

# TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
<b>TECHNICAL SPECIFICATIONS</b>		
1.0	<b>DEFINITIONS</b>	1-1
1.1	Safety Limits	1-1
1.2	Limiting Safety System Settings	1-1
1.3	Limiting Conditions for Operation	1-1
1.4	Operable	1-1
1.5	Containment Integrity	1-2
1.6	Protective Instrumentation Logic	1-2
1.7	Instrumentation Surveillance	1-3
1.8	(Deleted)	1-3
1.9	Action	1-4
1.10	Core Alteration	1-4
1.11	Rated Power	1-4
1.12	Thermal Power	1-4
1.13	Design Power	1-4
1.14	Dose Equivalent I-131	1-5
1.15	Power Tilt	1-5
1.16	Interim Limits	1-6
1.17	Low Power Physics Tests	1-6
1.18	Engineered Safety Features	1-6
1.19	Reactor Protection System	1-6
1.20	Safety Related Systems and Components	1-6
1.21	Per Annum	1-6
1.22	Reactor Coolant System Pressure Boundary Integrity	1-6
1.23	Coolant Loop	1-7
1.24	E-Average Disintegration Energy	1-7
1.25	Gas Decay Tank System	1-8
1.26	Ventilation Exhaust Treatment System	1-8
1.27	Process Control Program (PCP)	1-8
1.28	Offsite Dose Calculation Manual (ODCM)	1-8
1.29	Dose Equivalent I-131	1-8
1.30	Purge-Purging	1-9
1.31	Venting	1-9
1.32	Site Boundary	1-9
1.33	Unrestricted Area	1-9
1.34	Member(s) of the Public	1-9
1.35	Heavy Loads	1-9
1.36	Operational Modes	1-9
2.0	<b>SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS</b>	2.1-1
2.1	Safety Limit, Reactor Core	2.1-1
2.2	Safety Limit, Reactor Coolant System Pressure	2.2-1
2.3	Limiting Safety System Setting, Protective Instrumentation	2.3-1
3.0	<b>LIMITING CONDITIONS FOR OPERATION</b>	3.0-1
3.1	Reactor Coolant System	3.1-1
	Operational Components	3.1-1
	Pressure-Temperature Limits	3.1-2
	Leakage	3.1-3
	Maximum Reactor Coolant Activity	3.1-4
	Reactor Coolant Chemistry	3.1-6
	DNB Parameters	3.1-7

## LIST OF TABLES

<u>Table</u>	<u>Title</u>
1.1	Operational Modes
3.5-1	Instrument Operating Conditions for Reactor Trip
3.5-2	Engineering Safety Features Actuation
3.5-3	Instrument Operating Conditions for Isolation Functions
3.5-4	Engineered Safety Feature Set Points
3.13-1	Deleted
3.14-1	Fire Detection System
3.17-1	Spent Fuel Burnup Requirements for Storage in Region II of the Spent Fuel Pit
4.1-1	Minimum Frequencies for Checks, Calibrations and Test of Instrument Channels
4.1-2	Minimum Frequencies for Equipment and Sampling Tests
4.2-1	Reactor Coolant System In-Service Inspection Schedule
4.12-1	Operational Environmental Radiological Surveillance Program
4.12-2	Operational Environmental Radiological Surveillance Program Types of Analysis
6.2-1	Operating Personnel

**1.9 ACTION**

ACTION shall be that part of a Technical Specification which prescribes remedial measures required under designated conditions.

**1.10 CORE ALTERATION**

CORE ALTERATION shall be the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATION shall not preclude completion of movement of a component to a safe conservative position.

**1.11 RATED POWER (R.P.)**

Rated power is the licensed steady state reactor core thermal power output of 2200 MWt.

**1.12 THERMAL POWER**

Thermal power is the total core heat transferred from the fuel to the coolant.

**1.13 DESIGN POWER**

Design power is the steady state reactor thermal output of 2300 MWt.

## SNUBBERS

3.13.1 All safety related snubbers shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4. MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES.

### ACTION:

With one or more safety related snubbers inoperable, within 72 hours:

- 1) replace or restore the inoperable snubber(s) to OPERABLE status AND
- 2) perform an evaluation per T.S. 4.14.1.e on the attached component(s) OR
- 3) declare the attached system inoperable and follow the appropriate ACTION statements for that system.

## SNUBBERS

4.14.1 Each safety related snubber shall be demonstrated OPERABLE by performance of the following augmented in-service inspection program.

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 may be categorized as inaccessible or accessible during reactor operation. Each of these groups (inaccessible and accessible) may be inspected independently according to the schedule below. The first inservice visual inspection of each type of snubber shall be performed after 4 months but within 10 months of commencing POWER OPERATION and shall include all snubbers. If all snubbers of each type (on any system) are found OPERABLE during the first inservice visual inspection, the second inservice visual inspection (of that system) shall be performed at the first refueling outage. Otherwise, subsequent visual inspections (of a given system) shall be performed in accordance with the following schedule:

<u>Number Inoperable Snubbers of Each Type (on any system) per Inspection Period per Unit</u>	<u>Subsequent Visual Inspection Period*#</u>
0	18 months $\pm$ 25%
1	12 months $\pm$ 25%
2	6 months $\pm$ 25%
3, 4	124 days $\pm$ 25%
5, 6, 7	62 days $\pm$ 25%
8 or more	31 days $\pm$ 25%

\* The inspection interval for each type of snubber (on a given system) shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection interval may be lengthened one step the first time and two steps thereafter if no inoperable snubbers of that type are found (on that system).

# The provisions of T.S. 4.0.1 are not applicable.

c. 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) fasteners for attachment of the snubber to the component and to the snubber anchorage are secure. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.14.1.f.

d. Functional Tests

For each unit, during refueling shutdown, a representative sample (10% of the total number of safety related snubbers for the respective unit identified by site records) shall be functionally tested either in place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.14.1.f, an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type on that unit 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. At least 25% of the snubbers in the representative sample shall include snubbers from the following categories:

1. Snubbers within 5 feet of heavy equipment (ex. valves, pumps, turbines, motors, etc.).
2. Snubbers within 10 feet of the discharge from a safety relief valve.

Snubbers identified by site records as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample.\*

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

e. Functional Test Failure Analysis

An engineering evaluation shall be made of each failure to meet the functional test acceptance criteria to determine the cause of the failure. The results of this evaluation shall be used, if applicable, in selecting snubbers to be tested in an effort to determine the OPERABILITY of other snubbers irrespective of type which may be subject to the same failure mode.

If any snubber selected for functional testing either fails to activate or fails to move, i.e., frozen in place, the cause will be evaluated under the provisions of 10 CFR Part 21.

Should the results of the evaluation indicate that the failure was caused by either manufacturer or design deficiency, further action shall be taken, if needed, based on manufacturer or engineering recommendations.

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

\* Permanent or other exemptions from functional testing for individual snubbers in these categories may be granted by the Commission only if a justifiable basis for exemption is presented and/or snubber lift destructive testing was performed to qualify snubber OPERABILITY for all design conditions at either the completion of their fabrication or at a subsequent date.

f. Mechanical Snubbers Functional Test Acceptance Criteria

The mechanical snubber functional test shall verify that:

1. The force required to initiate or maintain motion of the snubber is within the specified range in both directions of travel.
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.

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.m.

Concurrent with the first inservice visual inspection and during refueling shutdown thereafter, the installation and maintenance records for each safety related snubber as identified by site records shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. This reevaluation, replacement or reconditioning shall be indicated in the records.



- k. Records of meetings of the PNSC and the CNRB.
- l. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.
- m. Records of the service lives of all snubbers required by Specification 3.13 including the date of which the service life commences and associated installation and maintenance records.
- n. Annual Radiological Environmental Monitoring Reports and records of analyses transmitted to the licensee which are used to prepare the Annual Radiological Environmental Monitoring Report.

#### 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:

- a. 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 issuance of a Radiation Work Permit and any individual or group of individuals permitted to enter such areas shall be provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. Each High Radiation Area in which the intensity of radiation is greater than 1000 mRem/hr shall be subject to the provisions of 6.12.1(a) above, and in addition locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under administrative control.

