

EOP: ECA-1.2	TITLE: LOCA OUTSIDE CONTAINMENT	REV: 3 PAGE 1 of 7
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ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

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TECHNICAL REVIEW

PORC REVIEW DATE 2-8-95

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PLANT SUPERINTENDENT

2-9-95  
EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: \_\_\_\_\_

EOP: ECA-1.2	TITLE: LOCA OUTSIDE CONTAINMENT	REV: 3 PAGE 2 of 7
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A. PURPOSE - This procedure provides actions to identify and isolate a LOCA outside containment.

B. ENTRY CONDITIONS/SYMPTOMS

1. ENTRY CONDITIONS - This procedure is entered from:

- a. E-0, REACTOR TRIP OR SAFETY INJECTION, and E-1, LOSS OF REACTOR OR SECONDARY COOLANT, on abnormal radiation in the auxiliary building due to a loss of RCS inventory outside containment.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE: Adverse CNMT values should be used whenever CNMT pressure is greater than 4 psig or CNMT radiation is greater than  $10^{+05}$  R/hr.

1 Verify Proper RHR Normal Cooling Valve Alignment:

- o MOV-700 and MOV-701, RHR suction valves from A hot leg - CLOSED
- o MOV-720 and MOV-721, RHR discharge valves to B cold leg - CLOSED

Manually close valves.

IF neither MOV-700 nor MOV-701 can be closed, THEN perform the following:

- a. Stop any running RHR pumps.
- b. Close the following valves:
  - MOV-856, RHR suction from RWST
  - MOV-704A and MOV-704B, RHR pump suction cross tie valves

IF neither MOV-720 nor MOV-721 can be closed, THEN:

- a. Stop any running RHR pump.
- b. Close the following valves:
  - HCV-624 and HCV-625, RHR Hx outlet valves
  - HCV-626, RHR Hx bypass valve, if open

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

## 2 Check CVCS Valve Alignment:

a. Verify the following valves -  
CLOSED

- AOV-310, Excess letdown isolation valve
- AOV-296, Auxiliary spray valve
- AOV-392A, Charging line isolation valve to loop B hot leg

b. Verify the following CI valves -  
CLOSED

- MOV-313, seal return isolation valve
- AOV-371, letdown isolation valve

a. Manually close valves.

IF AOV-310 can NOT be closed, THEN ensure seal return isolation valve, MOV-313, closed.

IF AOV-296 or AOV-392A can NOT be closed, THEN perform the following:

- 1) Manually close HCV-142 charging line flow control valve.
- 2) Dispatch AO with RWST area key to locally close V-384A.

b. Manually close valves.

IF either valve can NOT be closed, THEN dispatch AO to locally isolate flowpath as necessary.

- o Close V-315A, seal return filter inlet, to isolate MOV-313 (reach rod outside SWRF room).
- o Close V-204A, NRHX inlet, to isolate AOV-371 (inside NRHX room).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
3	Check Safeguards Valves For Backflow:	
	a. Close RHR pump discharge to Rx vessel deluge (MOV-852A) and check for RCS pressure increase	a. Perform the following: 1) Open MOV-852A. 2) Close RHR pump discharge to Rx vessel deluge (MOV-852B). 3) Check for RCS pressure increase. <u>IF NOT, THEN</u> open MOV-852B and go to Step 3c.
	b. Go to Step 7.	
	c. Dispatch AO with locked valve key to locally close breakers for SI pump discharge to cold leg isolation valves  • MOV-878B, MCC D position 8C • MOV-878D, MCC D position 8F	
	d. Close SI pump discharge to cold leg B (MOV-878B) and check for pressure increase	d. Perform the following: 1) Open MOV-878B. 2) Close SI pump discharge to cold leg A (MOV-878D). 3) Check for RCS pressure increase. <u>IF NOT, THEN</u> open MOV-878D <u>AND</u> go to Step 4.
	e. Open breakers for MOV-878B and MOV-878D	
	f. Go to Step 7.	

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

4 Check Charging Valves For Backflow:

- a. Check charging pumps - ALL PUMPS OFF
- b. Close charging line isolation valve to loop B cold, AOV-294
- c. Check RCS pressure - INCREASING
- d. Go to Step 7

5 RCP Seal Injection Flow To Each RCP - GREATER THAN 6 GPM

- a. Go to Step 5.
- b. Perform the following:
  - 1) Manually close HCV-142, charging line flow control valve.
  - 2) Dispatch AO with RWST area key to locally close V-384A.
- c. Restore charging line as necessary and go to Step 5.

IF CCW is being supplied to either RCP thermal barrier, THEN perform the following:

- a. Ensure at least one charging pump running.
- b. Increase charging pump speed and adjust charging line flow control valve (HCV-142) as necessary to establish required seal injection flow.
- c. Go to Step 6.

IF neither CCW pump is running, THEN perform the following:

- a. Close RCP CCW return valves.
  - MOV-759A
  - MOV-759B
- b. Go to Step 7.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
6 Check RCP Thermal Barrier:	<ul style="list-style-type: none"> <li>a. Check the following for indications of CCW System in leakage               <ul style="list-style-type: none"> <li>o CCW Surge Tank Level, LI-618 - INCREASING</li> </ul> </li> <li style="text-align: center;">-OR-</li> <li>o R-17 - ON ALARM OR INCREASING</li> </ul>	<ul style="list-style-type: none"> <li>a. Go to Step 7.</li> </ul>
b. Close RCP A thermal barrier return valve, AOV-754A	c. Check RCS pressure - INCREASING	b. Close RCP A CCW return valve, MOV-759A.
d. Go to Step 7.	e. Close RCP B thermal barrier return valve, AOV-754B	c. Restore RCP A thermal barrier cooling, if desired, and go to Step 6e.
f. Check RCS pressure - INCREASING	7 Check If Break Is Isolated:	e. Close RCP B CCW return valve, MOV-759B.
a. RCS pressure - INCREASING	b. Go to E-1, LOSS OF REACTOR OR SECONDARY COOLANT, Step 1	f. Restore RCP B thermal barrier cooling if desired.
		a. Go to ECA-1.1, LOSS OF EMERGENCY COOLANT RECIRCULATION, Step 1.

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