



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001

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January 11, 2000

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
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-CR.1, Rev. 16
ATT-16.0, Rev. 9

A002

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ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 23


RESPONSIBLE MANAGER

1-11-2000
EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

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A. PURPOSE - This procedure provides the guidance necessary to place and maintain the plant in a Hot Shutdown Condition in the event that a control room evacuation is necessary.

B. ENTRY CONDITIONS/SYMPTOMS

1. ENTRY CONDITIONS - This procedure may be entered from:

a. ER-SC.9, SECURITY EVENT PLAN, if SS determines to evacuate the Control Room.

2. SYMPTOMS - The symptoms of CONTROL ROOM INACCESSIBILITY are:

a. Fire in the Control Complex, or

b. Smoke in the Control Complex, or

c. Noxious Fumes in the Control Room.

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE: Steps 1 and 2 are immediate action steps.

1 Verify Reactor Trip:

- o At least one train of reactor trip breakers - OPEN
- o Neutron flux - DECREASING
- o MRPI indicates - ALL CONTROL AND SHUTDOWN RODS ON BOTTOM

Manually trip reactor. IF the Rx can NOT be tripped from the Control Room, THEN dispatch personnel to locally open the reactor trip breakers.

2 Verify Turbine Stop Valves - CLOSED

Manually trip turbine. IF turbine can NOT be tripped, THEN close both MSIVs.

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE: Conditions should be evaluated for site contingency reporting (Refer to EPIP-1.0, GINNA STATION EVENT EVALUATION AND CLASSIFICATION).

3 Evaluate Control Complex Conditions:

- o Verify no fire in progress

IF fire is NOT controllable, THEN perform the following:

- a. Manually close both MSIVs.
- b. Trip both RCPs.
- c. Place both PRZR PORV switches to CLOSE.
 - PCV-430
 - PCV-431C
- d. Operating shift personnel proceed to Appendix R locker immediately outside the Control Room.
- e. One SRO and communicator proceed to TSC.
- f. Go to ER-FIRE.1, ALTERNATIVE SHUTDOWN FOR CONTROL COMPLEX FIRE. DO NOT continue in this procedure.

4 Establish Local Operating Stations (Refer to Attachment CR EVAC)

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

5 Locally Verify Emergency AC Busses 14 And 18 - ENERGIZED (A D/G room at ELCP)

Consider restoration of emergency AC power using ER-FIRE.1.
ALTERNATIVE SHUTDOWN FOR CONTROL COMPLEX FIRE.

6 Locally Establish AFW Flow To S/Gs:

a. Transfer MDAFW pump control to LOCAL

b. Start MDAFW pumps - ANY PUMPS RUNNING

c. Verify MDAFW pump flow - LESS THAN 230 GPM PER RUNNING PUMP

b. Locally perform the following:

1) Open TDAFW pump steam supply valves at the steam header.

- MOV-3504A
- MOV-3505A

2) Insert pins in valve operators for TDAFW flow control valves to allow operation of valves.

- AOV-4297
- AOV-4298

3) Throttle TDAFW flow to each S/G as necessary.

4) Go to Step 7.

c. Locally throttle MDAFW flow control valves as necessary.

- MOV-4007
- MOV-4008

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

7 Monitor RCS Temperature -
TEMPERATURE STABLE

IF RCS temperature decreasing, THEN
perform the following:

- a. Control S/G feeding to that required to maintain level.
- b. IF cooldown continues, THEN ensure MSIVs closed.
- c. IF MDAFW pump available to feed S/Gs, THEN manually isolate steam supply to TDAFW pump.
 - V-3504
 - V-3505

IF RCS temperature increasing, THEN
perform the following:

- a. Locally open S/G ARVs as necessary.
- b. IF ARVs NOT adequate, THEN perform the following:
 - 1) Check open MSIVs or open MSIV bypass valves as necessary.
 - 2) Open priming ejector steam supply root valve, V-3578
 - 3) Throttle open selected priming ejector steam supply to 200 psig (PI-2019)
 - Priming ejector A, V-3581
 - Priming ejector B, V-3580

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

8 Establish Charging Flow Control:

- a. Transfer charging pump control to LOCAL
- b. Verify at least one charging pump - RUNNING
- c. Check PRZR level - GREATER THAN 13%
- d. Locally control charging speed and letdown orifices as necessary to restore PRZR level to program

- b. Locally start one charging pump.
- c. Locally increase charging pump speed. IF necessary, THEN locally start a second charging pump.

9 Monitor PRZR Pressure - PRESSURE STABLE

IF pressure increasing, THEN ensure RCS temperature and PRZR level stable.

IF pressure decreasing, THEN perform the following:

- a. Transfer PRZR heater backup group to local control (MDAFW pump area).
- b. Verify PRZR level greater than 13%.
- c. Energize PRZR heater backup group.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
***** <u>CAUTION</u> *****		
WHEN BORATION COMPLETE, THEN HIGH CONCENTRATION BORIC ACID SHOULD BE FLUSHED FROM RCP SEAL INJECTION LINES. *****		
10	Establish CSD Xenon Free Boron Concentration: a. Determine amount of boron required (Refer to 0-3.1, BORON CONCENTRATION FOR THE XENON FREE ALL RODS IN - MOST REACTIVE ROD STUCK OUT SHUTDOWN MARGIN) b. Locally open emergency borate valve, MOV-350 - VALVE OPEN c. Transfer boric acid pump control to LOCAL d. Start one boric acid pump e. Borate until required amount of boric acid added	b. Perform the following: 1) Locally open manual charging pump suction from RWST, V-358 (charging pump room between A and B pumps). 2) Go to Step 10e.

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

11 Check SW Pumps - AT LEAST ONE RUNNING IN EACH LOOP (Locally in the Screenhouse)

Locally close SW Pump breakers as necessary.

- Bus 18 Position 29C, SW Pump A
- Bus 17 Position 27C, SW Pump B
- Bus 18 Position 29D, SW Pump C
- Bus 17 Position 27D, SW Pump D

12 Check CNMT Recirc Fans - AT LEAST TWO RUNNING (At local operating stations by TDAFW pump)

Transfer CNMT RECIRC fan control to LOCAL and start fans as necessary.

13 Monitor S/G Levels:

Locally throttle AFW flows as necessary.

- o Levels - APPROXIMATELY 350 INCHES
- o Levels - STABLE

- MDAFW pump A, MOV-4007
- MDAFW pump B, MOV-4008
- TDAFW pump to S/G A, AOV-4297
- TDAFW pump to S/G B, AOV-4298

14 Evaluate Control Room Conditions - CONTROL ROOM HABITABLE

Return to Step 3.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

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CAUTION

WHEN THE CONTROL ROOM IS MANNED BY NRC LICENSED PERSONNEL, THEN EQUIPMENT CONTROL MAY BE TRANSFERRED BACK TO THE CONTROL ROOM IN AN ORDERLY MANNER. CONSULT PLANT STAFF FOR ADDITIONAL GUIDANCE.

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15 Establish Normal Control Room Operation:

- a. Restore normal control room operation of equipment
- b. Consult Plant Staff to determine if cooldown is necessary
- c. At least one RCP - RUNNING
- d. Go to 0-2.2, PLANT SHUTDOWN FROM HOT SHUTDOWN TO COLD SHUTDOWN
- b. IF cooldown NOT required, THEN go to 0-3, HOT SHUTDOWN WITH XENON PRESENT.
- c. Perform the following:
 - 1) Ensure 2 control rod shroud fans running.
 - 2) Go to ES-0.2, NATURAL CIRCULATION COOLDOWN, Step 1.

-END-

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AP-CR.1 APPENDIX LIST

- TITLE
1) ATTACHMENT CR EVAC (ATT-7.0)

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Responsible Manager Richard [Signature] Date 1-11-2000

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) 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.

- 2) Locally close TDAFW Pump steam root valve
 - o S/G A, V-3505
 - OR-
 - o S/G B, V-3504

- 3) Locally close the following steam valves from the ruptured S/G:
 - o Steam to sampling system valve (INT BLDG steam header area):
S/G A, close V-3413A
-OR-
S/G B, close V-3412A
 - o Support heating steam valve (INT BLDG steam header area):
S/G A, close V-3669
-OR-
S/G B, close V-3668
 - o Upstream trap isolation valve (TURB BLDG near MFW reg vlvs):
S/G A, close V-3521
-OR-
S/G B, close V-3520

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CAUTION

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

- 4) 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

- 5) Bypass condensate polishing demineralizers as follows:

- 1. Place AVT bypass valve controller in MANUAL (east end of AVT panel).

- 2. Open bypass valve.

- 3. Isolate ALL inservice demineralizers as follows:

- a) Place the Mixed Bed Service Selector switch to override AND select the bed to be removed from service.

- b) Place the 4 position selector switch for the selected bed to OFF.

- c) Repeat steps a and b for each inservice bed.

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

- 7) 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.

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)