

## SECONDARY CONTAINMENT PREVENTATIVE MAINTENANCE PROGRAM

A. PURPOSE

The purpose of this program is to provide a method for the periodic inspection of the Secondary Containment and guidelines on maintenance performed during the operating cycle. This program is a commitment resulting from the Level IV violation received in NRC Inspection Report 50-254/91017; 50-265/91013.

B. REFERENCES

1. Nuclear Licensing Administrator letter dated August 11, 1991 to Bert Davis of the NRC.
2. Notice of violation - NRC inspection reports no. 50-254/91917; 50-265/91013 dated Sep 24, 1991.
3. LER 91-11/ DVR 04-01-91-102
4. Response to NOV for NRC Inspection Reports 50-254/91017; 50-265/91013 dated October 25, 1991.
5. "Secondary Containment Capability Test", QTS 160-5.

C. PRECAUTIONS

1. None.

D. PREREQUISITES

1. None.

E. LIMITATIONS AND ACTIONS

1. Items on the Secondary Containment Preventative Maintenance Inspection Checklist may be evaluated as not applicable due to reasons of accessibility, ALARA, or other.
2. When performing leakage evaluations, inspect the as-found condition of the component in question and compare that to the results of the most recently completed secondary containment test in which a leak was induced. This will provide comparative data for allowable secondary containment inleakage. Items evaluated as below the threshold of impacting the secondary containment integrity may be repaired without performing a Secondary Containment Test.

F. PROCEDURE

1. Verify the operability of the Reactor Building interlock doors by performing the following:

**CAUTION**

If an interlock malfunctions allowing a breach of secondary containment, then immediately close the doors and notify the Shift Engineer.

- a. Open one door at a time at each interlock location specified on the Secondary Containment Preventative Maintenance Inspection Checklist and verify the other door(s) cannot be opened.
2. Inspect the integrity of the Secondary Containment penetrations listed in steps a through b of Secondary Containment Preventative Maintenance Inspection Checklist by performing the following:
    - a. Inspect each penetration for excessive air in leakage and/or degraded seals. Items of concern include rubber door seals, door sweeps, and missing or degraded seal material. The amount of air inleakage can be qualitatively measured by using a smoke generator (smoke tube SI# 853025). Some air inleakage is expected through the interlock doors.
    - b. Components that exhibit questionable integrity are to be documented on the As-Found Condition Evaluation Checklist and forwarded to the Technical Staff system engineer to be dispositioned.
    - c. The Technical Staff system engineer shall complete the As-Found Condition Evaluation Checklist for components with questionable leakage.
      1. If the item(s) are evaluated as below the threshold to impact secondary containments ability to perform its safety function, then a work request should be generated to correct the problem.
      2. If the item(s) are evaluated as above the threshold to impact secondary containment's ability to perform it's safety function, then immediately notify the Shift Engineer. In this event, QTS 160-5, "Secondary Containment Capability Test", shall be performed to verify secondary containment integrity.

H. CHECKLISTS

1. Attachment A, As-Found Condition Evaluation Checklist.
2. Attachment B, Secondary Containment Preventative Maintenance Inspection Checklist.  
(final)

ATTACHMENT A  
AS-FOUND CONDITION EVALUATION CHECKLIST

TEMPORARY PROCEDURE

1. Item(s) to be evaluated: \_\_\_\_\_  
\_\_\_\_\_

2. As found condition of item(s) (include dimensions):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Data from most recent performance of the Secondary Containment Capability Test:

Test Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Reactor Building Differential Pressure before induced leak (approximately a four inch hole). \_\_\_\_\_ inches H2O vacuum

Reactor Building Differential Pressure after induced leak. \_\_\_\_\_ inches H2O vacuum

Current margin between the induced leak differential pressure and the Technical Specification limit. \_\_\_\_\_ inches H2O vacuum

4. Is the magnitude of the as-found or degraded condition larger or smaller than the size of the induced leak from the last test? (Explain)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Final Evaluation of identified item(s). Include Work Request numbers as applicable.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Performed By: \_\_\_\_\_/\_\_\_\_\_  
Technical Staff System Engineer / Date

Reviewed By: \_\_\_\_\_/\_\_\_\_\_  
(final) Technical Staff Supervisor / Date

SECONDARY CONTAINMENT PREVENTATIVE MAINTENANCE INSPECTION CHECKLIST

A. DISCUSSION

This preventative maintenance program incorporates a periodic walkdown of Secondary Containment boundaries that are likely to wear or degrade through an operating cycle. This checklist is to be completed three times per year (every 3-5 months). The items included on this checklist may be inspected in any order. This checklist should not be considered all inclusive. Other items may be inspected at the inspector's discretion.

The inspection should focus on excessive air inleakage and/or degraded seals. All interlock doors will be verified to be functioning properly. Open one door at a time at each interlock location and verify the other door(s) cannot be opened. If an interlock malfunctions allowing a breach of secondary containment, then immediately close the doors and notify the Shift Engineer. If any items are found to be unsatisfactory, notify the Technical Staff system engineer to perform an evaluation of the as-found condition on Attachment A.

The three categories of evaluation are satisfactory (SAT), unsatisfactory (UNSAT), and not applicable (N/A). Items on the inspection checklist may be evaluated as not applicable due to reasons of accessibility, ALARA, or other.

B. CHECKLIST

	Interlock	Door	Evaluation	Init/Date
1	U-1 595' El. by RFP Area	Turb Bldg Side Rx Bldg Side To HRSS	_____ _____ _____	____/____
	Comments: _____ _____			
2	U-2 595' El. by RFP Area	Turb Bldg Side Rx Bldg Side To HRSS	_____ _____ _____	____/____
	Comments: _____ _____			

	<u>Interlock</u>	<u>Door</u>	<u>Evaluation</u>	<u>Init/Date</u>
3	U-1/2 EDG Access Area	Rx Bldg Side U-1/2 EDG Side 1/2 Trackway Outside	_____ _____ _____	____/____
Comments: _____ _____				
4	U-1/2 Door to Turb Bldg Roof	Rx Bldg Side TB Roof Side	_____ _____	____/____
Comments: _____ _____				
5	U-1 HPCI Room Access	HPCI Room Side Elevator Side	_____ _____	____/____
Comments: _____ _____				
6	U-1 MSIV Room Access	MSIV Room Side Turb Bldg Side	_____ _____	____/____
Comments: _____ _____				
7	U-2 MSIV Rcom Access	MSIV Room Side Turb Bldg Side	_____ _____	____/____
Comments: _____ _____				
8	U-1/2 647 El. 480V SWGR BUS 18 (28)	Turb Bldg Side U-1 Rx Bldg U-2 Rx Bldg	_____ _____ _____	____/____
Comments: _____ _____				
9	U-1 DW Purge Fans, Dampers, & Filter Access Doors	N/A	_____	____/____
Comments: _____ _____				

	<u>Interlock</u>	<u>Door</u>	<u>Evaluation</u>	<u>Init/Date</u>
10	U-2 DW Purge Fans, Dampers, & Filter Access Doors	N/A	_____	____/____
	Comments: _____			
11	U-1 Rx Bldg Vent Isol Damp	Supply Exhaust	_____	____/____
	Comments: _____			
12	U-2 Rx Bldg Vent Isol Damp	Supply Exhaust	_____	____/____
	Comments: _____			
13	U-1/2 Equip Access-RR Doors	Rx Bldg Side Outside	_____	____/____
	Comments: _____			
14	U-1 MSL Boot/ Seal D Htr Bay	A MSL B MSL C MSL D MSL	_____	____/____
	Comments: _____			
15	U-2 MSL Boot/ Seal D Htr Bay	A MSL B MSL C MSL D MSL	_____	____/____
	Comments: _____			
16	U-1 D Heater Bay - General Area	N/A	_____	____/____
	Comments: _____			

	<u>Interlock</u>	<u>Door</u>	<u>Evaluation</u>	<u>Init/Date</u>
17	U-2 D Heater Bay - General Area	N/A	_____	____/____
Comments: _____ _____				
18	U-1/2 690' El. Blow-Off Side Panels	N/A	_____	____/____
Comments: _____ _____				
19	SBGTS Access Hatch Near MO 1/2-7507-A,B	N/A	_____	____/____
Comments: _____ _____				

(final)