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JOSEPH A. WIDAY
VICE PRESIDENT & PLANT MANAGER
GINNA STATION

January 9, 2001

U.S. Nuclear Regulatory Commission
Document Control Desk
Attn: Guy S. Vissing
Project Directorate I
Washington, D.C. 20555

Subject: Emergency Operating Procedures
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Vissing:

As requested, enclosed are Ginna Station Emergency Operating Procedures.

Very truly yours,

Joseph A. Widay

JAW/jdw

xc: U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Ginna USNRC Senior Resident Inspector

Enclosure(s):

AP Index
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AP-CCW.1, Rev 14
ATT-16.0, Rev 10
ATT-17.0, Rev 11

A002

REPORT NO. 01 GINNA NUCLEAR POWER PLANT 01/09/01 PAGE: 1
REPORT: NPSP0200 PROCEDURES INDEX
DOC TYPE: PRAP ABNORMAL PROCEDURE

PARAMETERS: DOC TYPES - PROPS PRER PRATT PRAR PRAP STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
AP-CCW.1	LEAKAGE INTO THE COMPONENT COOLING LOOP	014	01/09/01	05/01/98	05/01/03	EF
AP-CCW.2	LOSS OF CCW DURING POWER OPERATION	014	05/18/00	08/17/99	08/17/04	EF
AP-CCW.3	LOSS OF CCW - PLANT SHUTDOWN	012	05/18/00	08/17/99	08/17/04	EF
AP-CR.1	CONTROL ROOM INACCESSIBILITY	016	01/11/00	01/11/00	01/11/05	EF
AP-CVCS.1	CVCS LEAK	012	05/01/98	05/01/98	05/01/03	EF
AP-CVCS.3	LOSS OF ALL CHARGING FLOW	002	02/11/00	02/26/99	02/26/04	EF
AP-CW.1	LOSS OF A CIRC WATER PUMP	010	07/16/98	05/01/98	05/01/03	EF
AP-ELEC.1	LOSS OF 12A AND/OR 12B BUSSES	020	09/08/00	05/01/98	05/01/03	EF
AP-ELEC.2	SAFEGUARD BUSSES LOW VOLTAGE OR SYSTEM LOW FREQUENCY	009	03/22/99	03/22/99	03/22/04	EF
AP-ELEC.3	LOSS OF 12A AND/OR 12B TRANSFORMER (BELOW 350 F)	008	09/08/00	05/01/98	05/01/03	EF
AP-ELEC.14/16	LOSS OF SAFEGUARDS BUS 14/16	001	09/08/00	06/09/97	06/09/02	EF
AP-ELEC.17/18	LOSS OF SAFEGUARDS BUS 17/18	002	10/18/99	06/09/97	06/09/02	EF
AP-FW.1	PARTIAL OR COMPLETE LOSS OF MAIN FEEDWATER	012	02/11/00	02/27/98	02/27/03	EF
AP-IA.1	LOSS OF INSTRUMENT AIR	017	12/02/99	05/01/98	05/01/03	EF
AP-PRZR.1	ABNORMAL PRESSURIZER PRESSURE	011	12/02/99	12/02/99	12/02/04	EF
AP-RCC.1	CONTINUOUS CONTROL ROD WITHDRAWAL/INSERTION	006	02/24/96	05/14/98	05/14/03	EF
AP-RCC.2	RCC/RPI MALFUNCTION	008	11/16/98	02/06/97	02/06/02	EF
AP-RCC.3	DROPPED ROD RECOVERY	004	11/16/98	02/27/98	02/27/03	EF
AP-RCP.1	RCP SEAL MALFUNCTION	013	06/09/00	05/01/98	05/01/03	EF
AP-RCS.1	REACTOR COOLANT LEAK	015	09/08/00	05/01/98	05/01/03	EF
AP-RCS.2	LOSS OF REACTOR COOLANT FLOW	010	12/14/98	05/01/98	05/01/03	EF
AP-RCS.3	HIGH REACTOR COOLANT ACTIVITY	007	08/05/97	08/05/97	08/05/02	EF
AP-RCS.4	SHUTDOWN LOCA	011	12/02/99	05/01/98	05/01/03	EF
AP-RHR.1	LOSS OF RHR	014	10/13/00	05/01/98	05/01/03	EF

PARAMETERS: DOC TYPES - PROPS PRER PRATT PRAR PRAP STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
AP-RHR.2	LOSS OF RHR WHILE OPERATING AT RCS REDUCED INVENTORY CONDITIONS	009	10/13/00	03/31/00	03/31/05	EF
AP-SG.1	STEAM GENERATOR TUBE LEAK	000	09/08/00	09/08/00	09/08/05	EF
AP-SW.1	SERVICE WATER LEAK	015	10/18/99	06/03/98	06/03/03	EF
AP-TURB.1	TURBINE TRIP WITHOUT RX TRIP REQUIRED	010	02/12/99	10/10/97	10/10/02	EF
AP-TURB.2	TURBINE LOAD REJECTION	017	02/11/00	05/13/98	05/13/03	EF
AP-TURB.3	TURBINE VIBRATION	010	02/11/00	02/10/98	02/10/03	EF
AP-TURB.4	LOSS OF CONDENSER VACUUM	014	05/01/98	05/01/98	05/01/03	EF
AP-TURB.5	RAPID LOAD REDUCTION	005	06/09/00	06/09/00	06/09/05	EF

TOTAL FOR PRAP 32

PARAMETERS: DOC TYPES - PROPS PRER PRATT PRAR PRAP STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
ATT-1.0	ATTACHMENT AT POWER CCW ALIGNMENT	001	07/26/94	02/10/98	02/10/03	EF
ATT-1.1	ATTACHMENT NORMAL CCW FLOW	000	05/18/00	05/18/00	05/18/05	EF
ATT-2.1	ATTACHMENT MIN SW	004	06/26/98	02/10/98	02/10/03	EF
ATT-2.2	ATTACHMENT SW ISOLATION	006	03/25/99	08/11/98	08/11/03	EF
ATT-2.3	ATTACHMENT SW LOADS IN CNMT	003	01/25/95	12/31/99	12/31/04	EF
ATT-3.0	ATTACHMENT CI/CVI	005	01/25/99	01/06/99	01/06/04	EF
ATT-3.1	ATTACHMENT CNMT CLOSURE	003	01/25/99	01/25/99	01/25/04	EF
ATT-4.0	ATTACHMENT CNMT RECIRC FANS	003	07/26/94	05/13/98	05/13/03	EF
ATT-5.0	ATTACHMENT COND TO S/G	004	01/25/95	12/31/99	12/31/04	EF
ATT-5.1	ATTACHMENT SAFW	006	07/07/98	12/31/99	12/31/04	EF
ATT-5.2	ATTACHMENT FIRE WATER COOLING TO TDAFW PUMP	003	01/14/99	01/14/99	01/14/04	EF
ATT-6.0	ATTACHMENT COND VACUUM	003	12/18/96	02/10/98	02/10/03	EF
ATT-7.0	ATTACHMENT CR EVAC	005	02/11/00	02/10/98	02/10/03	EF
ATT-8.0	ATTACHMENT DC LOADS	006	03/22/99	01/14/99	01/14/04	EF
ATT-8.1	ATTACHMENT D/G STOP	004	11/03/95	02/10/98	02/10/03	EF
ATT-8.2	ATTACHMENT GEN DEGAS	006	08/17/99	08/17/99	08/17/04	EF
ATT-8.3	ATTACHMENT NONVITAL	003	07/26/94	02/10/98	02/10/03	EF
ATT-8.4	ATTACHMENT SI/UV	004	04/24/97	02/10/98	02/10/03	EF
ATT-9.0	ATTACHMENT LETDOWN	007	06/09/00	01/06/99	01/06/04	EF
ATT-9.1	ATTACHMENT EXCESS L/D	003	03/31/00	02/10/98	02/10/03	EF
ATT-10.0	ATTACHMENT FAULTED S/G	005	10/03/96	05/13/98	05/13/03	EF
ATT-11.0	ATTACHMENT IA CONCERNS	002	04/07/97	08/11/98	08/11/03	EF
ATT-11.1	ATTACHMENT IA SUPPLY	002	04/07/97	08/11/98	08/11/03	EF
ATT-11.2	ATTACHMENT DIESEL AIR COMPRESSOR	001	12/20/00	04/03/98	04/03/03	EF

PARAMETERS: DOC TYPES - PROPS PRER PRATT PRAR PRAP STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
ATT-12.0	ATTACHMENT N2 PORVS	003	03/24/97	02/10/98	02/10/03	EF
ATT-13.0	ATTACHMENT NC	002	07/26/94	02/10/98	02/10/03	EF
ATT-14.0	ATTACHMENT NORMAL RHR COOLING	002	04/07/97	09/23/99	09/23/04	EF
ATT-14.1	ATTACHMENT RHR COOL	004	05/01/98	05/01/98	05/01/03	EF
ATT-14.2	ATTACHMENT RHR ISOL	001	07/26/94	02/10/98	02/10/03	EF
ATT-14.3	ATTACHMENT RHR NPSH	002	08/01/97	01/06/99	01/06/04	EF
ATT-14.4	ATTACHMENT RHR SAMPLE	001	07/26/94	01/06/99	01/06/04	EF
ATT-14.5	ATTACHMENT RHR SYSTEM	002	07/26/94	02/10/98	02/10/03	EF
ATT-14.6	ATTACHMENT RHR PRESS REDUCTION	001	01/14/99	01/14/99	01/14/04	EF
ATT-15.0	ATTACHMENT RCP START	006	10/13/00	03/17/00	03/17/05	EF
ATT-15.1	ATTACHMENT RCP DIAGNOSTICS	003	04/24/97	02/10/98	02/10/03	EF
ATT-15.2	ATTACHMENT SEAL COOLING	003	05/22/97	02/10/98	02/10/03	EF
ATT-16.0	ATTACHMENT RUPTURED S/G	010	01/09/01	01/11/00	01/11/05	EF
ATT-16.1	ATTACHMENT SGTL	000	09/08/00	09/08/00	09/08/05	EF
ATT-16.2	ATTACHMENT RCS BORON FOR SGTL	001	10/13/00	09/08/00	09/08/05	EF
ATT-17.0	ATTACHMENT SD-1	011	01/09/01	02/29/00	02/28/05	EF
ATT-17.1	ATTACHMENT SD-2	005	09/26/96	09/10/96	09/10/01	EF
ATT-18.0	ATTACHMENT SFP - RWST	004	10/08/97	02/10/98	02/10/03	EF
ATT-20.0	ATTACHMENT VENT TIME	003	07/26/94	02/10/98	02/10/03	EF
ATT-21.0	ATTACHMENT RCS ISOLATION	001	07/26/94	02/10/98	02/10/03	EF
ATT-22.0	ATTACHMENT RESTORING FEED FLOW	001	02/12/99	03/24/97	03/24/02	EF
ATT-23.0	ATTACHMENT TRANSFER 4160V LOADS	000	02/26/99	02/26/99	02/26/04	EF
ATT-24.0	ATTACHMENT TRANSFER BATTERY TO TSC	000	09/08/00	09/08/00	09/08/05	EF

TOTAL FOR PRATT 47

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 23

RESPONSIBLE MANAGER

1-9-2001

EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

A. PURPOSE - This procedure provides the actions required to identify and isolate leakage into the CCW system and to control the plant during the course of the event.

B. ENTRY CONDITIONS/SYMPTOMS

1. ENTRY CONDITIONS - This procedure is entered from;

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

b. AP-RCS.1, RCS LEAK, or,

c. AP-RCP.1 RCP SEAL MALFUNCTION, when CCW surge tank level increasing.

2. SYMPTOMS - The symptoms of LEAKAGE INTO THE COMPONENT COOLING LOOP are;

a. Annunciator A-5, CCW SURGE TANK HI LEVEL 58.8%, lit or

b. CCW radiation monitor (R-17) alarm, or

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

d. Erratic RCP labyrinth seal D/P.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

CAUTION

IF CCW SYSTEM RADIATION MONITOR ALARMS, THEN VERIFY CCW SURGE TANK VENT, RCV-017, CLOSES.

* *

1 Check CCW Indications

a. Check CCW surge tank level - INCREASING

a. IF level decreasing, THEN go to AP-CCW.2, LOSS OF CCW DURING POWER OPERATION or AP-CCW.3, LOSS OF CCW - PLANT SHUTDOWN as necessary. IF level stable, THEN return to procedure or step in effect.

b. Direct RP tech to perform CH-PRI-CCW-LEAK, DETERMINATION OF CCW SYSTEM LEAKAGE

c. CCW radiation monitor, R-17, - INCREASING

c. Check RCS leakrate. IF RCS leakrate increasing, THEN go to Step 2 (Refer to RCS Leakage Surveillance Sheet).

IF RCS leakage and R-17 indication normal, THEN go to Step 13.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

CAUTION

IF EITHER RCP #1 SEAL OUTLET TEMPERATURE EXCEEDS 215°F, THEN THE AFFECTED RCP(S) SHOULD BE STOPPED.

* *

NOTE: RCPs may be safely operated without CCW to the thermal barrier if seal injection flow is maintained.

2 Check RCP Thermal Barrier Indications:

- o Labyrinth seal D/Ps - GREATER THAN 15 INCHES OF WATER AND APPROXIMATELY EQUAL
- o RCP #1 seal leak off flows - WITHIN THE NORMAL OPERATING RANGE OF FIGURE RCP SEAL LEAKOFF
- o Annunciator A-7 (15), RCP A (B) CCW RETURN HI TEMP OR LO FLOW 165 GPM 125°F - EXTINGUISHED

IF either pump has indication of a thermal barrier leak, THEN perform the following:

a. Verify seal injection flow to affected RCP.

b. Close CCW return from affected RCP thermal barrier (labyrinth seal D/P should increase).

- RCP A, AOV-754A
- RCP B, AOV-754B

c. Evaluate CCW surge tank level trend. IF leakage into the CCW system has stopped, THEN go to Step 17.

3 Check RCS temperature - GREATER THAN 350°F

Go to Step 7.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

CAUTION

CLOSELY MONITOR PRZR LEVEL AND RCS PRESSURE WHILE LETDOWN IS ISOLATED.

* *

4 Check NRHX For Leakage:

a. Normal letdown - IN SERVICE

a. IF excess letdown in service, THEN perform the following:

1) Close excess letdown flow control valve, HCV-123.

2) Close EXCESS LTDN LOOP A COLD TO Hx, AOV-310.

3) Go to Step 5.

b. Check Letdown Indications:

- o Letdown line flow - APPROXIMATELY 40 GPM
- o Low press LTDN pressure - APPROXIMATELY 250 PSIG
- o Letdown pressure control valve, PCV-135, demand - APPROXIMATELY 35% OPEN

b. Isolate Normal Letdown:

1) Close loop B cold leg to REGEN Hx, AOV-427.

2) Close letdown orifice valves (AOV-200A, AOV-200B, and AOV-202).

3) Place letdown pressure controller, PCV-135, in MANUAL and close valve (demand at 100%).

4) Control charging pump speed as necessary to maintain RCP labyrinth seal D/P less than 80 inches.

5) Close charging flow control valve, HCV-142.

6) Go to Step 5.

c. Go to Step 6

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
5	Check If CCW Inleakage Has Stopped:	
	a. CCW surge tank level - STABLE	a. IF CCW surge tank level still increasing, THEN perform the following: 1) Restore letdown flowpath previously isolated (Refer to Attachment LETDOWN). 2) Adjust charging as necessary to restore PRZR level. 3) Go to Step 13.
	b. Restore an intact letdown flowpath if available (Refer to Attachment LETDOWN)	
	c. Check any letdown flowpath - RESTORED	c. IF no letdown flowpath available, THEN consult Plant Staff.
	d. Adjust charging as necessary to restore PRZR level	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
6	Establish Stable Plant Conditions:	
	a. Check Tavg - TRENDING TO TREF	a. Insert/withdraw control rods or, if necessary, adjust turbine load to match Tavg to Tref.
	b. Check PRZR pressure - TRENDING TO 2235 PSIG	b. Verify proper operation of PRZR heaters and spray or take manual control of PRZR pressure controller 431K.
	c. Check PRZR level - TRENDING TO PROGRAM	c. Verify proper operation of charging pump speed controllers or take manual control of speed controllers to control PRZR level.
	d. Go to Step 13	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

CAUTION

- o CLOSELY MONITOR PRZR LEVEL AND RCS PRESSURE WHILE LETDOWN IS ISOLATED.
- o UNFILTERED WATER MAY DAMAGE RCP SEAL SURFACES.

* *

7 Check NRHX For Leakage:

a. Narrow range PRZR level - ON SCALE

Response not obtained: a. IF the RCS is solid, THEN perform the following:

1) Stop any running RCP.

2) WHEN RCPs stopped, THEN stop any running charging pump.

b. Isolate letdown flow to NRHX:

o Ensure the following valves - CLOSED

- Loop B cold leg to REGEN Hx, AOV-427
- Letdown orifice valves (AOV-200A, AOV-200B, and AOV-202)
- RHR letdown flow control valve, HCV-133

o Close letdown isolation valve, AOV-371

o Place letdown pressure controller, PCV-135, in MANUAL and close valve (demand at 100%).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

CAUTION

IF THE RCS IS WATER SOLID, THEN ANY INCREASE IN RCS TEMPERATURE MAY RESULT IN A SIGNIFICANT RCS PRESSURE INCREASE. RCS HEATUP SHOULD BE PREVENTED.

* *

8 Check If CCW Inleakage Has Stopped:		
a. CCW surge tank level - STABLE		a. IF CCW inleakage continues, THEN go to Step 9.
b. Narrow range PRZR level - ON SCALE		b. IF RCS is solid, THEN perform the following: 1) Ensure both RCPs off. 2) Cycle charging pumps as necessary to control RCS pressure.
c. Establish excess letdown (Refer to Attachment LETDOWN)		
d. Start one charging pump		
e. Adjust charging flow as necessary to restore PRZR level		
f. Check RCS temperature - STABLE		f. Adjust RHR cooling as necessary.
g. Go to Step 17		

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
9	Restore Letdown:	
	a. Check RHR - IN SERVICE	a. Perform the following: 1) Establish normal letdown (Refer to Attachment LETDOWN). 2) Go to Step 10.
	b. Open letdown isolation valve, AOV-371	
	c. Place letdown controllers in MANUAL at 40% open • TCV-130 • PCV-135	
	d. Manually open RHR LETDOWN TO CVCS, HCV-133	
	e. Place TCV-130 in AUTO at 105°F	
	f. Place PCV-135 in AUTO at desired pressure	
	g. Start one charging pump	
	h. Adjust charging flow as necessary to restore PRZR pressure/level	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

<u>CAUTION</u>

- o ONE TRAIN OF RHR SHALL BE OPERABLE AT ALL TIMES.
- o IF AN RHR PUMP OR HX IS REMOVED FROM SERVICE, THEN OPERABILITY REQUIREMENTS SHOULD BE EVALUATED (REFER TO ITS SECTIONS 3.4 AND 3.5).

* *

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
10	Check RHR System For Leakage:	
	a. Both RHR loops - ALIGNED AND OPERABLE	a. <u>IF</u> any loop isolated for this leak investigation, <u>THEN</u> perform the following: 1) Restore isolated loop to service (Refer to Attachment RHR ISOL and S-13A, RHR LINEUP FOR SAFETY INJECTION). 2) <u>WHEN</u> loop restored, <u>THEN</u> isolate other RHR loop (Refer to Attachment RHR ISOL). 3) Go to Step 11.
	b. Isolate selected RHR loop (Refer to Attachment RHR ISOL)	
11	Verify RCS temperature - STABLE OR DECREASING	Increase cooling from available RHR loop. Attempt to establish S/G cooling if necessary.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
12	Check If CCW Inleakage Has Stopped: a. CCW surge tank level - STABLE b. Go to Step 17	a. IF any RHR loop has NOT been checked for leakage, THEN return to Step 10. IF both RHR loops have been checked, THEN restore RHR loops to operable and go to Step 13.
13	Check RMW to CCW Surge Tank: o Verify CCW surge tank fill valve, MOV-823 - CLOSED o Verify RMW pump(s) - OFF	IF RMW to CCW surge tank, MOV-823, open OR RMW pump running, THEN perform the following: a. Close CCW surge tank fill valve, MOV-823. b. Shut off running RMW pumps. c. IF CCW inleakage stops, THEN go to Step 17.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
14	Check For Sample Hx Leaks:	
	a. Direct AO to locally check nuclear sample room Hxs o Sample Hx (TI-602) common CCW return temperature from sample Hxs - NORMAL (Refer to Aux Bldg log sheet, 3 of 3) o Sample Hx (FI-603) common CCW return flow from sample Hxs - NORMAL (Refer to Aux Bldg log sheet, 3 of 3)	a. Determine which sample Hx CCW outlet temperature is high, <u>THEN</u> perform the following: 1) Isolate the affected Hx. 2) <u>IF</u> CCW inleakage has stopped, <u>THEN</u> go to Step 17.
	b. Direct RP Tech to check PASS - SAMPLING IN PROGRESS	b. Go to Step 15.
	c. Direct RP Tech to terminate PASS sampling	
	d. Verify CCW inleakage - STOPPED	
15	Check SW Header Pressure - LESS THAN 60 PSIG	Dispatch AO to check CCW pump discharge pressure. <u>IF</u> SW pressure greater than CCW pressure, <u>THEN</u> investigate possible SW leak into CCW system.

* *

<u>CAUTION</u>

IF A SAFEGUARDS PUMP IS TO BE REMOVED FROM SERVICE DURING AN EMERGENCY CONDITION, THEN CONSULT WITH PLANT STAFF PRIOR TO STOPPING PUMP.

* *

16	Check Safeguards Pump Status - ALL SAFEGUARDS PUMPS OFF • SI pumps • RHR pumps • CS pumps	<u>IF</u> any event in progress requiring safeguards pump operation, <u>THEN</u> consult Plant Staff for guidance on checking safeguards pumps for CCW leakage.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
17	Evaluate Plant Conditions:	
	a. CCW inleakage - IDENTIFIED AND ISOLATED	a. Return to Step 2.
	b. Determine if operation can continue (Consult Plant staff if necessary) - OPERATION CAN CONTINUE	b. IF plant shutdown is required, THEN refer to 0-2.1, NORMAL SHUTDOWN TO HOT SHUTDOWN.
18	Check CCW Surge Tank Level - APPROXIMATELY 50%	Consult RP tech to determine method to drain and dispose of excess CCW.

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

19 Notify Higher Supervision

20 Return To Procedure Or Guidance In Effect

-END-

AP-CCW.1 APPENDIX LIST

TITLE

1) FIGURE RCP SEAL LEAKOFF (FIG-4.0)

2) ATTACHMENT RHR ISOL (ATT-14.2)

3) ATTACHMENT LETDOWN (ATT-9.0)

EOP:	TITLE:	REV: 10
ATT-16.0	ATTACHMENT RUPTURED S/G	PAGE 1 of 3

Responsible Manager [signature] Date 1-9-2001

NOTE: Intermediate Building environment should be assessed for radiological and other personnel safety concerns.

PART A. Dispatch AO with locked valve key to complete local isolation of ruptured S/G as follows:

NOTE: Steps may be done in any order for PART A.

1) Check closed the ruptured S/G MSIV

- o S/G A, V-3517
- o S/G B, V-3516

IF ruptured S/G MSIV is NOT closed, THEN perform the following to close ruptured S/G MSIV:

- o S/G A
  - Close IA isol to S/G A MSIV, V-5408A
  - Open emerg vent valves V-5471 AND V-5473
  - Notify Control Room S/G A MSIV is closed

OR

- o S/G B
  - Close IA isol to S/G A MSIV, V-5409B
  - Open emerg vent valves V-5472 AND V-5474
  - Notify Control Room S/G B MISV is closed

2) Verify BOTH S/G MSIV bypass valves closed (INT BLDG steam header area):

- o S/G A, V-3615
- o S/G B, V-3614

****

CAUTION

CONTROL ROOM SHOULD BE NOTIFIED BEFORE ISOLATING TDAFW PUMP STEAM FLOW.

****

3) Locally close TDAFW Pump steam root valve

- o S/G A, V-3505

-OR-

- o S/G B, V-3504

4) Locally close the following steam valves from the ruptured S/G:

   - Steam to sampling system valve (INT BLDG steam header area):
     S/G A, close V-3413A
     -OR-
     S/G B, close V-3412A

   - Support heating steam valve (INT BLDG steam header area):
     S/G A, close V-3669
     -OR-
     S/G B, close V-3668

   - Upstream trap isolation valve (TURB BLDG near MFW reg vlvs):
     S/G A, close V-3521
     -OR-
     S/G B, close V-3520

****

CAUTION

CONTROL ROOM SHOULD BE NOTIFIED BEFORE ISOLATING TDAFW PUMP FEED FLOW.

****

5) Locally close TDAFW pump manual feedwater isolation valve to ruptured S/G (INT BLDG steam header area):

   S/G A, V-4005
   -OR-
   S/G B, V-4006

6) Bypass condensate polishing demineralizers as follows:

   a. Place AVT bypass valve controller in MANUAL (east end of AVT panel).
   b. Open bypass valve.
   c. Isolate ALL inservice demineralizers as follows:

      1) Place the Mixed Bed Service Selector switch to override AND select the bed to be removed from service.
      2) Place the 4 position selector switch for the selected bed to OFF.
      3) Repeat steps a and b for each inservice bed.

7) Locally place TURB RM WALL EXH FAN switches to CLOSE.

8) Locally place TURB RM ROOF VENT switches to CLOSE.

****

CAUTION

PART B OF THIS ATTACHMENT SHOULD ONLY BE PERFORMED IF RUPTURED S/G MSIV CANNOT BE CLOSED.

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PART B. Dispatch AO to locally perform the following when ruptured S/G MSIV cannot be closed, if areas are accessible:

1) Close Air Ejector/Gland steam root valve, V-3540 (Main steam header TURB BLDG).
2) Close flange heating isolation valves, MOV-3601A and MOV-3602A.
3) Notify Control Room that main flowpaths are isolated, THEN complete isolation by closing the following valves:

NOTE: Substeps may be done in any order.

a) MFW regulating valve and bypass valve manual isolation valves for both S/Gs:
   - o S/G A, V-3985 and V-3989
   - o S/G B, V-3984 and V-3988

b) Reheat steam chain valves:
   - o 1A MSR, V-3551
   - o 1B MSR, V-3550
   - o 2A MSR, V-3553
   - o 2B MSR, V-3552

c) Steam dump header isolation and bypass valves (Main steam header TURB BLDG on platform overhead)
   - o V-3532 and V-3659
   - o V-3533 and V-3658

d) Reheat steamline warmup valves (warmup vlvs located east end of 1A and 2A MSRs TURB BLDG middle floor):
   - o V-3645
   - o V-3646
   - o V-3647
   - o V-3648

e) Reheat steamline common vent, V-8500 (at condenser north of 1A MSR).

f) Steam to trap header isolation valves
   - o V-8513 (Main steam header TURB BLDG)
   - o V-8529 (south side EH skid)

g) Steam trap isolation and bypass valves
   - o V-3596 (south side of EH skid)
   - o V-3598 (south side of EH skid)

Responsible Manager [signature] Date 1-9-2001

Perform the following local actions to complete normal secondary system shutdown:

- o Close reheater 4th pass temperature control valves:
  - o V-2432 (SW corner 1A MSR)
  - o V-2433 (SW corner 1B MSR)
  - o V-2434 (SW corner 2A MSR)
  - o V-2435 (SW corner 2B MSR)

- o Close reheater steam chain valves:
  - o V-3550 (SW of 1B MSR)
  - o V-3551 (SW of 1B MSR)
  - o V-3552 (NW of 1A MSR)
  - o V-3553 (NW of 1A MSR)

- o Open Reheater steamline vents (SW corner of condenser, middle floor):
  - o V-8500
  - o V-8501
  - o V-8502
  - o V-8504
  - o V-8505

- o Open Reheater steamline vents (SW corner of condenser, above walkway):
  - o V-8506
  - o V-8507
  - o V-8508
  - o V-8509

- o Locally close flange heating isolation valves:
  - o MOV-3601A (TB Middle Lvl East of TURB Lube Oil Reservoir)
  - o MOV-3602A

NOTE: IF either S/G pressure is LESS THAN condensate header pressure, THEN manual isolation of the MFW regulating and bypass valves should be considered before aligning for cooldown recirculation.

- o Open the following valves to align for condensate feed system cooldown RECIRC:
  - o V-3982B (at #5 heater outlet header)
  - o V-3983B (at #5 heater outlet header)
  - o V-4363 (at #5 heater outlet header)
  - o V-4365 (by MFW regulating valves)
  - o V-4361 (southwest corner of condenser, middle floor)
  - o V-3976A MFP A discharge valve bypass valve
  - o V-3977A MFP B discharge valve bypass valve

- o Secure all 5 secondary chemical addition pumps on TURB BLDG middle floor by #5 heaters.

- Secure all 3 ammonia pumps, TURB BLDG basement by MCC A.
- Secure the Ethanolamine (ETA) injection pump, TURB BLDG basement by turbine lube oil purifier.
- Isolate SW from the following coolers:
  - MFW Pump Oil Coolers (MFW pump room)
    - V-4703
    - V-4704
  - Exciter Air Cooler:
    - V-4679B (chain valve next to condensate transfer pump)
  - Bus Duct Air Cooler (TURB BLDG basement East of bus duct cooler)
    - V-4674
    - V-4674C (mini bypass around V-4674)
- Throttle SW as necessary from following coolers:
  - Generator Seal Oil Unit Coolers (H2 side and air side):
    - V-4676A (mini bypass disch valve inside seal oil enclosure Bldg. NW corner)
    - V-4677A (mini bypass disch valve inside seal oil enclosure Bldg. NW corner)
  - Main Lube Oil Coolers (SW corner of Turb Oil Reservoir)
    - V-4691
    - V-4692
- <u>WHEN</u> the turbine shaft stops, <u>THEN</u> notify Control Room. Control Room personnel will determine if adequate power available to start turning gear.
- Transfer house heating steam to house heating boiler if necessary (refer to T-35H, NUCLEAR HOUSE HEATING STEAM TO BOILER STEAM SUPPLY CHANGE).
- Perform T-14G, STEAM GENERATOR BLOWDOWN HEAT RECOVERY SYSTEM SHUTDOWN.
- Restore MAKEUP to CSTs as directed by Control Room.