ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 23

TECHNICAL REVIEW

PORC REVIEW DATE 5/6/92

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PLANT SUPERINTENDENT

5/8/92
EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

A. PURPOSE - This procedure provides the steps necessary to respond to a loss of CCW while the plant is at power.

B. ENTRY CONDITIONS/SYMPTOMS

1. SYMPTOMS - The symptoms of LOSS OF CCW DURING POWER OPERATION are;

a. Annunciator A-13 COMP COOLING SURGE TANK LO LEVEL 41.2%, lit, or

b. Annunciator A-22 CCW PUMP DISCHARGE LO PRESS 60 PSI, lit, or

c. Annunciator A-17, MOTOR OFF, RCP, CCP, lit, or

d. Annunciator A-9, RHR PUMP COOLING WATER OUTLET LO FLOW 15 GPM, lit or

e. Annunciator A-6, CONT SPRAY PUMP COOLING WATER OUT LOW FLOW 15 GPM, lit or

f. Annunciator A-14, SAFETY INJ PUMPS COOLING WATER OUT LO FLOW 25 GPM, lit or

g. Annunciator A-7 (A-15), RCP 1A (1B) CCW RETURN HI TEMP OR LO FLOW 165 GPM 125°F, lit or

h. Annunciator A-24 (A-32), RCP 1A (1B) OIL LEVEL + 1.25, lit.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

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CAUTION

IF CCW FLOW TO A RCP IS INTERRUPTED FOR GREATER THAN 2 MINUTES OR IF EITHER RCP MOTOR BEARING TEMPERATURE EXCEEDS 200°F, THEN CCW SHOULD BE CONSIDERED LOST TO THAT RCP, REFER TO STEP 3.

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1 Check CCW Pump Status:	Perform the following:
o Annunciator A-17, Motor Off RCP CCP - EXTINGUISHED	a. Verify auto start of standby CCW pump or start manually.
o Both CCW pump breaker white disagreement lights - EXTINGUISHED	b. IF Annunciator A-22, CCW pump discharge lo press 60 psi LIT, THEN check closed CCW to RHR HXs (MOV-738A and MOV-738B).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: CCW surge tank level should be verified locally in the Aux Bldg, if possible.

2 Verify CCW Surge Tank Level Normal:

a. CCW surge tank level - APPROXIMATELY 50% AND STABLE

a. Open RMW to CCW surge tank (MOV-823) and start a RMW pump and perform the following:

IF surge tank level is stable or increasing, THEN go to Step 3.

IF surge tank level can NOT be maintained greater than 10%, THEN:

1) Trip the Rx.

2) Trip the RCPs.

3) Place both CCW pumps in pull stop.

4) Go to E-0, REACTOR TRIP or SAFETY INJECTION.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

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CAUTION

IF AN RCP(S) IS TRIPPED DUE TO A LOSS OF CCW, SEAL INJECTION SHOULD BE MAINTAINED TO THE IDLE RCP(S) UNTIL RCS TEMPERATURE IS LESS THAN 200°F, OR UNTIL CCW IS RESTORED.

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3	Check CCW To Both RCPs: o Annunciator A-7 (A-15), RCP 1A (1B) CCW return Hi temp or low flow 165 gpm 125°F alarm - EXTINGUISHED o RCP motor bearings temperature (PPCS address GD-RCPS OR RCP temperature monitor RK-30A recorder) - ≤ 200°F	IF CCW lost to RCP(s), THEN: a. Trip the Rx. b. Trip affected RCP(s). c. Go to E-0, REACTOR TRIP or SAFETY INJECTION.
4	Check CCW Valve Alignment - NORMAL (Refer to Attachment CONTROL ROOM CCW ALIGNMENT DURING POWER OPERATION)	Align CCW valves as necessary.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: o An evaluation must be made to determine if operation may continue while investigating a CCW leak in containment.

o Operation may continue with the reactor support coolers isolated. If this occurs, notify higher supervision.

5 Check For CCW Leakage In CNMT:

a. CNMT sump A levels - NOT INCREASING NOTICEABLY

a. IF abnormal increase in CNMT sump level, THEN:

1) Direct HP Tech to sample sump A for chromates.

2) Prepare to make CNMT entry to check for CCW leak.

b. RCP oil levels - NOT INCREASING

b. IF any RCP oil level increasing uncontrollably, THEN:

1) Close CCW to and from affected RCP(s), (MOVs 749A and 759A for "A" RCP; MOVs 749B and 759B for "B" RCP).

2) Trip Rx.

3) Trip affected RCP(s).

4) Go to E-0, REACTOR TRIP or SAFETY INJECTION.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
6	Check For CCW Leakage In AUX BLDG: o Aux Bldg sump pump - INCREASED START FREQUENCY -OR- o Waste holdup tank level - UNEXPLAINED INCREASE -OR- o Aux Bldg - VISUAL LEAKAGE IDENTIFIED	IF no leakage indicated in AUX BLDG, THEN: a. Direct HP Tech to sample CCW Hx SW outlet for chromates. b. Go to step 10.
7	Establish - THE SOURCE OF THE CCW LEAKAGE AND ISOLATE	
8	Verify CCW Surge Tank Level Normal: o CCW surge tank level APPROXIMATELY 50%	IF CCW surge tank level NOT approximately 50%, THEN open RMW to CCW surge tank, MOV-823, and start a RMW pump to fill CCW surge tank to approximately 50%.
9	Direct HP To Sample For Chromates	
10	Verify - CONDITIONS PERMIT CONTINUED POWER OPERATION, (Refer to Technical Specification Section 3.3.3).	IF shutdown required, THEN refer to 0-2.1, NORMAL SHUTDOWN TO HOT SHUTDOWN.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: Refer to 0-9.3, NRC STATE AND COUNTIES IMMEDIATE NOTIFICATION, for reporting requirements.

11 Complete - NOTIFICATION TO HIGHER SUPERVISION

12 Establish Further Guidance:

a. Problem or leakage - CORRECTED

a. IF problem NOT corrected or leakage NOT found or isolated, THEN return to Step 4.

b. Return to - APPROPRIATE OPERATING PROCEDURE

-END-

ATTACHMENT CONTROL ROOM CCW ALIGNMENT DURING POWER OPERATION

o CCW to RHR Hx A	MOV-738A Closed
o CCW to RHR Hx B	MOV-738B Closed
o CCW from RCP 1A Thermal Barrier	AOV-754A Open
o CCW from RCP 1B Thermal Barrier	AOV-754B Open
o CCW from Ex Ltdn Hx Isol Vlv	AOV-745 Closed
o CCW Surge Tk Vent	RCV-017 Open
o CCW to CNMT Isol Vlv	MOV-817 Open
o CCW to Rx Supp Clrs Isol Vlv	MOV-813 Open
o CCW from Rx Supp Clrs Isol Vlv	MOV-814 Open
o CCW to RCP 1A Isol Vlv	MOV-749A Open
o CCW to RCP 1B Isol Vlv	MOV-749B Open
o CCW from RCP 1A Isol Vlv	MOV-759A Open
o CCW from RCP 1B Isol Vlv	MOV-759B Open
o NRHX Ltdn Outlet Temp (Controller)	TCV-130 Auto