HRS-220	HRS-379	HRS-561
HRS-94	HRS-243	HRS-381	HRS-566
HRS-95	HRS-244	HRS-413	HRS-571
HRS-98	HRS-246	HRS-414	HRS-576
HRS-101	HRS-278	HRS-416	HRS-577
HRS-103	HRS-279	HRS-421	HRS-957
HRS-104	HRS-281	HRS-422	HRS-958
HRS-105	HRS-289	HRS-428	HRS-961
HRS-128	HRS-314	HRS-468	HRS-966
HRS-129	HRS-315	HRS-470	HRS-971
HRS-131	HRS-318	HRS-501	HRS-972
HRS-158	HRS-321	HRS-505	HRS-985
HRS-159	HRS-324	HRS-506	HRS-990
HRS-161			

Emergency Condensate Snubbers

ECS-1	ECS-8	ECS-15-1	ECS-20
ECS-2	ECS-9	ECS-15-2	ECS-21
ECS-3	ECS-10	ECS-16	ECS-22
ECS-4	ECS-11	ECS-17	ECS-23
ECS-5	ECS-12	ECS-18	ECS-24
ECS-6	ECS-13	ECS-19	ECS-25
ECS-7	ECS-14		

TABLE 4.3.10-1 (continued)

CLASS I HYDRAULIC SNUBBERS (continued)

Helium Vent Snubbers

HVS-1-1	HVS-2-1	HVS-3-1	HVS-4-1
HVS-1-2	HVS-2-2	HVS-3-2	HVS-4-2

Emergency Boiler Feed Snubbers

BFS-14E	BFS-142E	BFS-245E	BFS-374E
BFS-15E	BFS-143E	BFS-257E	BFS-380E
BFS-16E	BFS-154E	BFS-260E	BFS-398E
BFS-26E	BFS-158E	BFS-263E	BFS-399E
BFS-29E	BFS-167E	BFS-264E	BFS-405E
BFS-30E	BFS-181E	BFS-268E	BFS-414E
BFS-31E	BFS-197E	BFS-269E	BFS-417E
BFS-47E	BFS-203E	BFS-316E	BFS-419E
BFS-53E	BFS-204E	BFS-317E	BFS-421E
BFS-56E	BFS-210E	BFS-320E	BFS-422E
BFS-57E	BFS-216E	BFS-344E	BFS-423E
BFS-74E	BFS-218E	BFS-345E	BFS-430E
BFS-76E	BFS-219E	BFS-359E	BFS-431E
BFS-77E	BFS-228E	BFS-364E	BFS-432E
BFS-89E	BFS-229E	BFS-366E	BFS-442E
BFS-122E	BFS-243E	BFS-367E	BFS-444E
BFS-141E	BFS-244E		

TABLE 4.3.10-1 (continued)

CLASS I HYDRAULIC SNUBBERS (continued)

Main Steam Snubbers

MSS-9	MSS-125	MSS-281	MSS-584
MSS-16	MSS-126	MSS-284	MSS-688
MSS-17	MSS-135-1	MSS-291	MSS-696
MSS-18	MSS-139	MSS-304	MSS-706
MSS-19	MSS-145-1	MSS-311	MSS-717
MSS-27	MSS-145-2	MSS-312	MSS-718
MSS-29	MSS-145-3	MSS-314	MSS-719
MSS-44	MSS-146	MSS-321	MSS-721
MSS-51	MSS-147	MSS-339	MSS-774
MSS-52	MSS-149	MSS-346	MSS-778
MSS-54	MSS-184	MSS-347	MSS-779
MSS-61	MSS-191	MSS-348	MSS-822-1
MSS-64	MSS-192	MSS-356	MSS-831
MSS-74	MSS-194	MSS-369	MSS-833
MSS-81	MSS-201	MSS-376	MSS-834
MSS-82	MSS-204	MSS-377	MSS-835
MSS-84	MSS-206	MSS-379	MSS-836
MSS-85-1	MSS-222	MSS-414	MSS-862
MSS-85-2	MSS-225	MSS-421	MSS-869
MSS-95B	MSS-227	MSS-422	MSS-870
MSS-95C	MSS-239	MSS-424	MSS-871
MSS-109	MSS-246	MSS-431	MSS-901
MSS-116	MSS-247	MSS-433	MSS-906
MSS-117	MSS-248	MSS-451	MSS-909
MSS-118	MSS-249	MSS-452	MSS-911
MSS-120-1	MSS-257	MSS-453	MSS-912
MSS-120-2	MSS-258	MSS-495	MSS-987
MSS-120-3	MSS-274	MSS-583A	MSS-988

TABLE 4.3.10-1 (continued)

CLASS I HYDRAULIC SNUBBERS (continued)

Boiler Feed Snubbers

BFS-8	BFS-235	BFS-435	BFS-556
BFS-25	BFS-239	BFS-437	BFS-563
BFS-28	BFS-256	BFS-451	BFS-564
BFS-35	BFS-256-1	BFS-467	BFS-566
BFS-40	BFS-282	BFS-468	BFS-572
BFS-53	BFS-297	BFS-477	BFS-573
BFS-53A	BFS-325	BFS-479	BFS-577
BFS-54	BFS-352	BFS-498	BFS-614
BFS-61	BFS-358	BFS-500	BFS-641
BFS-97	BFS-397	BFS-501	BFS-679
BFS-110	BFS-398	BFS-516	BFS-711
BFS-117	BFS-400	BFS-523	BFS-763
BFS-138	BFS-402	BFS-526	BFS-764
BFS-139	BFS-412	BFS-528	BFS-796
BFS-142	BFS-416	BFS-529	BFS-820
BFS-149	BFS-420	BFS-530	BFS-823
BFS-152	BFS-421	BFS-532	BFS-843
BFS-153	BFS-422	BFS-534	BFS-844
BFS-166	BFS-425	BFS-536	BFS-870
BFS-210	BFS-434-1	BFS-537	BFS-871
BFS-211	BFS-434-2	BFS-553-1	BFS-922
BFS-216	BFS-434-3	BFS-553-2	BFS-933
BFS-221			

TABLE 4.3.10-1 (continued)

CLASS I HYDRAULIC SNUBBERS (continued)

Hydraulic Oil Snubbers

HOS-1	HOS-22	HOS-46	HOS-72
HOS-2	HOS-23	HOS-48	HOS-73
HOS-3	HOS-24	HOS-49	HOS-74
HOS-4-1	HOS-25	HOS-50	HOS-75
HOS-4-2	HOS-27	HOS-51	HOS-76
HOS-5	HOS-28	HOS-52	HOS-77
HOS-6	HOS-29	HSO-53	HOS-78
HOS-7	HOS-30	HOS-54	HOS-79
HOS-8	HOS-31	HOS-55	HOS-80
HOS-9	HOS-33	HOS-56	HOS-81
HOS-10	HOS-34	HOS-57	HOS-82
HOS-11	HOS-35	HOS-58	HOS-83
HOS-13	HOS-36	HOS-59	HOS-84
HOS-14	HOS-37	HOS-60	HOS-85
HOS-15	HOS-38	HOS-61	HOS-86
HOS-16	HOS-39	HOS-63	HOS-87
HOS-17	HOS-40	HOS-64	HOS-88
HOS-18	HOS-41	HOS-65	HOS-89
HOS-19	HOS-42	HOS-66	HOS-90
HOS-20	HOS-45	HOS-71	HOS-91
HOS-21			

Vent Stack Snubbers

VSS-101	VSS-108	VSS-114	VSS-120
VSS-102	VSS-110	VSS-116	VSS-122
VSS-104	VSS-111	VSS-117	VSS-123
VSS-105	VSS-113	VSS-119	VSS-124
VSS-107			

TABLE 4.3.10-2

CLASS I MECHANICAL SNUBBERS

System 22

22- 7-SN1	22-23-SN2	22- 73-SN1	22-128-SN1
22-11-SN1	22-30-SN1	22- 73-SN2	22-132-SN1
22-23-SN1	22-68-SN1	22-100-SN1	22-132-SN2

System Instrumentation

I-72-SN1	I-73-SN2	I-179-SN1	I-179-SN2
I-73-SN1			

Vent Stack Snubbers

VSS-103	VSS-109	VSS-115	VSS-121
VSS-106	VSS-112	VSS-118	

equilibrium value at the same reactor power level, the frequency of sampling and analysis shall be increased to a minimum of once each day until the activity level decreases or reaches a new equilibrium value (defined by four consecutive daily analyses whose results are within ±10%), at which time weekly sampling may be resumed.

Basis for Specification SR 5.3.7

The specification surveillance interval is adequate to monitor the activity of the secondary coolant.

Specification SR 5.3.8 - Shock Suppressors (Snubbers) Surveillance

The following surveillance requirements apply to all Class I piping system hydraulic and mechanical snubbers:

a) Visual Inspections

The first in-service visual inspection of snubbers shall be performed within six months from issuance of this Technical Specification (Amendment 39). For the purpose of entering the schedule described in this section, it shall be assumed that the facility had been on a six-month inspection interval.

The first in-service visual inspection of snubbers shall include all snubbers listed in Tables 4.3.10-1 and 4.3.10-2. If less than two snubbers are found inoperable during the first in-service visual inspection, the second in-service visual inspection shall be performed 12 months ± 25% from the date of the first inspection. Otherwise, subsequent visual inspections shall be performed in accordance with the following schedule:

Number of Inoperable Snubbers per Inspection Period	Subsequent Visual Inspection Period*
0	18 Months plus or minus 25%
1	12 Months plus or minus 25%
2	6 Months plus or minus 25%
3, 4	124 Days plus or minus 25%
5, 6, 7	62 Days plus or minus 25%
8 or more	31 Days plus or minus 25%

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

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) 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. 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 Sections 5.3.8.d) and 5.3.8.e). However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers.

c) Functional Tests

At least once per 18 months (not to exceed 22½ months), a representative sample of each type of snubber shall be tested using one of the following sample plans*: The sample plan(s) shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan(s) selected for each type of snubber prior to the test period or the sample plan(s) used in the prior test period shall be implemented:

1) At least 10% of the total of the type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of that type that does not meet the functional test acceptance criteria of Specification SR 5.3.8.d) or SR 5.3.8.e), an additional 10% of that type of

*These sample plans shall supersede the previous requirements within 22 ½ months of the issuance of this Technical Specification (Amendment 39); the previous requirements shall continue to be implemented until superseded.

snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

2) A representative sample of the type of snubber shall be functionally tested in accordance with Figure 5.3.8-1; "C" is the total number of snubbers of a type found not meeting the acceptance criteria of Specification SR 5.3.8.d) or SR 5.3.8.e). The cumulative number of snubbers of a type tested is denoted by "N". At the end of each day's testing, the new values of "N" and "C" (previous day's total plus current day's increments) shall be plotted on Figure 5.3.8-1. If at any time the point plotted falls in the "Reject" region all snubbers of that type shall be functionally tested. If at any time the point plotted falls in the "Accept" region testing of that type of snubber may be terminated. When the point plotted lies in the "Continue Testing" region, additional snubbers of that type shall be tested until the point falls in the "Accept" region or the "Reject" region, or all the snubbers of that type have been tested.

The representative samples selected of each type for functional testing shall include the various configurations, operating environments and the

range of size and capacity of the snubbers. The representative samples shall be selected randomly from the total population of each type of safety-related snubbers.

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.

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 force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force.

2) Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

3) Snubber release rate, where required, is within the specified range in compression or tension. For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

f) Exemption From Visual Inspection or Functional Tests

Permanent or other exemptions from the surveillance program for individual snubbers may be granted by the Commission if a justifiable basis for exemption is presented. Snubbers so exempted shall continue to be listed in Tables 4.3.10-1 and 4.3.10-2.

g) Record Keeping

Record keeping shall consist of:

1) A historical record for each snubber shall be maintained.

2) Concurrent with the first in-service visual inspection and at least once per refueling cycle thereafter, the historical records for each snubber listed in Tables 4.3.10-1 and 4.3.10-2 shall be reviewed to determine any trends that may adversely affect service life.

3) The maximum expected service life for the various seals, seal materials, and applications shall be determined and established based on engineering information and the seals shall be replaced so that the maximum expected service life will not be exceeded during a period when the snubber is required to be OPERABLE. This monitoring program shall be fully implemented within 22½ months from the issuance of this Technical Specification (Amendment 39).

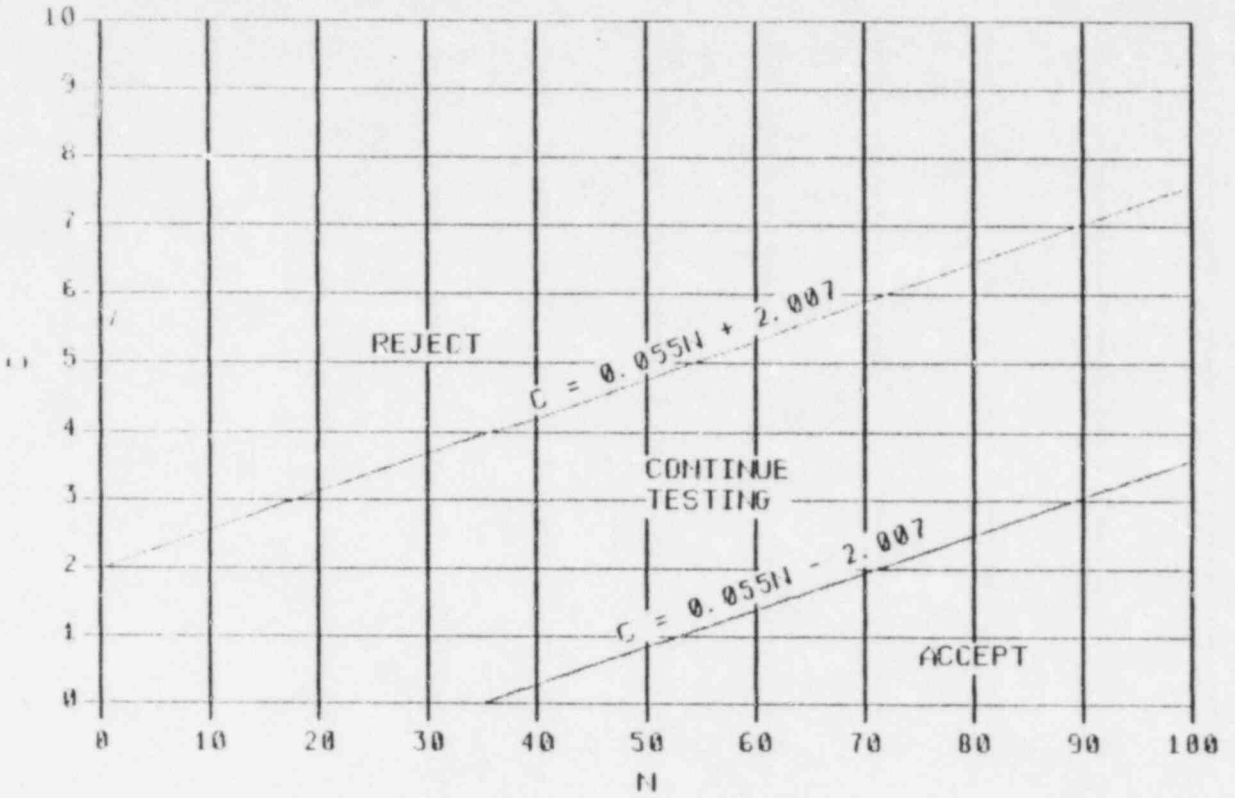

FIGURE 5.3.8-1

SAMPLE PLAN 2) FOR SNUBBER FUNCTIONAL TEST

Basis for Specification SR 5.3.8

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

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

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

To further increase the assurance of snubber reliability, functional tests should be performed once each refueling cycle. These tests will include stroking of the snubbers

to verify proper piston movement, lock-up, and bleed. The number of each type of snubber represented by use of either plan presented in Section 5.3.8.c) of this specification is an adequate sample for such tests. Observed failures on these samples should require testing of additional units.

The required surveillance program will assure a higher degree of snubber functional reliability.

Specification SR 5.3.9 - Safety Valves Surveillance

The steam generator superheater and reheater safety valves and the steam/water dump tank safety valves shall be tested at five calendar year intervals to verify their setpoint.

SR 5.3.9 shall be implemented per ISI Criterion B.

Basis for Specification SR 5.3.9

The safety valves protect the integrity of the steam generators, which are part of the reactor coolant boundary, and of the dump tank, which may contain radioactive fluids. Testing the safety valve setpoints will assure that the pressure within the equipment remains within design limits.

When practical, testing of the safety valves will be scheduled during the surveillance interval so that testing

of one (or more) safety valve(s) of similar type and operating conditions several times during the interval will provide additional confidence in safety valve reliability and adequate overpressure protection.

Specification SR 5.3.10 - Secondary Coolant System Instrumentation Surveillance

The secondary coolant reheat steam instrumentation used

a) for control and indication of emergency condensate flow to the reheaters and reheater backpressure, in case of safe shutdown cooling,

b) to automatically open the reheater discharge bypass on high pressure, and

c) to monitor reheater discharge bypass temperature, and reheater inlet temperature,

shall be functionally tested and calibrated annually, or at the next scheduled plant shutdown if such surveillance was not performed during the previous year.

SR 5.3.10 shall be implemented per ISI Criterion B.

Basis for Specification SR 5.3.10

The frequency specified for surveillance of the above instrumentation will assure that they perform their expected automatic actions, and that the operator will be provided with accurate information which he can use for safe shutdown cooling or to avoid abnormal equipment operation.

Specification 5.3.11 - Steam Generator Bimetallic Welds Surveillance

The accessible portions of steam generator bimetallic welds shall be volumetrically examined for indications of subsurface defects as follows:

a) The main steam ring header collector to main steam piping weld for one steam generator module in each loop at five calendar year intervals.

b) The main steam ring header collector to collector drain piping weld for one steam generator module in each loop at five calendar year intervals.

c) The same two steam generator modules initially selected shall be re-examined at each interval.

d) The bimetallic welds described in a) and b) shall also be inspected for two other steam generator modules in each loop during the initial examination.

SR 5.3.11 shall be implemented per ISI Criterion C.

Basis for Specification 5.3.11

The steam generator crossover tube bimetallic welds between Incoloy 800 and 2 1/4 Cr-1 Mo materials are not accessible for examination. The bimetallic welds between the steam generator ring header collector, the main steam piping, and the collector drain piping are accessible, involve the same materials and operate at conditions not significantly different from the crossover tube bimetallic welds. The collector drain piping weld is also geometrically similar to the crossover tube weld. Examination of selected bimetallic welds that are accessible will provide additional assurance concerning the continued integrity of steam generator bimetallic welds. Although no degradation is expected to occur, this specification allows for detection of defects which might result from conditions that can uniquely affect bimetallic welds made between these materials. Additional collector welds are inspected at the first examination to establish a baseline which could be used, should defects be found in later inspections and additional examinations subsequently be required.