


February 26, 2007

DISTRIBUTION CONTROL LIST

Document Name: **IP3 ITS / BASES**

CC#	NAME	DEPARTMENT	LOCATION
1	OPS PROC GP SUPERVISOR	OPS PROCEDURE GROUP	IP2
5	CONTROL ROOM	OPERATIONS	IP3
11	RES DEPARTMENT MGR	RES	45-4-A
19	CONROY, PAT	LICENSING / ROOM 205	GSB-2D
20	CHEMISTRY SUPERVISOR	CHEMISTRY DEPARTMENT	45-4-A
21	TSC (IP3)	53' ELEVATION	IP2
22	SHIFT MANAGER	OPERATIONS	IP3
23	LIS	LICENSING & INFO SERVICE	OFFSITE
25	SIMULATOR	TRAINING	48-2-A
28	RESIDENT INSPETOR	US NRC 88' ELEVATION	IP2
32	EOF	E-PLAN	EOF
47	CHAPMAN, N	BECHTDL	OFFSITE
50	SCOZZARO, ANTHONY	WESTINGHOUSE ELECTRIC	OFFSITE
61	SIMULATOR	TRAINING	48-2-A
69	CONROY, PAT	LICENSING / ROOM 205	GSB/2D
99	BARANSKI J	ST. EMERGENCY MGMT. OFFICE	OFFSITE
106	SIM INSTRUCT AREA	TRAINING	#48
164	CONTROL ROOM	OPERATIONS	IP3
273	FAISON, CHARLENE	NUCLEAR LICENSING	WPO-12
319	GRANT, LEAH	LRQ TRAINING	#48
354	GRANT, LEAH	LRQ TRAINING	#48
357	GRANT, LEAH	ILO TRAINING	48-2-A
424	GRANT, LEAH	TRAINING	#48
474	OUELLETTE P	ENG, PLAN & MGMT INC	OFFSITE
489	CLOUGHNESSY, PAT	PLANT SUPPORT TEAM	GSB/3B
492	WORK CONTROL	OPERATION 72' ELEVATION	IP2
493	OPERATIONS FIN TEAM	33 TURBIN DECK	45-1-A
494	AOEF / A. GROSSJEAN	E-PLAN	WPO/12-D
496	GRANT, LEAH	LRQ TRAINING	#48
497	GRANT, LEAH	LRQ TRAINING	#48
500	GRANT, LEAH	LRQ TRAINING	#48
501	GRANT, LEAH	LRQ TRAINING	#48
512	GRANT, LEAH	LRQ TRAINING	#48
513	GRANT, LEAH	LRQ TRAINING	#48
518	DOC CONTROL DESK	NRC	OFFSITE

4001


 Entergy IPEC SITE MANAGEMENT MANUAL	QUALITY RELATED ADMINISTRATIVE PROCEDURE	IP-SMM-AD-103 Revision 0
	INFORMATIONAL USE	Page 13 of 21

ATTACHMENT 10.1

SMM CONTROLLED DOCUMENT TRANSMITTAL FORM

SITE MANAGEMENT MANUAL CONTROLLED DOCUMENT TRANSMITTAL FORM - PROCEDURES

Page 1 of 1

 Entergy		CONTROLLED DOCUMENT TRANSMITTAL FORM - PROCEDURES	
TO: DISTRIBUTION		DATE: 3/2/07	PHONE NUMBER: 271-7057
FROM: IPEC DOCUMENT CONTROL			
The Document(s) identified below are forwarded for use. In accordance with IP-SMM-AD-103, please review to verify receipt, incorporate the document(s) into your controlled document file, properly disposition superseded, void, or inactive document(s). Sign and return the receipt acknowledgement below within fifteen (15) working days.			
AFFECTED DOCUMENT:		IP3 ITS/BASES/TRM	
DOC #	REV #	TITLE	INSTRUCTIONS
<p>***** FOLLOW THE ATTACHED INSTRUCTIONS*****</p> <p>*****PLEASE NOTE EFFECTIVE DATE*****</p>			
RECEIPT OF THE ABOVE LISTED DOCUMENT(S) IS HEREBY ACKNOWLEDGED. I CERTIFY THAT ALL SUPERSEDED, VOID, OR INACTIVE COPIES OF THE ABOVE LISTED DOCUMENT(S) IN MY POSSESSION HAVE BEEN REMOVED FROM USE AND ALL UPDATES HAVE BEEN PERFORMED IN ACCORDANCE WITH EFFECTIVE DATE(S) (IF APPLICABLE) AS SHOWN ON THE DOCUMENT(S).			
NAME (PRINT)	SIGNATURE	DATE	CC# 518

Distribution of IP3 Technical Specification Amendment 233

(Approved by NRC February 13, 2007)

Pages are to be inserted into your controlled copy of the IP3 Improved Technical Specifications following the instructions listed below. The **TAB** notation indicates which section the pages are located.

REMOVE PAGE	INSERT PAGE
TAB – Facility Operating License	
FOL Page 3, Amd 232	FOL Page 3, Amd 233
TAB – List of Effective Pages	
Pages 1 through 3, (Amd 232)	Pages 1 through 3, (Amd 233)
TAB – List of Amendments	
Page 14	Page 14
TAB – Table of Contents	
Page I, Amd 227	Page I, Amd 233
Page II, Amd 228	Page II, Amd 233
Page III, Amd 227	Page III, Amd 233
Page IV, Amd 227	Page IV, Amd 233
TAB 1.0 – Use and Application	
1.1-4, Amd 205	1.1-2, Amd 233
TAB 3.4 – Reactor Coolant System (RCS)	
3.4.13-1, Amd 205	3.4.13-1, Amd 233
3.4.13-2, Amd 205	3.4.13-2, Amd 233
	3.4.17-1, Amd 233 (new)
	3.4.17-2, Amd 233 (new)

Distribution of IP3 Technical Specification Amendment 233

(Approved by NRC February 13, 2007)

Pages are to be inserted into your controlled copy of the IP3 Improved Technical Specifications following the instructions listed below. The **TAB** notation indicates which section the pages are located.

TAB 5.0 – Administrative Controls	
5.0-13, Amd 205	5.0-13, Amd 233
5.0-14, Amd 205	5.0-14, Amd 233
5.0-15, Amd 205	5.0-15, Amd 233
5.0-16, Amd 205	Deleting pgs 5.0-16 thru 5.0-19
5.0-17, Amd 205	
5.0-18, Amd 205	
5.0-19, Amd 205	
5.0-36, Amd 205	5.0-36, Amd 233

- | | | |
|-----|---|-----------------------|
| (4) | ENO pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; | Amdt. 203
11/27/00 |
| (5) | ENO pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility. | Amdt. 203
11/27/00 |

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

ENO is authorized to operate the facility at steady state reactor core power levels not in excess of 3216 megawatts thermal (100% of rated power).

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 233 are hereby incorporated in the License. ENO shall operate the facility in accordance with the Technical Specifications.

(3)	<u>(DELETED)</u>	Amdt. 205 2-27-01
-----	------------------	----------------------

(4)	<u>(DELETED)</u>	Amdt. 205 2-27-01
-----	------------------	----------------------

D.	(DELETED)	Amdt.46 2-16-83
----	-----------	--------------------

E.	(DELETED)	Amdt.37 5-14-81
----	-----------	--------------------

F. This amended license is also subject to appropriate conditions by the New York State Department of Environmental Conservation in its letter of May 2, 1975, to Consolidated Edison Company of New York, Inc., granting a Section 401 certification under the Federal Water Pollution Control Act Amendments of 1972.

INDIAN POINT 3
TECHNICAL SPECIFICATIONS - APPENDIX A
LIST OF EFFECTIVE PAGES
Page 1 of 3

Page	Amend
Table of Contents	
i	233
ii	233
iii	233
iv	233
Section 1.1	
1	205
2	205
3	224
4	233
5	225
6	205
7	205
8	205
Section 1.2	
1	205
2	205
3	205
Section 1.3	
1	205
2	205
3	205
4	205
5	205
6	205
7	205
8	205
9	205
10	205
11	205
12	205
13	205
Section 1.4	
1	205
2	205
3	205
4	205
Section 2.0	
1	225

Section 3.0	
1	229
2	226
3	229
4	212
5	226
Section 3.1.1	
1	205
Section 3.1.2	
1	205
2	205
Section 3.1.3	
1	205
2	205
Section 3.1.4	
1	205
2	205
3	205
4	205
5	205
Section 3.1.5	
1	205
2	205
Section 3.1.6	
1	205
2	205
3	205
Section 3.1.7	
1	205
2	205
3	205
4	205
Section 3.1.8	
1	205
2	205
Section 3.2.1	
1	205
2	205
3	205
Section 3.2.2	
1	205

2	205
3	205
Section 3.2.3	
1	205
2	205
3	205
4	205
Section 3.2.4	
1	205
2	205
3	205
4	205
Section 3.3.1	
1	205
2	205
3	205
4	205
5	205
6	205
7	205
8	205
9	205
10	205
11	205
12	205
13	225
14	205
15	225
16	205
17	205
18	205
19	225
20	225
Section 3.3.2	
1	205
2	205
3	205
4	205
5	205
6	205
7	205

8	225
9	213
10	205
11	225
12	205
13	205
Section 3.3.3	
1	226
2	211
3	205
4	228
5	228
Section 3.3.4	
1	226
2	205
Section 3.3.5	
1	205
2	231
Section 3.3.6	
1	205
2	205
3	205
4	205
5	205
Section 3.3.7	
1	224
2	205
3	205
Section 3.3.8	
1	215
2	205
Section 3.4.1	
1	225
2	225
Section 3.4.2	
1	205
Section 3.4.3	
1	205
2	205
3	220
4	220

The latest amendment reflected in this list is: **Amendment 233**

INDIAN POINT 3
TECHNICAL SPECIFICATIONS - APPENDIX A
LIST OF EFFECTIVE PAGES
Page 2 of 3

5	220
Section 3.4.4	
1	205
Section 3.4.5	
1	205
2	205
3	205
Section 3.4.6	
1	205
2	205
3	205
Section 3.4.7	
1	205
2	205
3	205
Section 3.4.8	
1	205
2	205
Section 3.4.9	
1	225
2	225
Section 3.4.10	
1	205
2	205
Section 3.4.11	
1	226
2	205
3	205
Section 3.4.12	
1	205
2	226
3	205
4	205
5	205
6	205
7	205
8	205
9	220
10	220
11	220
12	220

Section 3.4.13	
1	233
2	233
Section 3.4.14	
1	205
2	205
3	205
4	205
5	205
Section 3.4.15	
1	226
2	205
3	205
4	205
Section 3.4.16	
1	226
2	205
3	205
4	205
Section 3.4.17	
1	233
2	233
Section 3.5.1	
1	222
2	205
3	205
Section 3.5.2	
1	205
2	205
3	230
4	205
Section 3.5.3	
1	226
2	205
Section 3.5.4	
1	205
2	205
Section 3.6.1	
1	205
2	205
Section 3.6.2	

1	205
2	205
3	205
4	205
5	205
Section 3.6.3	
1	205
2	205
3	205
4	205
5	205
6	205
Section 3.6.4	
1	205
Section 3.6.5	
1	205
Section 3.6.6	
1	205
2	205
3	205
4	205
Section 3.6.7	
1	205
2	205
Section 3.6.8	
1	228
Section 3.6.9	
1	205
2	205
Section 3.6.10	
1	205
2	205
3	205
4	205
Section 3.7.1	
1	205
2	205
3	225
4	205
Section 3.7.2	

1	205
2	205
3	205
Section 3.7.3	
1	207
2	207
3	207
Section 3.7.4	
1	226
2	205
Section 3.7.5	
1	226
2	205
3	205
4	205
Section 3.7.6	
1	205
2	205
Section 3.7.7	
1	205
2	218
Section 3.7.8	
1	205
2	205
Section 3.7.9	
1	205
2	205
3	205
Section 3.7.10	
1	205
Section 3.7.11	
1	223
2	224
Section 3.7.12	
1	205
Section 3.7.13	
1	215
2	205
Section 3.7.14	
1	205

The latest amendment reflected in this list is: **Amendment 233**

INDIAN POINT 3
TECHNICAL SPECIFICATIONS - APPENDIX A
LIST OF EFFECTIVE PAGES
Page 3 of 3

Section 3.7.15	
1	205
2	205
Section 3.7.16	
1	205
2	205
3	205
Section 3.7.17	
1	205
Section 3.8.1	
1	226
2	205
3	205
4	205
5	205
6	205
7	205
8	205
9	205
10	205
Section 3.8.2	
1	205
2	205
3	205
4	205
Section 3.8.3	
1	205
2	205
3	205
4	205
5	205
Section 3.8.4	
1	216
2	216
3	216
Section 3.8.5	
1	205
2	205
Section 3.8.6	

1	205
2	205
3	205
4	205
Section 3.8.7	
1	205
2	205
3	205
Section 3.8.8	
1	205
2	205
Section 3.8.9	
1	205
2	205
Section 3.8.10	
1	205
2	205
Section 3.9.1	
1	205
Section 3.9.2	
1	205
2	205
Section 3.9.3	
1	215
2	215
3	215
Section 3.9.4	
1	205
2	205
Section 3.9.5	
1	205
2	205
Section 3.9.6	
1	205
Section 4.0	
1	205
2	205
3	205
Section 5.0	
1	205
2	205

3	232
4	232
5	232
6	205
7	205
8	205
9	210
10	232
11	232
12	205
13	233
14	233
15	233
16	Deleted
17	Deleted
18	Deleted
19	Deleted
20	205
21	224
22	224
23	224
24	224
25	224
26	232
27	205
28	205
29	205
30	206
31	225
32	227
33	227
34	225
35	225
36	233
37	232
38	232
39	232
40	232
41	232

The latest amendment reflected in this list is: **Amendment 233**

Entergy Nuclear Operations, Inc
Indian Point 3 Nuclear Power Plant
License Amendments Page 14

AMENDMENT	SUBJECT	LETTER DATE
232	Adoption of TSTF-258, TSTF-308, and Related Administrative Control Changes Based on NUREG-1431	12/13/2006
233	Adoption of TSTF-449 - Steam Generator Tube Integrity	02/13/2007

TABLE OF CONTENTS

1.0	USE AND APPLICATION
1.1	Definitions
1.2	Logical Connectors
1.3	Completion Times
1.4	Frequency
2.0	SAFETY LIMITS (SLs)
2.1	Safety Limits
2.2	Safety Limit Violations
3.0	LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY SURVEILLANCE REQUIREMENT (SR) APPLICABILITY
3.1	REACTIVITY CONTROL SYSTEMS
3.1.1	Shutdown Margin (SDM)
3.1.2	Core Reactivity
3.1.3	Moderator Temperature Coefficient (MTC)
3.1.4	Rod Group Alignment Limits
3.1.5	Shutdown Bank Insertion Limits
3.1.6	Control Bank Insertion Limits
3.1.7	Rod Position Indication
3.1.8	PHYSICS TESTS Exceptions—MODE 2
3.2	POWER DISTRIBUTION LIMITS
3.2.1	Heat Flux Hot Channel Factor (FQ(Z))
3.2.2	Nuclear Enthalpy Rise Hot Channel Factor (F^N_H)
3.2.3	AXIAL FLUX DIFFERENCE (AFD)
3.2.4	QUADRANT POWER TILT RATIO (QPTR)
3.3	INSTRUMENTATION
3.3.1	Reactor Protection System (RPS) Instrumentation
3.3.2	Engineered Safety Feature Actuation System (ESFAS) Instrumentation
3.3.3	Post Accident Monitoring (PAM) Instrumentation
3.3.4	Remote Shutdown
3.3.5	Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation
3.3.6	Containment Purge System and Pressure Relief Line Isolation Instrumentation
3.3.7	Control Room Ventilation (CRVS) Actuation Instrumentation
3.3.8	Fuel Storage Building Emergency Ventilation System (FSBEVS) Actuation Instrumentation

(continued)

TABLE OF CONTENTS

3.4 REACTOR COOLANT SYSTEM (RCS)

- 3.4.1 RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits
- 3.4.2 RCS Minimum Temperature for Criticality
- 3.4.3 RCS Pressure and Temperature (P/T) Limits
- 3.4.4 RCS Loops—MODES 1 and 2
- 3.4.5 RCS Loops—MODE 3
- 3.4.6 RCS Loops—MODE 4
- 3.4.7 RCS Loops—MODE 5, Loops Filled
- 3.4.8 RCS Loops—MODE 5, Loops Not Filled
- 3.4.9 Pressurizer
- 3.4.10 Pressurizer Safety Valves
- 3.4.11 Pressurizer Power Operated Relief Valves (PORVs)
- 3.4.12 Low Temperature Overpressure Protection (LTOP)
- 3.4.13 RCS Operational LEAKAGE
- 3.4.14 RCS Pressure Isolation Valve (PIV) Leakage
- 3.4.15 RCS Leakage Detection Instrumentation
- 3.4.16 RCS Specific Activity
- 3.4.17 Steam Generator (SG) Tube Integrity

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

- 3.5.1 Accumulators
- 3.5.2 ECCS—Operating
- 3.5.3 ECCS—Shutdown
- 3.5.4 Refueling Water Storage Tank (RWST)

3.6 CONTAINMENT SYSTEMS

- 3.6.1 Containment
- 3.6.2 Containment Air Locks
- 3.6.3 Containment Isolation Valves
- 3.6.4 Containment Pressure
- 3.6.5 Containment Air Temperature
- 3.6.6 Containment Spray System and Containment Fan Cooler System
- 3.6.7 Spray Additive System
- 3.6.8 Not Used
- 3.6.9 Isolation Valve Seal Water (IVSW) System
- 3.6.10 Weld Channel and Penetration Pressurization System (WC & PPS)

(continued)

TABLE OF CONTENTS

3.7 PLANT SYSTEMS

- 3.7.1 Main Steam Safety Valves (MSSVs)
- 3.7.2 Main Steam Isolation Valves (MSIVs) and Main Steam Check Valves (MSCVs)
- 3.7.3 Main Boiler Feedpump Discharge Valves (MBFPDVs), Main Feedwater Regulation Valves (MFRVs), Main Feedwater Inlet Isolation Valves (MFIIVs) and Main Feedwater (MF) Low Flow Bypass Valves
- 3.7.4 Atmospheric Dump Valves (ADVs)
- 3.7.5 Auxiliary Feedwater (AFW) System
- 3.7.6 Condensate Storage Tank (CST)
- 3.7.7 City Water (CW)
- 3.7.8 Component Cooling Water (CCW) System
- 3.7.9 Service Water (SW) System
- 3.7.10 Ultimate Heat Sink (UHS)
- 3.7.11 Control Room Ventilation System (CRVS)
- 3.7.12 Control Room Air Conditioning System (CRACS)
- 3.7.13 Fuel Storage Building Emergency Ventilation System (FSBEVS)
- 3.7.14 Spent Fuel Pit Water Level
- 3.7.15 Spent Fuel Pit Boron Concentration
- 3.7.16 Spent Fuel Assembly Storage
- 3.7.17 Secondary Specific Activity

3.8 ELECTRICAL POWER SYSTEMS

- 3.8.1 AC Sources—Operating
- 3.8.2 AC Sources—Shutdown
- 3.8.3 Diesel Fuel Oil and Starting Air
- 3.8.4 DC Sources—Operating
- 3.8.5 DC Sources—Shutdown
- 3.8.6 Battery Cell Parameters
- 3.8.7 Inverters—Operating
- 3.8.8 Inverters—Shutdown
- 3.8.9 Distribution Systems—Operating
- 3.8.10 Distribution Systems—Shutdown

3.9 REFUELING OPERATIONS

- 3.9.1 Boron Concentration
- 3.9.2 Nuclear Instrumentation
- 3.9.3 Containment Penetrations
- 3.9.4 Residual Heat Removal (RHR) and Coolant Circulation—High Water Level
- 3.9.5 Residual Heat Removal (RHR) and Coolant Circulation—Low Water Level
- 3.9.6 Refueling Cavity Water Level

(continued)

TABLE OF CONTENTS

4.0 DESIGN FEATURES

- 4.1 Site Location
- 4.2 Reactor Core
- 4.3 Fuel Storage

5.0 ADMINISTRATIVE CONTROLS

- 5.1 Responsibility
- 5.2 Organization
- 5.3 Unit Staff Qualifications
- 5.4 Procedures
- 5.5 Programs and Manuals
 - 5.5.1 Offsite Dose Calculation Manual (ODCM)
 - 5.5.2 Primary Coolant Sources Outside Containment
 - 5.5.3 NOT USED
 - 5.5.4 Radioactive Effluent Controls Program
 - 5.5.5 Component Cyclic or Transient Limit
 - 5.5.6 Reactor Coolant Pump Flywheel Inspection Program
 - 5.5.7 Inservice Testing Program
 - 5.5.8 Steam Generator (SG) Program
 - 5.5.9 Secondary Water Chemistry Program
 - 5.5.10 Ventilation Filter Testing Program (VFTP)
 - 5.5.11 Explosive Gas and Storage Tank Radioactivity Monitoring Program
 - 5.5.12 Diesel Fuel Oil Testing Program
 - 5.5.13 Technical Specification (TS) Bases Control Program
 - 5.5.14 Safety Function Determination Program (SFDP)
 - 5.5.15 Containment Leakage Rate Testing Program
- 5.6 Reporting Requirements
 - 5.6.1 NOT USED
 - 5.6.2 Annual Radiological Environmental Operating Report
 - 5.6.3 Radioactive Effluent Release Report
 - 5.6.4 NOT USED
 - 5.6.5 CORE OPERATING LIMITS REPORT (COLR)
 - 5.6.6 NOT USED
 - 5.6.7 Post Accident Monitoring Instrumentation (PAM) Report
 - 5.6.8 Steam Generator Tube Inspection Report
- 5.7 High Radiation Area

1.1 Definitions

LEAKAGE (continued)

system not directly connected to the atmosphere. Leakage past the pressurizer safety valve seats and leakage past the safety injection pressure isolation valves are examples of reactor coolant system leakage into closed systems.)

2. LEAKAGE into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; or
3. Reactor Coolant System (RCS) LEAKAGE through a steam generator to the Secondary System (primary to secondary LEAKAGE);

b. Unidentified LEAKAGE

All LEAKAGE (except for leakage into closed systems and RCP seal water injection or leakoff) that is not identified LEAKAGE;

c. Pressure Boundary LEAKAGE

LEAKAGE (except primary to secondary LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.

MASTER RELAY TEST

A MASTER RELAY TEST shall consist of energizing each master relay and verifying the OPERABILITY of each relay. The MASTER RELAY TEST shall include a continuity check of each associated slave relay.

MODE

A MODE shall correspond to any one inclusive combination of core reactivity condition, power level, average reactor coolant loop temperature, and reactor

(continued)

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.13 RCS Operational LEAKAGE

LCO 3.4.13 RCS operational LEAKAGE shall be limited to:

- a. No pressure boundary LEAKAGE;
- b. 1 gpm unidentified LEAKAGE;
- c. 10 gpm identified LEAKAGE; and
- d. 150 gallons per day primary to secondary LEAKAGE through any one steam generator (SG).

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. RCS operational LEAKAGE not within limits for reasons other than pressure boundary LEAKAGE or primary to secondary LEAKAGE.	A.1 Reduce LEAKAGE to within limits.	4 hours
B. Required Action and associated Completion Time of Condition A not met. <u>OR</u> Pressure boundary LEAKAGE exists. <u>OR</u> Primary to secondary LEAKAGE not within limit.	B.1 Be in MODE 3. <u>AND</u> B.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.13.1	<p>-----NOTES-----</p> <p>1. Not required to be performed in MODE 3 or 4 until 12 hours of steady state operation.</p> <p>2. Not applicable to primary to secondary LEAKAGE.</p> <p>-----</p> <p>Verify RCS Operational LEAKAGE is within limits by performance of RCS water inventory balance.</p>	<p>-----NOTE-----</p> <p>Only required to be performed during steady state operation</p> <p>-----</p> <p>72 hours</p>
SR 3.4.13.2	<p>-----NOTE-----</p> <p>Not required to be performed until 12 hours after establishment of steady state operation.</p> <p>-----</p> <p>Verify primary to secondary LEAKAGE is \leq 150 gallons per day through any one SG.</p>	<p>72 hours</p>

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.17 Steam Generator (SG) Tube Integrity

LCO 3.4.17 SG tube integrity shall be maintained.

AND

All SG tubes satisfying the tube repair criteria shall be plugged in accordance with the Steam Generator Program.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

-----NOTE-----
Separate Condition entry is allowed for each SG tube.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more SG tubes satisfying the tube repair criteria and not plugged in accordance with the Steam Generator Program.	A.1 Verify tube integrity of the affected tube(s) is maintained until the next refueling outage or SG tube inspection.	7 days
	<u>AND</u> A.2 Plug the affected tube(s) in accordance with the Steam Generator Program.	Prior to entering MODE 4 following the next refueling outage or SG tube inspection
B. Required Action and associated Completion Time of Condition A not met. <u>OR</u> SG tube integrity not maintained.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.17.1	Verify SG tube integrity in accordance with the Steam Generator Program.	In accordance with the Steam Generator Program
SR 3.4.17.2	Verify that each inspected SG tube that satisfies the tube repair criteria is plugged in accordance with the Steam Generator Program.	Prior to entering MODE 4 following a SG tube inspection

5.5 Programs and Manuals

5.5.8 Steam Generator (SG) Program

A Steam Generator Program shall be established and implemented to ensure that SG tube integrity is maintained. In addition, the Steam Generator Program shall include the following provisions:

- a. Provisions for condition monitoring assessments. Condition monitoring assessment means an evaluation of the "as found" condition of the tubing with respect to the performance criteria for structural integrity and accident induced leakage. The "as found" condition refers to the condition of the tubing during an SG inspection outage, as determined from the inservice inspection results or by other means, prior to the plugging of tubes. Condition monitoring assessments shall be conducted during each outage during which the SG tubes are inspected or plugged, to confirm that the performance criteria are being met.
- b. Performance criteria for SG tube integrity. SG tube integrity shall be maintained by meeting the performance criteria for tube structural integrity, accident induced leakage, and operational LEAKAGE.
 1. Structural integrity performance criterion: All in-service steam generator tubes shall retain structural integrity over the full range of normal operating conditions (including startup, operation in the power range, hot standby, and cool down and all anticipated transients included in the design specification) and design basis accidents. This includes retaining a safety factor of 3.0 against burst under normal steady state full power operation primary-to-secondary pressure differential and a safety factor of 1.4 against burst applied to the design basis accident primary-to-secondary pressure differentials. Apart from the above requirements, additional loading conditions associated with the design basis accidents, or combination of accidents in accordance with the design and licensing basis, shall also be evaluated to determine if the associated loads contribute significantly to burst or collapse. In the assessment of tube integrity, those loads that do significantly affect burst or collapse shall be determined and assessed in combination with the loads due to pressure with a safety factor of 1.2 on the combined primary loads and 1.0 on axial secondary loads.
 2. Accident induced leakage performance criterion: The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the

(continued)

5.5 Programs and Manuals

5.5.8 Steam Generator (SG) Program (continued)

leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG. Leakage is not to exceed 0.3 gpm per SG and 1 gpm through all SGs.

3. The operational LEAKAGE performance criterion is specified in LCO 3.4.13, "RCS Operational LEAKAGE."
- c. Provisions for SG tube repair criteria. Tubes found by inservice inspection to contain flaws with a depth equal to or exceeding 40% of the nominal tube wall thickness shall be plugged.
- d. Provisions for SG tube inspections. Periodic SG tube inspections shall be performed. The number and portions of the tubes inspected and methods of inspection shall be performed with the objective of detecting flaws of any type (e.g., volumetric flaws, axial and circumferential cracks) that may be present along the length of the tube, from the tube-to-tubesheet weld at the tube inlet to the tube-to-tubesheet weld at the tube outlet, and that may satisfy the applicable tube repair criteria. The tube-to-tubesheet weld is not part of the tube. In addition to meeting the requirements of d.1, d.2, and d.3 below, the inspection scope, inspection methods, and inspection intervals shall be such as to ensure that SG tube integrity is maintained until the next SG inspection. An assessment of degradation shall be performed to determine the type and location of flaws to which the tubes may be susceptible and, based on this assessment, to determine which inspection methods need to be employed and at what locations.
 1. Inspect 100% of the tubes in each SG during the first refueling outage following SG replacement.
 2. Inspect 100% of the tubes at sequential periods of 144, 108, 72, and, thereafter, 60 effective full power months. The first sequential period shall be considered to begin after the first inservice inspection of the SGs. In addition, inspect 50% of the tubes by the refueling outage nearest the midpoint of the period and the remaining 50% by the refueling outage nearest the end of the period. No SG shall operate for more than 72 effective full power months or three refueling outages (whichever is less) without being inspected.

(continued)

5.5 Programs and Manuals

5.5.8 Steam Generator (SG) Program (continued)

3. If crack indications are found in any SG tube, then the next inspection for each SG for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever is less). If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-line indication is not associated with a crack(s), then the indication need not be treated as a crack.
- e. Provisions for monitoring operational primary to secondary LEAKAGE.

-----NOTE-----
Pages 5.0-16 through 5.0-19 are deleted.
Next page is 5.0-20.

(continued)

5.6 Reporting Requirements

5.6.7 Post Accident Monitoring Instrumentation (PAM) Report

When a report is required by LCO 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the next 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.8 Steam Generator Tube Inspection Report

A report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with the Specification 5.5.8 Steam Generator (SG) Program. The report shall include:

- a. The scope of inspections performed on each SG,
 - b. Active degradation mechanisms found,
 - c. Nondestructive examination techniques utilized for each degradation mechanism,
 - d. Location, orientation (if linear), and measured sizes (if available) of service induced indications,
 - e. Number of tubes plugged during the inspection outage for each active degradation mechanism,
 - f. Total number and percentage of tubes plugged to date,
 - g. The results of condition monitoring, including the results of tube pulls and in-situ testing, and
 - h. The effective plugging percentage for all plugging in each SG.
-