

December 26, 1991

Docket No. 50-397

Mr. G. C. Sorensen, Manager  
Regulatory Programs  
Washington Public Power Supply System  
3000 George Washington Way  
P.O. Box 968  
Richland, Washington 99352

Dear Mr. Sorensen:

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SUBJECT: ISSUANCE OF AMENDMENT FOR THE WASHINGTON PUBLIC POWER SUPPLY  
SYSTEM NUCLEAR PROJECT NO. 2 (TAC NO. M80941)

The Commission has issued the enclosed Amendment No. 98 to the Facility Operating License No. NPF-21 for WPPSS Nuclear Project No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated June 28, 1991.

The amendment revises the Technical Specifications (TS) by relocating the procedural details of the current Radiological Effluent Technical Specifications (RETS) to WPPSS controlled documents. Relocation of RETS to the WNP-2 Offsite Dose Calculation Manual and Process Control Program is consistent with the guidance in NRC Generic Letter 89-01. The amendment also implements programmatic controls in the Administrative Controls section of the WNP-2 TS to satisfy existing regulatory requirements for RETS.

A copy of the related Safety Evaluation is also enclosed. A notice of issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

Original signed by

Patricia L. Eng, Project Manager  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

**Enclosures:**

1. Amendment No. 98 to NPF-21
2. Safety Evaluation

cc w/enclosures:  
See next page

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DATE	: 12/10/91	: 12/14/91	: 12/14/91	: 12/22/91	: 12/26/91

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

December 26, 1991

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Regulatory Programs  
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Sincerely,

A handwritten signature in cursive script, appearing to read "Patricia L. Eng".

Patricia L. Eng, Project Manager  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.98 to NPF-21
2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. A. Lee Oxsen  
Washington Public Power Supply System

WPPSS Nuclear Project No. 2  
(WNP-2)

cc:

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WNP-2 Plant Manager  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 98  
License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Washington Public Power Supply System (licensee) dated June 28, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-21 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 98 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

*Charles M. Trammell*

for

Theodore R. Quay, Director  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 26, 1991

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 98 TO FACILITY OPERATING LICENSE NO. NPF-21

DOCKET NO. 50-397

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

<u>REMOVE</u>	<u>INSERT</u>
i	i
ii	ii
vi	vi
xi	xi
xiii	xiii
xvi	xvi
xix	xix
xxiii	xxiii
xxiv	xxiv
xxv	--
1-3	1-3
1-4	1-4
--	1-4a
1-6	1-6
1-7	1-7
3/4 3-78	3/4 3-78
3/4 3-79	3/4 3-79
3/4 3-80	3/4 3-80
3/4 3-81	3/4 3-81
3/4 3-82	3/4 3-82
3/4 3-83	3/4 3-83
3/4 3-84	3/4 3-84
3/4 3-85	3/4 3-85
3/4 3-86	3/4 3-86
3/4 3-87	3/4 3-87
3/4 3-88 thru 3/4 3-104	--
3/4 11-1	3/4 11-1
3/4 11-2	3/4 11-2
3/4 11-3	3/4 11-3
3/4 11-4 thru 3/4 11-20	--
3/4 12-1 thru 3/4 12-14	--
B 3/4 3-5	B 3/4 3-5
B 3/4 3-6	B 3/4 3-6
B 3/4 3-7	--
B 3/4 11-1	B 3/4 11-1
B 3/4 11-2 thru B 3/4 11-6	--
B 3/4 12-1	B 3/4 12-1
B 3/4 12-2	--

REMOVE

--  
--  
6-18  
6-19  
6-20  
6-23  
6-25  
6-26

INSERT

6-15a  
6-15b  
6-18  
6-19  
6-20  
6-23  
6-25  
--



## INDEX

### DEFINITIONS

#### SECTION

<u>1.0 DEFINITIONS</u>	<u>PAGE</u>
1.1 ACTION.....	1-1
1.2 AVERAGE BUNDLE EXPOSURE.....	1-1
1.3 AVERAGE PLANAR EXPOSURE.....	1-1
1.4 AVERAGE PLANAR LINEAR HEAT GENERATION RATE.....	1-1
1.5 CHANNEL CALIBRATION.....	1-1
1.6 CHANNEL CHECK.....	1-1
1.7 CHANNEL FUNCTIONAL TEST.....	1-1
1.8 CORE ALTERATION.....	1-2
1.8A CORE OPERATING LIMITS REPORT.....	1-2
1.9 CRITICAL POWER RATIO.....	1-2
1.10 DOSE EQUIVALENT I-131.....	1-2
1.11 $\bar{E}$ -AVERAGE DISINTEGRATION ENERGY.....	1-2
1.12 EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME.....	1-2
1.12-A END-OF-CYCLE (EOC).....	1-2
1.13 END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME..	1-3
1.13-A FINAL FEEDWATER TEMPERATURE REDUCTION (FFTR).....	1-3
1.14 FRACTION OF LIMITING POWER DENSITY.....	1-3
1.15 FRACTION OF RATED THERMAL POWER.....	1-3
1.16 FREQUENCY NOTATION.....	1-3
1.17 NOT USED.....	1-3
1.18 IDENTIFIED LEAKAGE.....	1-3
1.19 ISOLATION SYSTEM RESPONSE TIME.....	1-3
1.20 LIMITING CONTROL ROD PATTERN.....	1-4
1.21 LINEAR HEAT GENERATION RATE.....	1-4

## INDEX

### DEFINITIONS

---

#### SECTION

<u>DEFINITIONS (Continued)</u>	<u>PAGE</u>
1.22 LOGIC SYSTEM FUNCTIONAL TEST.....	1-4
1.23 MAXIMUM FRACTION OF LIMITING POWER DENSITY.....	1-4
1.24 MAXIMUM TOTAL PEAKING FACTOR.....	1-4
1.25 MEMBER(S) OF THE PUBLIC.....	1-4
1.26 MINIMUM CRITICAL POWER RATIO.....	1-4
1.27 OFFSITE DOSE CALCULATION MANUAL.....	1-4a
1.28 OPERABLE - OPERABILITY.....	1-5
1.29 OPERATIONAL CONDITION - CONDITION.....	1-5
1.30 PHYSICS TESTS.....	1-5
1.31 PRESSURE BOUNDARY LEAKAGE.....	1-5
1.32 PRIMARY CONTAINMENT INTEGRITY.....	1-5
1.33 PROCESS CONTROL PROGRAM.....	1-6
1.34 PURGE - PURGING.....	1-6
1.35 RATED THERMAL POWER.....	1-6
1.36 REACTOR PROTECTION SYSTEM RESPONSE TIME.....	1-6
1.37 REPORTABLE EVENT.....	1-6
1.38 ROD DENSITY.....	1-6
1.39 SECONDARY CONTAINMENT INTEGRITY.....	1-6
1.40 SHUTDOWN MARGIN.....	1-7
1.41 SITE BOUNDARY.....	1-7
1.42 NOT USED.....	1-7
1.43 SOURCE CHECK.....	1-7
1.44 STAGGERED TEST BASIS.....	1-7

## INDEX

### LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.0 APPLICABILITY</u> .....	3/4 0-1
<u>3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
3/4.1.1 SHUTDOWN MARGIN.....	3/4 1-1
3/4.1.2 REACTIVITY ANOMALIES.....	3/4 1-2
3/4.1.3 CONTROL RODS	
Control Rod Operability.....	3/4 1-3
Control Rod Maximum Scram Insertion Times.....	3/4 1-6
Four Control Rod Group Scram Insertion Times.....	3/4 1-8
Control Rod Scram Accumulators.....	3/4 1-9
Control Rod Drive Coupling.....	3/4 1-11
Control Rod Position Indication.....	3/4 1-13
Control Rod Drive Housing Support.....	3/4 1-15
3/4.1.4 CONTROL ROD PROGRAM CONTROLS	
Rod Worth Minimizer.....	3/4 1-16
Rod Sequence Control System.....	3/4 1-17
Rod Block Monitor.....	3/4 1-18
3/4.1.5 STANDBY LIQUID CONTROL SYSTEM.....	3/4 1-19
3/4.1.6 FEEDWATER TEMPERATURE.....	3/4 1-23
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 AVERAGE PLANAR LINEAR HEAT GENERATION RATE.....	3/4 2-1
3/4 2.2 AWRM SETPOINTS.....	3/4 2-2
3/4.2.3 MINIMUM CRITICAL POWER RATIO.....	3/4 2-3
3/4.2.4 LINEAR HEAT GENERATION RATE.....	3/4 2-4
3/4.2.5 (RESERVED FOR FFTR)	
3/4.2.6 POWER/FLOW INSTABILITY.....	3/4 2-5
3/4.2.7 STABILITY MONITORING - TWO LOOP OPERATION.....	3/4 2-7
3/4.2.8 STABILITY MONITORING - SINGLE LOOP OPERATION.....	3/4 2-9

## INDEX

### LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION.....	3/4 3-1
3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION.....	3/4 3-10
3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION.....	3/4 3-25
3/4.3.4 RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION	
ATWS Recirculation Pump Trip System Instrumentation..	3/4 3-37
End-of-Cycle Recirculation Pump Trip System Instrumentation.....	3/4 3-41
3/4.3.5 REACTOR CORE ISOLATION COOLING SYSTEM ACTUATION INSTRUMENTATION.....	3/4 3-47
3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION.....	3/4 3-52
3/4.3.7 MONITORING INSTRUMENTATION	
Radiation Monitoring Instrumentation.....	3/4 3-58
Seismic Monitoring Instrumentation.....	3/4 3-61
Meteorological Monitoring Instrumentation.....	3/4 3-64
Remote Shutdown Monitoring Instrumentation.....	3/4 3-67
Accident Monitoring Instrumentation.....	3/4 3-70
Source Range Monitors.....	3/4 3-76
Traversing In-Core Probe System.....	3/4 3-77
Loose-Part Detection System.....	3/4 3-78
Explosive Gas Monitoring Instrumentation.....	3/4 3-79
3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM.....	3/4 3-82
3/4.3.9 FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION.....	3/4 3-84

## INDEX

### LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

---

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.10 SPECIAL TEST EXCEPTIONS</u>	
3/4.10.1 PRIMARY CONTAINMENT INTEGRITY.....	3/4 10-1
3/4.10.2 ROD SEQUENCE CONTROL SYSTEM.....	3/4 10-2
3/4.10.3 SHUTDOWN MARGIN DEMONSTRATIONS.....	3/4 10-3
3/4.10.4 RECIRCULATION LOOPS.....	3/4 10-4
3/4.10.5 OXYGEN CONCENTRATION.....	3/4 10-5
3/4.10.6 TRAINING STARTUPS.....	3/4 10-6
<u>3/4.11 RADIOACTIVE EFFLUENTS</u>	
3/4.11.1 LIQUID EFFLUENTS	
Liquid Holdup Tanks.....	3/4 11-1
3/4 11.2 GASEOUS EFFLUENTS	
Explosive Gas Mixture.....	3/4 11-2
Main Condenser.....	3/4 11-3
<u>3/4.12 RADIOLOGICAL ENVIRONMENTAL MONITORING</u>	
Entire section relocated to ODCM.	

## INDEX

### BASES

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.0 APPLICABILITY.....</u>	<u>B 3/4 0-1</u>
<u>3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
3/4.1.1 SHUTDOWN MARGIN.....	B 3/4 1-1
3/4.1.2 REACTIVITY ANOMALIES.....	B 3/4 1-1
3/4.1.3 CONTROL RODS.....	B 3/4 1-2
3/4.1.4 CONTROL ROD PROGRAM CONTROLS.....	B 3/4 1-3
3/4.1.5 STANDBY LIQUID CONTROL SYSTEM.....	B 3/4 1-4
3/4.1.6 FEEDWATER TEMPERATURE.....	B 3/4 1-5
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 AVERAGE PLANAR LINEAR HEAT GENERATION RATE.....	B 3/4 2-1
3/4.2.2 APRM SETPOINTS.....	B 3/4 2-2
3/4.2.3 MINIMUM CRITICAL POWER RATIO.....	B 3/4 2-3
3/4.2.4 LINEAR HEAT GENERATION RATE.....	B 3/4 2-4
3/4.2.5 (RESERVED FOR FFTR)	
3/4.2.6 POWER/FLOW INSTABILITY.....	B 3/4 2-4
3/4.2.7 STABILITY MONITORING - TWO LOOP OPERATION.....	B 3/4 2-5
3/4.2.8 STABILITY MONITORING - SINGLE LOOP OPERATION.....	B 3/4 2-5
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION.....	B 3/4 3-1
3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION.....	B 3/4 3-2
3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION.....	B 3/4 3-2
3/4.3.4 RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION.....	B 3/4 3-3
3/4.3.5 REACTOR CORE ISOLATION COOLING SYSTEM ACTUATION INSTRUMENTATION.....	B 3/4 3-4
3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION.....	B 3/4 3-4

## INDEX

### BASES

### SECTION

### PAGE

#### INSTRUMENTATION (Continued)

##### 3/4.3.7 MONITORING INSTRUMENTATION

Radiation Monitoring Instrumentation.....	B 3/4 3-4
Seismic Monitoring Instrumentation.....	B 3/4 3-4
Meteorological Monitoring Instrumentation.....	B 3/4 3-5
Remote Shutdown Monitoring Instrumentation.....	B 3/4 3-5
Accident Monitoring Instrumentation.....	B 3/4 3-5
Source Range Monitors.....	B 3/4 3-5
Traversing In-Core Probe System.....	B 3/4 3-5
Loose-Part Detection System.....	B 3/4 3-6
Explosive Gas Monitoring Instrumentation.....	B 3/4 3-6

##### 3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM..... B 3/4 3-6

##### 3/4.3.9 FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION..... B 3/4 3-6

#### 3/4.4 REACTOR COOLANT SYSTEM

3/4.4.1 RECIRCULATION SYSTEM.....	B 3/4 4-1
3/4.4.2 SAFETY/RELIEF VALVES.....	B 3/4 4-1
3/4.4.3 REACTOR COOLANT SYSTEM LEAKAGE	
Leakage Detection Systems.....	B 3/4 4-1a
Operational Leakage.....	B 3/4 4-2
3/4.4.4 CHEMISTRY.....	B 3/4 4-2
3/4.4.5 SPECIFIC ACTIVITY.....	B 3/4 4-3
3/4.4.6 PRESSURE/TEMPERATURE LIMITS.....	B 3/4 4-4
3/4.4.7 MAIN STEAM LINE ISOLATION VALVES.....	B 3/4 4-5

## INDEX

### BASES

#### SECTION

#### PAGE

### 3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 and 3/4.5.2 ECCS - OPERATING and SHUTDOWN..... B 3/4 5-1

3/4.5.3 SUPPRESSION CHAMBER..... B 3/4 5-2

### 3/4.6 CONTAINMENT SYSTEMS

#### 3/4.6.1 PRIMARY CONTAINMENT

Primary Containment Integrity..... B 3/4 6-1

Primary Containment Leakage..... B 3/4 6-1

Primary Containment Air Locks..... B 3/4 6-1

MSIV Leakage Control System..... B 3/4 6-1

Primary Containment Structural Integrity..... B 3/4 6-2

Drywell and Suppression Chamber Internal  
Pressure..... B 3/4 6-2

Drywell Average Air Temperature..... B 3/4 6-2

Drywell and Suppression Chamber Purge System..... B 3/4 6-2

3/4.6.2 DEPRESSURIZATION SYSTEMS..... B 3/4 6-3

3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES..... B 3/4 6-4

3/4.6.4 VACUUM RELIEF..... B 3/4 6-4

3/4.6.5 SECONDARY CONTAINMENT..... B 3/4 6-5

3/4.6.6 PRIMARY CONTAINMENT ATMOSPHERE CONTROL..... B 3/4 6-5

### 3/4.7 PLANT SYSTEMS

3/4.7.1 SERVICE WATER SYSTEMS..... B 3/4 7-1

3/4.7.2 CONTROL ROOM EMERGENCY FILTRATION SYSTEM..... B 3/4 7-1

3/4.7.3 REACTOR CORE ISOLATION COOLING SYSTEM..... B 3/4 7-1

3/4.7.4 SNUBBERS..... B 3/4 7-2



## INDEX

### BASES

---

#### SECTION

#### PAGE

#### PLANT SYSTEMS (Continued)

3/4.7.5 SEALED SOURCE CONTAMINATION..... B 3/4 7-3

3/4.7.8 AREA TEMPERATURE MONITORING..... B 3/4 7-4

3/4.7.9 MAIN TURBINE BYPASS SYSTEM..... B 3/4 7-4

#### 3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1, 3/4.8.2, and  
3/4.8.3 A.C. SOURCES, D.C. SOURCES, and ONSITE POWER  
DISTRIBUTION SYSTEMS..... B 3/4 8-1

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES..... B 3/4 8-3

#### 3/4.9 REFUELING OPERATIONS

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 COMMUNICATIONS..... B 3/4 9-1

3/4.9.6 REFUELING PLATFORM..... B 3/4 9-2

3/4.9.7 CRANE TRAVEL - SPENT FUEL STORAGE POOL..... B 3/4 9-2

3/4.9.8 and 3/4.9.9 WATER LEVEL - REACTOR VESSEL  
and WATER LEVEL - SPENT FUEL STORAGE POOL..... B 3/4 9-2

3/4.9.10 CONTROL ROD REMOVAL..... B 3/4 9-2

3/4.9.11 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION... B 3/4 9-2

## INDEX

### BASES

---

<u>SECTION</u>	<u>PAGE</u>
<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
3/4.10.5 OXYGEN CONCENTRATION.....	B 3/4 10-1
3/4.10.6 TRAINING STARTUPS.....	B 3/4 10-1
<u>3/4.11 RADIOACTIVE EFFLUENTS</u>	
3/4.11.1 LIQUID EFFLUENTS.....	B 3/4 11-1
3/4.11.2 GASEOUS EFFLUENTS.....	B 3/4 11-1
<u>3/4.12 RADIOLOGICAL ENVIRONMENTAL MONITORING</u>	
Entire section relocated to ODCM.	

## INDEX

### ADMINISTRATIVE CONTROLS

<u>SECTION</u>	<u>PAGE</u>
<u>CORPORATE NUCLEAR SAFETY REVIEW BOARD (Continued)</u>	
MEETING FREQUENCY.....	6-11
QUORUM.....	6-11
REVIEW.....	6-11
AUDITS.....	6-12
RECORDS.....	6-13
<u>6.6 REPORTABLE OCCURRENCE ACTION.....</u>	6-13
<u>6.7 SAFETY LIMIT VIOLATION.....</u>	6-14
<u>6.8 PROCEDURES AND PROGRAMS.....</u>	6-14
<u>6.9 REPORTING REQUIREMENTS.....</u>	6-16
6.9.1 ROUTINE REPORTS AND REPORTABLE OCCURRENCES.....	6-16
STARTUP REPORT.....	6-16
ANNUAL REPORTS.....	6-16
MONTHLY OPERATING REPORTS.....	6-17
REPORTABLE OCCURENCES.....	6-17
PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP.....	6-17
THIRTY DAY WRITTEN REPORTS.....	6-18
ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT.....	6-18
RADIOACTIVE EFFLUENT RELEASE REPORT.....	6-19
6.9.2 SPECIAL REPORTS.....	6-20
6.9.3 CORE OPERATING LIMITS REPORT.....	6-20
<u>6.10 RECORD RETENTION.....</u>	6-22
<u>6.11 RADIATION PROTECTION PROGRAM.....</u>	6-24
<u>6.12 HIGH RADIATION AREA.....</u>	6-24
<u>6.13 PROCESS CONTROL PROGRAM.....</u>	6-25
<u>6.14 OFFSITE DOSE CALCULATION MANUAL.....</u>	6-25

# INDEX

## LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
3.1.5-1	SODIUM PENTABORATE SOLUTION SATURATION TEMPERATURE...	3/4 1-21
3.1.5-2	SODIUM PENTABORATE TANK, VOLUME VERSUS CONCENTRATION REQUIREMENTS.....	3/4 1-22
3.2.1-1	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS AVERAGE PLANAR EXPOSURE, INITIAL CORE FUEL TYPE 8CR183.....	Deleted
3.2.1-2	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS AVERAGE PLANAR EXPOSURE, INITIAL CORE FUEL TYPE 8CR233.....	Deleted
3.2.1-3	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS AVERAGE BUNDLE EXPOSURE ANF 8x8 RELOAD FUEL.....	Deleted
3.2.1-4	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS AVERAGE PLANAR EXPOSURE, INITIAL CORE FUEL TYPE 8CR183.....	Deleted
3.2.1-5	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS AVERAGE PLANAR EXPOSURE, INITIAL CORE FUEL TYPE 8CR233.....	Deleted
3.2.1-6	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS AVERAGE BUNDLE EXPOSURE ANF 9x9-IX AND 9x9-9X FUEL.....	Deleted
3.2.1-7	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS BUNDLE AVERAGE EXPOSURE SVEA-96 LEAD FUEL ASSEMBLIES.....	Deleted
3.2.1-8	MAXIMUM AVERAGE PLANAR LINEAR HEAT GENERATION RATE (MAPLHGR) VERSUS BUNDLE AVERAGE EXPOSURE GE11 LEAD FUEL ASSEMBLIES.....	Deleted
3.2.3-1	REDUCED FLOW MCPR OPERATING LIMIT.....	Deleted
3.2.4-1	LINEAR HEAT GENERATION RATE (LHGR) LIMIT VERSUS AVERAGE PLANAR EXPOSURE ANF 8x8 RELOAD FUEL.....	Deleted
3.2.4-2	LINEAR HEAT GENERATION RATE (LHGR) LIMIT VERSUS AVERAGE PLANAR EXPOSURE ANF 9x9-IX FUEL.....	Deleted
3.2.4-3	LINEAR HEAT GENERATION RATE (LHGR) LIMIT VERSUS AVERAGE PLANAR EXPOSURE ANF 9x9-9X FUEL.....	Deleted
3.2.4-4	LINEAR HEAT GENERATION RATE (LHGR) LIMIT VERSUS AVERAGE PLANAR EXPOSURE SVEA-96 LEAD FUEL ASSEMBLIES.....	Deleted

# INDEX

## LIST OF TABLES (Continued)

<u>TABLE</u>		<u>PAGE</u>
3.3.7.5-1	ACCIDENT MONITORING INSTRUMENTATION.....	3/4 3-71
4.3.7.5-1	ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS.....	3/4 3-74
3.3.7.12-1	EXPLOSIVE GAS MONITORING INSTRUMENTATION.....	3/4 3-80
4.3.7.12-1	EXPLOSIVE GAS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS.....	3/4 3-81
3.3.9-1	FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION.....	3/4 3-85
3.3.9-2	FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION SETPOINTS.....	3/4 3-86
4.3.9.1-1	FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS.....	3/4 3-87
3.4.3.2-1	REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES.....	3/4 4-11
3.4.3.2-2	REACTOR COOLANT SYSTEM INTERFACE VALVES LEAKAGE PRESSURE MONITORS.....	3/4 4-11
3.4.4-1	REACTOR COOLANT SYSTEM CHEMISTRY LIMITS.....	3/4 4-14
4.4.5-1	PRIMARY COOLANT SPECIFIC ACTIVITY SAMPLE AND ANALYSIS PROGRAM.....	3/4 4-17

## INDEX

### LIST OF TABLES (Continued)

<u>TABLE</u>		<u>PAGE</u>
4.4.6.1.3-1	REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM-- WITHDRAWAL SCHEDULE .....	3/4 4-22
3.6.3-1	PRIMARY CONTAINMENT ISOLATION VALVES.....	3/4 6-21
3.6.5.2-1	SECONDARY CONTAINMENT VENTILATION SYSTEM AUTOMATIC ISOLATION VALVES.....	3/4 6-39
3.7.8-1	AREA TEMPERATURE MONITORING .....	3/4 7-31
4.8.1.1.2-1	DIESEL GENERATOR TEST SCHEDULE .....	3/4 8-9
4.8.2.1-1	BATTERY SURVEILLANCE REQUIREMENTS .....	3/4 8-14
3.8.4.2-1	PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES .....	3/4 8-23
3.8.4.3-1	MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION .....	3/4 8-26
B3/4.4.6-1	REACTOR VESSEL TOUGHNESS .....	B 3/4 4-6
5.7.1-1	COMPONENT CYCLIC OR TRANSIENT LIMITS .....	5-7
6.2.2-1	MINIMUM SHIFT CREW COMPOSITION - SINGLE UNIT FACILITY .....	6-6

## DEFINITIONS

### END OF CYCLE (EOC)

1.12A The END-OF-CYCLE (EOC) shall be the core exposure at which rated thermal power, rated core flow, and rated feedwater temperature would all be achieved if all control rods were fully withdrawn.

### END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME

1.13 The END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME shall be that time interval to energization of the recirculation pump circuit breaker trip coil from when the monitored parameter exceeds its trip setpoint at the channel sensor of the associated:

- a. Turbine throttle valves channel sensor contact opening, and
- b. Turbine governor valves initiation of valve fast closure.

The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

### FINAL FEEDWATER TEMPERATURE REDUCTION (FFTR)

1.13A FINAL FEEDWATER TEMPERATURE REDUCTION (FFTR) shall be operation at or beyond EOC for the purpose of extending the normal fuel cycle by plant operation with a final feedwater temperature reduced from the normal rated power temperature condition.

### FRACTION OF LIMITING POWER DENSITY

1.14 The FRACTION OF LIMITING POWER DENSITY (FLPD) shall be the LHGR existing at a given location divided by the specified LHGR limit for that bundle type.

### FRACTION OF RATED THERMAL POWER

1.15 The FRACTION OF RATED THERMAL POWER (FRTP) shall be the measured THERMAL POWER divided by the RATED THERMAL POWER.

### FREQUENCY NOTATION

1.16 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.1.

1.17 Not Used

### IDENTIFIED LEAKAGE

1.18 IDENTIFIED LEAKAGE shall be:

- a. Leakage into collection systems, such as pump seal or valve packing leaks, that is captured and conducted to a sump or collecting tank, or
- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of the leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE.

### ISOLATION SYSTEM RESPONSE TIME

1.19 The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation actuation setpoint at the channel sensor until the isolation valves travel to their required positions. Times shall include diesel generator starting and sequence loading delays where applicable. The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

## DEFINITIONS

### LIMITING CONTROL ROD PATTERN

- 1.20 A LIMITING CONTROL ROD PATTERN shall be a pattern which results in the core being on a thermal hydraulic limit, i.e., operating on a limiting value for APLHGR, LHGR, or MCPR.

### LINEAR HEAT GENERATION RATE

- 1.21 LINEAR HEAT GENERATION RATE (LHGR) shall be the heat generation per unit length of fuel rod. It is the integral of the heat flux over the heat transfer area associated with the unit length.

### LOGIC SYSTEM FUNCTIONAL TEST

- 1.22 A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all logic components, i.e., all relays and contacts, all trip units, solid state logic elements, etc, of a logic circuit, from sensor through and including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total system steps such that the entire logic system is tested.

### MAXIMUM FRACTION OF LIMITING POWER DENSITY

- 1.23 The MAXIMUM FRACTION OF LIMITING POWER DENSITY (MFLPD) shall be highest value of the FLPD which exists in the core.

### MAXIMUM TOTAL PEAKING FACTOR

- 1.24 The MAXIMUM TOTAL PEAKING FACTOR (MTPF) shall be the largest TPF which exists in the core for a given class of fuel for a given operating condition.

### MEMBER(S) OF THE PUBLIC

- 1.25 MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the utility, its contractors or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational or other purposes not associated with the plant.

### MINIMUM CRITICAL POWER RATIO

- 1.26 The MINIMUM CRITICAL POWER RATIO (MCPR) shall be the smallest CPR which exists in the core.



## DEFINITIONS

---

### OFFSITE DOSE CALCULATION MANUAL

- 1.27 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the current methodology and parameters used in the calculation of offsite doses due to radioactive gaseous and liquid effluents in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints and in the conduct of the environmental radiological monitoring program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.3, and (2) descriptions of the information that should be included in the Radioactive Effluent Release Reports required by Specifications 6.9.1.10 and 6.9.1.11.

## DEFINITIONS

### OPERABLE - OPERABILITY

- 1.28 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s) and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

### OPERATIONAL CONDITION - CONDITION

- 1.29 An OPERATIONAL CONDITION, i.e., CONDITION, shall be any one inclusive combination of mode switch position and average reactor coolant temperature as specified in Table 1.2.

### PHYSICS TESTS

- 1.30 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation as (1) described in Chapter 14 of the FSAR, (2) authorized under the provisions of 10 CFR 50.59, or (3) otherwise approved by the Commission.

### PRESSURE BOUNDARY LEAKAGE

- 1.31 PRESSURE BOUNDARY LEAKAGE shall be leakage through a non-isolable fault in a reactor coolant system component body, pipe wall, or vessel wall.

### PRIMARY CONTAINMENT INTEGRITY

- 1.32 PRIMARY CONTAINMENT INTEGRITY shall exist when:

- a. All primary containment penetrations required to be closed during accident conditions are either:
  1. Capable of being closed by an OPERABLE primary containment automatic isolation system, or
  2. Closed by at least one manual valve, blind flange, or deactivated automatic valve secured in its closed position, except as provided in Table 3.6.3-1 of Specification 3.6.3.
- b. All primary containment equipment hatches are closed and sealed.
- c. Each primary containment air lock is in compliance with the requirements of Specification 3.6.1.3.
- d. The primary containment leakage rates are within the limits of Specification 3.6.1.2.
- e. The suppression chamber is in compliance with the requirements of Specification 3.6.2.1.
- f. The sealing mechanism associated with each primary containment penetration; e.g., welds, bellows, or O-rings, is OPERABLE.

## DEFINITIONS

### PROCESS CONTROL PROGRAM

- 1.33 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, test and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61 and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

### PURGE - PURGING

- 1.34 PURGE or PURGING shall be the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

### RATED THERMAL POWER

- 1.35 RATED THERMAL POWER shall be a total reactor core heat transfer rate to the reactor coolant of 3323 MWt.

### REACTOR PROTECTION SYSTEM RESPONSE TIME

- 1.36 REACTOR PROTECTION SYSTEM RESPONSE TIME shall be the time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until deenergization of the scram pilot valve solenoids. The response time may be measured by any series of sequential, overlapping, or total steps such that the entire response time is measured.

### REPORTABLE EVENT

- 1.37 A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 to 10 CFR Part 50.

### ROD DENSITY

- 1.38 ROD DENSITY shall be the number of control rod notches inserted as a fraction of the total number of control rod notches. All rods fully inserted is equivalent to 100% ROD DENSITY.

### SECONDARY CONTAINMENT INTEGRITY

- 1.39 SECONDARY CONTAINMENT INTEGRITY shall exist when:

- a. All secondary containment penetrations required to be closed during accident conditions are either:
  1. Capable of being closed by an OPERABLE secondary containment automatic isolation system, or
  2. Closed by at least one manual valve, blind flange, or deactivated automatic valve secured in its closed position.
- b. All secondary containment hatches and blowout panels are closed and sealed.
- c. The standby gas treatment system is in compliance with the requirements of Specification 3.6.5.3.

## DEFINITIONS

### SECONDARY CONTAINMENT INTEGRITY (Continued)

- d. At least one door in each access to the secondary containment is closed.
- e. The sealing mechanism associated with each secondary containment penetration, e.g., welds, bellows, or O-rings, is OPERABLE.
- f. The pressure within the secondary containment is less than or equal to the value required by Specification 4.6.5.1.a.

### SHUTDOWN MARGIN

- 1.40 SHUTDOWN MARGIN shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is assumed to be fully withdrawn and the reactor is in the shutdown condition; cold, i.e., 68°F; and xenon free.

### SITE BOUNDARY

- 1.41 The SITE BOUNDARY shall be that line beyond which the land is not owned, leased, or otherwise controlled by the licensee.

1.42 Not Used

### SOURCE CHECK

- 1.43 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a radioactive source.

### STAGGERED TEST BASIS

- 1.44 A STAGGERED TEST BASIS shall consist of:

- a. A test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals.
- b. The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

## DEFINITIONS

### THERMAL POWER

- 1.45 THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

### TOTAL PEAKING FACTOR

- 1.46 The TOTAL PEAKING FACTOR (TPF) shall be the ratio of local LHGR for any specific location on a fuel rod divided by the core average LHGR associated with the fuel bundles of the same type operating at the core average bundle power.

### TURBINE BYPASS SYSTEM RESPONSE TIME

- 1.47 The TURBINE BYPASS SYSTEM RESPONSE TIME shall be that time interval from when the turbine bypass control unit generates a turbine bypass valve flow signal until the turbine bypass valves travel to their required positions. The response time may be measured by any series of sequential, overlapping, or total steps such that the entire response time is measured.

### UNIDENTIFIED LEAKAGE

- 1.48 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE.

### UNRESTRICTED AREA

- 1.49 An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials, or any area within the site boundary used for residential quarters or for industrial, commercial, institutional, and/or recreational purposes.

### VENTILATION EXHAUST TREATMENT SYSTEM

- 1.50 A VENTILATION EXHAUST TREATMENT SYSTEM shall be any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal adsorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment (such a system is not considered to have any effect on noble gas effluents). Engineered Safety Features (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.

### VENTING

- 1.51 VENTING shall be the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

## INSTRUMENTATION

### TRAVERSING IN-CORE PROBE SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.3.7.7. The traversing in-core probe system shall be OPERABLE with:

- a. Five movable detectors, drives, and readout equipment to map the core, and
- b. Indexing equipment to allow all five detectors to be calibrated in a common location;

otherwise: with four traversing in-core probe machines, an inaccessible LPRM string may be calibrated using a traversing in-core probe scan from a symmetric string provided that an 'A' type control rod pattern is in use and that the total core TIP asymmetry is less than 6% (standard deviation).

APPLICABILITY: When the traversing in-core probe is used for:

- a. Recalibration of the LPRM detectors, and
- b.\* Monitoring the APLHGR, LHGR, MCPR, or MFLPD.

#### ACTION:

With the traversing in-core probe system inoperable, suspend use of the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.3.7.7 The traversing in-core probe system shall be demonstrated OPERABLE by normalizing each of the above required detector outputs within 72 hours prior to use for the above applicable monitoring or calibration functions.

\*Only the detector(s) in the required measurement location(s) are required to be OPERABLE.

## INSTRUMENTATION

### LOOSE-PART DETECTION SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.3.7.10 The loose-part detection system shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

- a. With one or more loose-part detection system channels inoperable for more than 30 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.3.7.10 Each channel of the loose-part detection system shall be demonstrated OPERABLE by performance of a:

- a. CHANNEL CHECK at least once per 24 hours,
- b. CHANNEL FUNCTIONAL TEST at least once per 31 days, and
- c. CHANNEL CALIBRATION at least once per 18 months.

## INSTRUMENTATION

### EXPLOSIVE GAS MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

---

3.3.7.12 The explosive gas monitoring instrumentation channels shown in Table 3.3.7.12-1 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.6 are not exceeded.

APPLICABILITY: As shown in Table 3.3.7.12-1.

#### ACTION:

- a. With an explosive gas monitoring instrumentation channel alarm/trip setpoint less conservative than required immediately initiate action to suspend the release of gaseous effluents monitored by the affected channel or change the setpoint so it is acceptably conservative or declare the channel inoperable.
- b. With less than the minimum number of explosive gas monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3.7.12-1. Restore the inoperable instrumentation to OPERABLE status within the time specified in the ACTION and if unsuccessful prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 to explain why this inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.3.7.12 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, SOURCE CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3.7.12-1.



TABLE 3.3.7.12-1EXPLOSIVE GAS MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
1 Main Condenser Offgas Treatment System Explosive Gas Monitoring System			
a. Hydrogen Monitor	2	*	111

\*During main condenser offgas treatment system operation.

ACTION 111 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of main condenser offgas treatment system may continue for up to 30 days provided that grab samples are collected at least once per 4 hours and analyzed within the following 4 hours. If the recombiner temperature remains constant and THERMAL POWER has not changed, the grab sample collection frequency may be changed to 8 hours.

TABLE 4.3.7.12-1

EXPLOSIVE GAS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE IS REQUIRED</u>
1 Main Condenser Offgas Treatment System Explosive Gas Monitoring System				
a. Hydrogen Monitor	D	Q(1)	M	*

\*During main condenser offgas treatment system operation.

(1) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

- a. 0.0 volume percent hydrogen, balance nitrogen, and
- b. 2.0 volume percent hydrogen, balance nitrogen.

## INSTRUMENTATION

### 3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

3.3.8 At least one turbine overspeed protection system shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

- a. With one turbine governor valve or one turbine throttle valve per steam chest inoperable and not closed, restore the inoperable valve to OPERABLE status within 72 hours, isolate the affected steam chest from the steam supply, or isolate the turbine from the steam supply within the next 6 hours.
- b. With one turbine interceptor valve or one turbine reheat stop valve inoperable, restore the inoperable valve to OPERABLE status within 72 hours, or close at least one valve in the affected steam line or isolate the turbine from the steam supply within the next 6 hours.
- c. With either of the the above required turbine overspeed protection systems otherwise inoperable, isolate the turbine from the steam supply within the next 6 hours.

#### SURVEILLANCE REQUIREMENTS

---

4.3.8.1 The provisions of Specification 4.0.4 are not applicable.

4.3.8.2 The above required turbine overspeed protection system shall be demonstrated OPERABLE:

- a. At least once per 31 days by:

Cycling each of the following valves through at least one complete cycle from the running position for the overspeed protection control system, the electrical overspeed trip system and the mechanical overspeed trip system;

1. Four high pressure turbine throttle valves,
2. Six low pressure turbine reheat stop valves,
3. Four high pressure turbine governor valves, and
4. Six low pressure turbine interceptor valves.

## INSTRUMENTATION

### SURVEILLANCE REQUIREMENTS (Continued)

---

- b. At least once per 18 months by performance of a CHANNEL CALIBRATION of the turbine overspeed protection instrumentation.
- c. At least once per 40 months by disassembling at least one of each of the above valves and performing a visual and surface inspection of all valve seats, disks and stems and verifying no unacceptable flaws or excessive corrosion. If unacceptable flaws or excessive corrosion are found, all other valves of that type shall be inspected.

## INSTRUMENTATION

### 3/4.3.9 FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

---

3.3.9 The feedwater system/main turbine trip system actuation instrumentation channels shown in Table 3.3.9-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.9-2.

APPLICABILITY: As shown in Table 3.3.9-1.

#### ACTION:

- a. With a feedwater system/main turbine trip system actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.9-2, declare the channel inoperable and either place the inoperable channel in the tripped condition until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value, or declare the associated system inoperable.
- b. For the feedwater system/main turbine trip system, with the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels requirement, restore the inoperable channel to OPERABLE status within 7 days or be in at least STARTUP within the next 6 hours.

#### SURVEILLANCE REQUIREMENTS

---

4.3.9.1 Each feedwater system/main turbine trip system actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST, and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.9.1-1.

4.3.9.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

TABLE 3.3.9-1FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>MINIMUM OPERABLE CHANNELS</u>	<u>APPLICABLE OPERATIOAL CONDITIONS</u>
1. Feedwater System/Main Turbine Trip System		
a. Reactor Vessel Water Level-High, Level 8	3	1

TABLE 3.3.9-2

FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
1. Feedwater System/Main Turbine Trip System		
a. Reactor Vessel Water Level-High, Level 8	$\leq 54.5$ inches*	$\leq 56.0$ inches

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\*See Bases Figure B 3/4 3-1.

TABLE 4.3.9.1-1

FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
1. Feedwater System/Main Turbine Trip System				
a. Reactor Vessel Water Level-High, Level 8	N.A.	M	R	1



### 3/4.11 RADIOACTIVE EFFLUENTS

#### 3/4.11.1 LIQUID EFFLUENTS

##### LIQUID HOLDUP TANKS

##### LIMITING CONDITION FOR OPERATION

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3.11.1.1 - Relocated to ODCM

3.11.1.2 - Relocated to ODCM

3.11.1.3 - Relocated to ODCM

3.11.1.4 The quantity of radioactive material contained in any outside temporary tanks shall be limited to the limits calculated in the ODCM such that a complete release of the tank contents would not result in a concentration at the nearest offsite potable water supply that would exceed the limits specified in 10 CFR Part 20 Appendix B Table II.

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank, within 48 hours reduce the tank contents to within the limit, and describe the events leading to this condition in the next Semiannual Radioactive Effluent Release Report.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

##### SURVEILLANCE REQUIREMENTS

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4.11.1.4 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

### 3/4.11 RADIOACTIVE EFFLUENTS

#### 3/4.11.2 GASEOUS EFFLUENTS

##### EXPLOSIVE GAS MIXTURE

##### LIMITING CONDITION FOR OPERATION

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3.11.2.1 - Relocated to ODCM

3.11.2.2 - Relocated to ODCM

3.11.2.3 - Relocated to ODCM

3.11.2.4 - Relocated to ODCM

3.11.2.5 - Relocated to ODCM

3.11.2.6 The concentration of hydrogen in the main condenser offgas treatment system shall be limited to less than or equal to 4% by volume.

APPLICABILITY: Whenever the main condenser steam jet air ejector (evacuation) system is in operation.

##### ACTION:

- a. With the concentration of hydrogen in the main condenser offgas treatment system exceeding the limit, restore the concentration to within the limit within 48 hours.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

##### SURVEILLANCE REQUIREMENTS

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4.11.2.6 The concentration of hydrogen in the main condenser offgas treatment system shall be determined to be within the above limits by continuously monitoring the waste gases in the main condenser offgas treatment system with the hydrogen monitors required OPERABLE by Table 3.3.7.12-1 of Specification 3.3.7.12.

## RADIOACTIVE EFFLUENTS

### MAIN CONDENSER

#### LIMITING CONDITION FOR OPERATION

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3.11.2.7 The gross radioactivity rate (beta and/or gamma) of the noble gases measured at the main condenser air ejector shall be limited to less than or equal to 332 millicuries/second after 30 minutes decay.

APPLICABILITY: During main condenser offgas treatment system operation as specified in Section 3.3.7.12.

#### ACTION:

With the gross radioactivity rate of the specified noble gases at the motive steam jet condenser discharge exceeding 332 millicuries/second, restore the gross radioactivity rate to within its limit within 72 hours or be in at least HOT STANDBY within the next 12 hours.

#### SURVEILLANCE REQUIREMENTS

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4.11.2.7.1 The radioactivity rate of noble gases at the main condenser air ejector shall be monitored in accordance with Specification 3.3.7.12.

4.11.2.7.2 The gross radioactivity rate (beta and/or gamma) of the specified noble gases from the main condenser air ejector shall be determined to be within the limits of Specification 3.11.2.7 at the following frequencies by performing an isotopic analysis of a representative sample of gases taken at the discharge (prior to dilution and/or discharge) of the main condenser air ejector:

- a. At least once per 31 days.
- b. Within 4 hours following an increase, as indicated by the condenser air ejector noble gas activity monitor, of greater than 50%, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady-state fission gas release from the primary coolant.

## INSTRUMENTATION

### BASES

#### MONITORING INSTRUMENTATION (Continued)

##### 3/4.3.7.2 SEISMIC MONITORING INSTRUMENTATION

The OPERABILITY of the seismic monitoring instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the unit. This instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

##### 3/4.3.7.3 METEOROLOGICAL MONITORING INSTRUMENTATION

The OPERABILITY of the meteorological monitoring instrumentation ensures that sufficient meteorological data are available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public. This instrumentation is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February, 1972.

##### 3/4.3.7.4 REMOTE SHUTDOWN MONITORING INSTRUMENTATION

The OPERABILITY of the remote shutdown monitoring instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT SHUTDOWN of the unit from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criterion 19 of Appendix A to 10 CFR Part 50.

##### 3/4.3.7.5 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

##### 3/4.3.7.6 SOURCE RANGE MONITORS

The source range monitors provide the operator with information of the status of the neutron level in the core at very low power levels during startup and shutdown. At these power levels, reactivity additions shall not be made without this flux level information available to the operator. When the intermediate range monitors are on scale, adequate information is available without the SRMs and they can be retracted.

##### 3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core.

## INSTRUMENTATION

### BASES

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#### MONITORING INSTRUMENTATION (Continued)

3/4.3.7.8 NOT USED

3/4.3.7.9 NOT USED

#### 3/4.3.7.10 LOOSE-PART DETECTION SYSTEM

The OPERABILITY of the loose-part detection system ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

3/4.3.7.11 NOT USED

#### 3/4.3.7.12 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation provides for monitoring the concentrations of potentially explosive gas mixtures in the WASTE GAS HOLDUP SYSTEM to ensure that the concentration of potentially explosive gas mixtures contained in the offgas holdup system is maintained below the flammability limits of hydrogen. Maintaining the concentration of hydrogen below its flammability limit in accordance with Specification 3/4 11.2.6 provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

#### 3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM

This specification is provided to ensure that the turbine overspeed protection system instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment or structures.

#### 3/4.3.9 FEEDWATER SYSTEM/MAIN TURBINE TRIP SYSTEM ACTUATION INSTRUMENTATION

The feedwater system/main turbine trip system actuation instrumentation is provided to initiate the feedwater system/main turbine trip system in the event of reactor vessel water level equal to or greater than the level 8 setpoint associated with a feedwater controller failure.

### 3/4.11 RADIOACTIVE EFFLUENTS

#### BASES

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#### 3/4.11.1 LIQUID EFFLUENTS

3/4.1.1.1 - Relocated to ODCM

3/4.1.1.2 - Relocated to ODCM

3/4.1.1.3 - Relocated to ODCM

#### 3/4.11.1.4 LIQUID HOLDUP TANKS

The tanks listed in this specification include all those outdoor radwaste tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

#### 3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1 - Relocated to ODCM

3/4.11.2.2 - Relocated to ODCM

3/4.11.2.3 - Relocated to ODCM

3/4.11.2.4 - Relocated to ODCM

3/4.11.2.5 - Relocated to ODCM

#### 3/4.11.2.6 EXPLOSIVE GAS MIXTURE

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the offgas system is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

#### 3/4.11.2.7 MAIN CONDENSER

Restricting the gross radioactivity rate of noble gases from the main condenser provides reasonable assurance that the total body exposure to an individual at the exclusion area boundary will not exceed a small fraction of the limits of 10 CFR Part 100 in the event this effluent is inadvertently discharged directly to the environment without treatment. This specification implements the requirements of General Design Criteria 60 and 64 of Appendix A to 10 CFR Part 50.

3/4.12 RADIOLOGICAL ENVIRONMENTAL MONITORING

BASES

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3/4.12.1 - Relocated to ODCM

3/4.12.2 - Relocated to ODCM

3/4.12.3 - Relocated to ODCM

## ADMINISTRATIVE CONTROLS

### PROCEDURES AND PROGRAMS (Continued)

#### d. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- 1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2,
- 3) Monitoring, sampling and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM,
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days.
- 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31 day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,
- 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column I,
- 8) Limitations on the annual and quarterly air dose resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,



## ADMINISTRATIVE CONTROLS

### PROCEDURES AND PROGRAMS (Continued)

#### d. Radioactive Effluent Controls Program (continued)

- 9) Limitations on the annual and quarterly dose to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- 10) Limitations on venting and purging of the containment through the Standby Gas Treatment System to maintain releases as low as reasonably achievable, and
- 11) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

#### e. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- 1) Monitoring, sampling, analysis and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM.
- 2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 3) Participation in the Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

ANNUAL REPORTS (Continued)

6.9.1.5 Reports required on an annual basis shall include:

- a. A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions\* (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole-body dose received from external sources should be assigned to specific major work functions; and
- b. Documentation of all challenges to main steam line safety/relief valves.
- c. The results of specific activity analysis in which the primary coolant exceeded the limits of Specification 3.4.5. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Cleanup system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

MONTHLY OPERATING REPORTS

6.9.1.6 Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC, no later than the 15th of each month following the calendar month covered by the report.

REPORTABLE OCCURRENCES

6.9.1.7 DELETED

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP

6.9.1.8 DELETED

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\*This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

## ADMINISTRATIVE CONTROLS

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### THIRTY DAY WRITTEN REPORTS

6.9.1.9 DELETED

### ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

6.9.1.10 The Annual Radiological Environmental Operating Reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of each year.

The Annual Radiological Environmental Operating Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental monitoring program for the report period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3 and IV.C of Appendix I to 10 CFR Part 50.

## ADMINISTRATIVE CONTROLS

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### RADIOACTIVE EFFLUENT RELEASE REPORT

6.9.1.11 The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a(a)(2).

The Radioactive Effluent Release Reports shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

## ADMINISTRATIVE CONTROLS

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### SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report.

### CORE OPERATING LIMITS REPORT

- 6.9.3.1 Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, for the following:
- a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATES (APLHGR) for Specifications 3.2.1 and 3.4.1.
  - b. The MINIMUM CRITICAL POWER RATIO (MCPR) for Specification 3.2.3.
  - c. The LINEAR HEAT GENERATION RATE (LHGR) for Specification 3.2.4.
- and shall be documented in the CORE OPERATING LIMITS REPORT.

## ADMINISTRATIVE CONTROLS

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### RECORD RETENTION (Continued)

- e. Records of changes made to the procedures required by Specification 6.8.1.
- f. Records of radioactive shipments.
- g. Records of sealed source and fission detector leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.

6.10.3 The following records shall be retained for the duration of the unit Operating License:

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report (FSAR).
- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.
- 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 inservice inspections performed pursuant to these Technical Specifications.
- i. Records of quality assurance activities required by the Operational Quality Assurance Manual not listed in Section 6.10.2.
- 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 POC and the CNSRB.
- l. Records of the service lives of all hydraulic and mechanical snubbers required by Specification 3.7.4 including the date at which the service life commences and associated installation and maintenance records.
- m. Records of analysis required by the radiological environmental monitoring program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed.
- n. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

## ADMINISTRATIVE CONTROLS

### 6.11 RADIATION PROTECTION PROGRAM

6.11.1 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 Part 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/h but less than 1000 mrem/h 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 (RWP)\*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them.
- c. A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the Health Physicist in the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose greater than 1000 mrem shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Manager on duty and/or the health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose in excess of 1000 mrem\*\* that are located within large areas, such as the containment,

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\*Health physics personnel or personnel escorted by health physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

\*\*Measurement made at 18 inches from source of radioactivity.

## ADMINISTRATIVE CONTROLS

### HIGH RADIATION AREA (Continued)

where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device. In lieu of the stay time specification of the RWP, continuous surveillance, direct or remote (such as use of closed circuit TV cameras) may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

### 6.13 PROCESS CONTROL PROGRAM (PCP)

Licensee-initiated changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:
  - 1) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
  - 2) A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State or other applicable regulations.
- b. Shall become effective after review and acceptance by the POC and the approval of the Plant Manager.

### 6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

Licensee-initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:
  - 1) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
  - 2) A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose or setpoint calculations.
- b. Shall become effective after review and acceptance by the POC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any changes to the ODCM were made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 98 TO FACILITY OPERATING LICENSE NO. NPF-21  
WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NUCLEAR PROJECT NO. 2  
DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated June 28, 1991, Washington Public Power Supply System submitted a request for changes to the Technical Specifications (TS) for Nuclear Project No. 2. The proposed changes would relocate the Radiological Effluent TS (RETS) to the Offsite Dose Calculation Manual (ODCM). The proposed changes are in accordance with the guidance provided in the NRC Generic Letter (GL) 89-01, dated January 31, 1989. GL 89-01 stated that the NRC would approve a TS amendment to delete RETS if the requirements would be relocated to the ODCM or Process Control Program.

2.0 DISCUSSION

The following changes would be made to the WNP-2 TS in order to relocate the RETS to the ODCM.

SPECIFICATION	TITLE	DISPOSITION OF EXISTING SPECIFICATION
1.17	GASEOUS RADWASTE TREATMENT SYSTEM	Definition is relocated to the ODCM.
1.27	OFFSITE DOSE CALCULATION MANUAL	Definition is updated to reflect the change in scope of the ODCM.
1.33	PROCESS CONTROL PROGRAM	Definition is updated using guidance from GL 89-01.
1.42	SOLIDIFICATION	Definition is relocated to the ODCM.
3/4.3.7.11	RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION	Programmatic controls are included in 6.8.4 d. Item 1). Existing specification procedural details are relocated to the ODCM.

SPECIFICATION	TITLE	DISPOSITION OF EXISTING SPECIFICATION
3/4.3.3.12	RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION	Programmatic controls are included in 6.8.4 d. Item 1). Existing specification procedural details are relocated to the ODCM. Existing requirements for explosive gas monitoring instrumentation are retained.
3/4.11.1.1	LIQUID EFFLUENTS: CONCENTRATION	Programmatic controls are included in 6.8.4 d. Item 2) and 3). Existing specification procedural details are relocated to the ODCM.
3/4.11.1.2	LIQUID EFFLUENTS: DOSE	Programmatic controls are included in 6.8.4 d. Item 4) and 5). Existing specification procedural details are relocated to the ODCM.
3/4.11.1.3	LIQUID EFFLUENTS: LIQUID RADWASTE TREATMENT SYSTEM	Programmatic controls are included in Item 6). Existing specification procedural details are relocated to the ODCM.
3/4.11.2.1	GASEOUS EFFLUENTS: DOSE RATE	Programmatic controls are included in 6.8.4 d. Item 3) and 7). Existing specification procedural details are relocated to the ODCM.
3/4.11.2.2	GASEOUS EFFLUENTS: DOSE--NOBLE GASES	Programmatic controls are included in 6.8.4 d. Item 5) and 8). Existing specification procedural details are relocated to the ODCM.
3/4.11.2.3	GASEOUS EFFLUENTS: DOSE--IODINE 131, TRITIUM, AND RADIOACTIVE MATERIAL IN PARTICULATE FORM	Programmatic controls are included in 6.8.4 d. Item 5) and 9). Existing specification procedural details are relocated to the ODCM.

SPECIFICATION	TITLE	DISPOSITION OF EXISTING SPECIFICATION
3/4.11.2.4	GASEOUS EFFLUENTS: GASEOUS RADWASTE TREATMENT SYSTEM	Programmatic controls are included in 6.8.4 d. Item 6). Existing specification procedural details are relocated to the ODCM.
3/4.11.2.5	GASEOUS EFFLUENTS: GASEOUS RADWASTE VENTILATION SYSTEM	Programmatic controls are included in 6.8.4 d. Item 6). Existing specification procedural details are relocated to the ODCM.
3/4.11.2.8	RADIOACTIVE EFFLUENTS: VENTING OR PURGING	Programmatic controls are included in 6.8.4 d. Item 10). Existing specification procedural details are relocated to the ODCM.
3/4.11.3	RADIOACTIVE EFFLUENTS: SOLID RADIOACTIVE WASTES	Existing specifications procedural details are relocated to the ODCM.
3/4.11.4	RADIOACTIVE EFFLUENTS: TOTAL DOSE	Programmatic controls are included in 6.8.4 d. Item 11). Existing specification procedural details are relocated to the ODCM.
3/4.12.1	RADIOLOGICAL ENVIRON- MENTAL MONITORING: MONITORING PROGRAM	Programmatic controls are included in 6.8.4 h. Item 1). Existing specification procedural details are relocated to the ODCM.
3/4.12.2	RADIOLOGICAL ENVIRON- MENTAL MONITORING: LAND USE CENSUS	Programmatic controls are included in 6.8.4 h. Item 2). Existing specification procedural details are relocated to the ODCM.
3/4.12.3	RADIOLOGICAL ENVIRON- MENTAL MONITORING: INTERLABORATORY COMPARISON PROGRAM	Programmatic controls are included in 6.8.4 h. Item 3). Existing specification procedural details are relocated to the ODCM.

SPECIFICATION	TITLE	DISPOSITION OF EXISTING SPECIFICATION
6.9.1.10	REPORTING REQUIREMENTS: ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT	Specification simplified and existing reporting details are relocated to the ODCM.
6.9.1.11	REPORTING REQUIREMENTS: RADIOACTIVE EFFLUENTS RELEASE REPORT	Specification simplified and existing reporting details are relocated to the ODCM.
6.13	PROCESS CONTROL PROGRAM	Specification requirements are simplified per GL 89-01 guidance.
6.14	OFFSITE DOSE CALCULATION MANUAL	Specification requirements are simplified.
6.15	MAJOR CHANGES TO LIQUID, GASEOUS, AND SOLID RADWASTE TREATMENT SYSTEMS	Existing procedural details are relocated to the ODCM.

### 3.0 EVALUATION

The proposed changes, as discussed above, are based on NRC GL 89-01 dated January 31, 1989. The changes do not deviate from the guidance, specified in GL 89-01, for moving RETS to the ODCM. In addition, the changes do not alter the conditions or assumptions of any accident analysis, as stated in the WNP-2 Updated Final Safety Analysis Report. Therefore, we find the proposed changes to be acceptable.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted areas as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously

issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding (56 FR 55951). Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). This amendment also involves changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

#### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: B. McDermott

Date: December 26, 1991