ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 23

TECHNICAL REVIEW

PORC REVIEW DATE 9-21-94

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PLANT SUPERINTENDENT

9-29-94
EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

A. PURPOSE - This procedure provides the actions necessary to mitigate the consequences of abnormal PRZR pressure.

B. ENTRY CONDITIONS/SYMPTOMS

1. ENTRY CONDITIONS - This procedure is entered from:

a. AP-CVCS.1, CVCS LEAK, or

b. AP-FW.1, PARTIAL OR COMPLETE LOSS OF MAIN FEEDWATER, or

c. AP-IA.1, LOSS OF INSTRUMENT AIR, or

d. AP-RCC.1, CONTINUOUS CONTROL ROD WITHDRAWAL OR INSERTION, or

e. AP-RCS.1, REACTOR COOLANT LEAK, or

f. AP-TURB.1, TURBINE TRIP WITHOUT RX TRIP REQUIRED, or

g. AP-TURB.2, TURBINE LOAD REJECTION, when PRZR pressure can NOT be controlled.

2. SYMPTOMS - The symptoms of ABNORMAL PRZR PRESSURE are;

a. Annunciator F-19, PRZR PORV OUTLET HI TEMP 145°F, lit, or

b. Annunciator F-18, PRZR SAFETY VLV OUTLET HI TEMP 145°F, lit, or

c. Annunciator AA-13, PRESSURIZER SAFETY VALVE POSITION, lit, or

d. Annunciator F-1, PRT LIQUID HI TEMP 220°F, lit, or

e. Annunciator F-9, PRT HI PRESS 5 PSI, lit, or

f. Annunciator F-17, PRT LEVEL 60.8 % 84.5, lit, or

g. Annunciator F-2, PRESSURIZER HI PRESS 2310 PSI, lit, or

h. Annunciator F-10, PRESSURIZER LO PRESS 2185 PSI, lit, or

i. Annunciator F-6, PRESSURIZER HEATER BREAKER TRIP, lit.

j. Annunciator F-26, PRESSURIZER HI PRESS CHANNEL ALERT 2377 PSI.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

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CAUTION

IF, AT ANY TIME DURING THIS PROCEDURE, A REACTOR TRIP OR SI OCCURS, E-0, REACTOR TRIP OR SAFETY INJECTION, SHALL BE PERFORMED.

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NOTE: Actual PRZR pressure should be verified by more than 1 indicator.

1 Check PRZR Pressure: o All 4 narrow range channels - APPROXIMATELY EQUAL o All 4 narrow range channels - TRENDING TOGETHER	IF one pressure channel deviates significantly from the other 3, THEN perform the following: a. IF the controlling PRZR pressure channel has failed, THEN place controller, 431K, in MANUAL and adjust output to restore PRZR pressure. b. Refer to ER-INST.1, REACTOR PROTECTION BISTABLE DEFEAT AFTER INSTRUMENTATION LOOP FAILURE.
2 Check Reactor Power - STABLE	IF the abnormal PRZR pressure is a result of a power transient, THEN evaluate conditions and go to the appropriate plant procedure.
3 Check PRZR Pressure: a. Pressure - LESS THAN 2235 PSIG b. Pressure - GREATER THAN 2000 PSIG	a. Go to Step 12. b. IF pressure decreasing uncontrollably, THEN trip the reactor and go to E-0, REACTOR TRIP OR SAFETY INJECTION.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

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CAUTION

OBSERVE D/G LOADING LIMITS OF 2300 KW FOR 1/2 HOUR, 2250 KW FOR 2 HOURS, AND 1950 KW FOR CONTINUOUS SERVICE.

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4 Check PRZR Heater Status:

a. PRZR heater control group - BREAKER CLOSED

a. Place PRZR heater control group switch to TRIP to reset, then place switch to CLOSE and let return to AUTO.

b. PRZR heater backup group - ON

b. IF PRZR pressure less than 2220 psig, THEN energize PRZR backup heaters.

IF PRZR backup heater breaker has tripped, THEN perform the following:

1) Place the breaker switch to OFF to reset breaker.

2) Place the breaker switch to ON to energize heaters.

3) Verify load increase on Bus 16.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
5	Verify Normal PRZR Spray Valve Controllers - DEMAND AT 0%	Place controllers in MANUAL at 0% demand. IF valves can NOT be closed, THEN perform the following: a. Trip the reactor. b. Trip the associated RCP. c. Go to E-0, REACTOR TRIP OR SAFETY INJECTION.

NOTE: With PRZR pressure controller 431K in manual, PORV-431C will not be operable in the automatic mode.

6	Check PRZR Pressure Controller, 431K, Demand - LESS THAN 50%	Place 431K in MANUAL and decrease output to energize PRZR heaters.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
7	Check PRZR PORVs:	
	a. PORVs - CLOSED	a. Manually close PORVs. IF any valve can NOT be closed, THEN manually close the associated block valve. • MOV-516 for PCV-430 • MOV-515 for PCV-431C
	b. Annunciator F-19, PRZR PORV OUTLET HI TEMP 145°F - EXTINGUISHED	b. IF PORV leakage is indicated, THEN perform the following: 1) Close PORV block valves one at a time AND check if pressure stabilizes. • MOV-515 • MOV-516 2) IF a leaking PRZR PORV is identified, THEN restore any nonleaking PORV to operable AND go to Step 8.
	c. Go to Step 9	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
8	Attempt To Reseat Any Leaking PORV:	
	a. Verify affected PORV block valve - CLOSED	a. Close the affected PORV block valve.
	b. Cycle the leaking PORV open then closed	
	c. Open affected PORV block valve	
	d. Verify leakage has stopped	d. IF leakage continues, THEN perform the following: 1) Reclose leaking PORV block valve. 2) Refer to Tech Spec section 3.1.1.4 for required actions.
	e. Go to Step 11	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

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CAUTION

- IF PRZR PRESSURE IS TO BE REDUCED WHILE AT POWER, IT SHOULD BE DONE SLOWLY SINCE THE PRZR LOW PRESSURE TRIP IS RATE SENSITIVE.
- WHEN REDUCING PRZR PRESSURE, OTΔT SETPOINT WILL DECREASE.

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9	Check PRZR Safety Valves: o Position indicator - LESS THAN 0.1 INCH. o Annunciator F-18, PRZR SAFETY VLV OUTLET HI TEMP 145°F - EXTINGUISHED o Annunciator AA-13, PRESSURIZER SAFETY VALVE POSITION - EXTINGUISHED	IF safety valve leakage indicated, THEN perform the following to attempt to reseat the leaking valve: a. SLOWLY reduce PRZR pressure (remain above 2000 psig). b. IF symptoms indicate leakage has stopped, THEN restore pressure to normal. c. IF leakage recurs or can NOT be stopped, THEN perform the following: 1) Verify leakage within limits of Tech Spec section 3.1.5. 2) Go to Step 17.
10	Check AUX Spray Valve, AOV-296 - CLOSED	Manually close valve. IF valve can NOT be closed, THEN consider isolating letdown and closing charging flow control valve, HCV-142.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
11	Check PRZR Pressure Control Restored: a. Pressure - TRENDING TO 2235 PSIG b. Go to Step 17	a. IF pressure continues to decrease, THEN return to Step 1.
12	Check PRZR Backup Heaters - OFF	Verify PRZR backup heater switch in AUTO, AND ensure proper operation.
	NOTE: With PRZR pressure controller 431K in manual, PORV-431C will not be operable in the automatic mode.	
13	Check PRZR Pressure Controller, 431K, Demand - INCREASING	Place 431K in MANUAL at 50% demand.
	NOTE: o If auxiliary spray is in use, spray flow may be increased by closing normal charging valve AOV-294 and normal PRZR spray valves. o The ΔT between the REGEN Hx charging outlet and the PRZR shall NOT exceed 320°F.	
14	Check RCPs - ANY RUNNING	IF letdown in service, THEN perform the following: a. Open AUX spray valve, AOV-296, as necessary to control PRZR pressure. b. Go to Step 16.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: If either RCP is off, then the associated PRZR spray valve controller should be placed in MANUAL with demand at 0%.

15	Check PRZR Spray Valve Controllers Demand - GREATER THAN 0% • PCV-431A • PCV-431B	Place PRZR spray valve controllers in MANUAL and open as required to control pressure.
16	Check PRZR Pressure - TRENDING TO 2235 PSIG	IF PRZR pressure continues to increase uncontrollably, THEN trip the reactor and go to E-0, REACTOR TRIP or SAFETY INJECTION.
17	Check PRT Indications:	
	a. Level - BETWEEN 61% AND 84%	a. Drain PRT to RCDT using PRT drain valve, AOV-526.
	b. Pressure - APPROXIMATELY 1.5 PSIG AND STABLE	b. Open PRT vent, AOV-527. IF PRT pressure will NOT decrease, THEN open PRT drain valve, AOV-526, to reduce pressure.
	c. Temperature - AT CNMT AMBIENT TEMPERATURE AND STABLE	c. To feed and bleed the PRT, perform the following: 1) Start a RMW pump. 2) Verify RMW to CNMT isolation valve, AOV-508, open. 3) Feed and bleed the PRT using PRT fill valve from RMW, AOV-548, and PRT drain valve, AOV-526.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: Refer to O-9.3, NRC IMMEDIATE NOTIFICATION, for reporting requirements.

18 Notify Higher Supervision

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