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JOSEPH A. WIDAY
VICE PRESIDENT & PLANT MANAGER
GINNA STATION

March 15, 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
AP-ELEC.14/16

A002

PARAMETERS: DOC TYPES - 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	003	03/15/01	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	015	02/08/01	05/01/98	05/01/03	EF

PARAMETERS: DOC TYPES - 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

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 23

RESPONSIBLE MANAGER

3-15-2001

EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

A. PURPOSE - This procedure provides actions to respond to a loss of AC Emergency Bus 14 or Bus 16.

B. ENTRY CONDITIONS/SYMPTOMS

2. SYMPTOMS - The symptoms of a LOSS OF SAFEGUARDS BUS 14/16 are;

a. Annunciator J-7, 480V MAIN OR TIE BREAKER TRIP, lit, or

b. Annunciator J-29, 480V TRANSFORMER BREAKER TRIP, lit.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

* *

CAUTION

- IF A LOSS OF BUS 12A OR 12B HAS OCCURRED, THEN AP-ELEC.1, LOSS OF 12A AND/OR 12B BUSSES, SHOULD BE PERFORMED.
- IF A TURBINE RUNBACK HAS OCCURRED, THEN AP-TURB.2, TURBINE LOAD REJECTION, SHOULD BE PERFORMED.
- OBSERVE D/G LOADING LIMITS OF 2300 KW FOR 1/2 HOUR, 2250 KW FOR 2 HOURS, AND 1950 KW FOR CONTINUOUS SERVICE.
- DO NOT ATTEMPT TO ENERGIZE A BUS THAT IS POTENTIALLY FAULTED.

* *

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

1	Establish Manual Rod Control	
	a. Place Rod Control Bank Selector Switch to MANUAL	
	b. Verify control rod motion stops	b. Manually trip the reactor and go to E-0, REACTOR TRIP OR SAFETY INJECTION.
	c. Manually move control rods as necessary	
2	Verify Emergency D/G Associated With Affected Bus - RUNNING AND LOADED o Bus 14 - D/G A o Bus 16 - D/G B	Attempt to start and load emergency D/G(s) manually. (Refer to ER-D/G.1, RESTORING D/Gs)

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
3	Verify At Least One Train of AC Emergency Busses Energized to at Least 420 Volts: o Bus 14 and Bus 18 -OR- o Bus 16 and Bus 17	Go to ECA-0.0, LOSS OF ALL AC POWER step 1.

* *

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 TRIP THE AFFECTED RCP.

* *

4	Verify CCW Pump Status	
	a. At least one CCW Pump - RUNNING	a. Start one CCW pump (124 KW) 1) IF neither CCW pump can be started, THEN perform the following: a) Trip the reactor. b) Trip BOTH RCP's. c) Go to E-0, REACTOR TRIP OR SAFETY INJECTION.
	b. Annunciator A-22, CCW PUMP DISCHARGE LO PRESS 60 PSIG - EXTINGUISHED	b. Start second CCW pump (124 KW).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
5	Verify Charging Pump Status- AT LEAST ONE RUNNING	Secure letdown flowpaths o Close loop B cold leg to REGEN Hx, AOV-427. o Ensure closed loop A cold leg to EXCESS LETDOWN Hx, AOV-310. o Ensure closed EXCESS LETDOWN HCV-123.
6	Monitor S/G Level Control: o S/G level - TRENDING TO 52% o MFW regulating valves - CONTROLLING IN AUTO	Place MFW regulating valves in MANUAL and control feed flow as necessary.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
7	Verify Bus 14 - ENERGIZED TO AT LEAST 420 VOLTS	Perform the following: a. Close loop B cold leg to REGEN Hx, AOV-427. b. IF steam dump is armed, THEN place STEAM DUMP MODE SELECTOR Switch to MANUAL. c. Ensure only one charging pump operating. d. Transfer Inst Bus B to maintenance supply. e. Return steam dump to AUTO, if desired. f. Ensure the following equipment operating as necessary: • CCW Pump B • PRZR Backup Heaters • CNMT Recirc Fans B and C • Boric Acid Pump B • RMW Pump B • Reactor Compartment Cooling Fan B • Penetration Cooling Fan B g. IF Bus 14 can NOT be energized, THEN: o Provide alternate room cooling for D/G A. o Cross-connect D/G B fuel oil transfer pump to D/G A (Refer to ER-D/G.1).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
8	Verify Bus 16 - ENERGIZED TO AT LEAST 420 VOLTS	Perform the following: a. Ensure the following equipment operating as necessary: • CCW Pump A • Charging Pump A • PRZR Proportional Heaters • CNMT Recirc Fans A and D • Boric Acid Pump A • RMW Pump A • Reactor Compartment Cooling Fan A • Penetration Cooling Fan A b. IF Bus 16 can NOT be energized, THEN: o Provide alternate room cooling for D/G B. o Cross-connect D/G A fuel oil transfer pump to D/G B (Refer to ER-D/G.1).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: IF VCT level decreased to 5%, charging pump suction will swap to the RWST. This may required a load reduction.

9 Check VCT Makeup System:

a. Verify the following:

1) RMW mode selector switch in AUTO

2) RMW control armed - RED LIGHT LIT

a. Adjust controls as necessary.

b. Check VCT level:

o Level GREATER THAN 20%

-OR-

o Level - STABLE OR INCREASING

b. Check letdown divert valve, LCV-112A, aligned to VCT.

Manually increase VCT makeup flow as follows:

1) Ensure BA transfer pumps and RMW pumps running.

2) Adjust RMW flow control valve, HCV-111, to increase RMW flow.

3) Increase boric acid flow as necessary to maintain required concentration.

IF VCT level can NOT be maintained, THEN refer to ER-CVCS.1, REACTOR MAKEUP CONTROL MALFUNCTION, if necessary.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
10	Check Charging Pump Suction Aligned To VCT:	
	a. VCT level - GREATER THAN 20%	a. IF VCT level can NOT be maintained greater than 5%, THEN perform the following: 1) Ensure charging pump suction aligned to RWST o LCV-112B open o LCV-112C closed 2) Continue with Step 11. WHEN VCT level greater than 20%, THEN do Step 10b.
	b. Verify charging pumps aligned to VCT o LCV-112C open o LCV-112B closed	b. Manually align valves as necessary.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: When restarting equipment for recovery, it is preferable to start equipment on busses being supplied from offsite power, if possible.

11 Check CVCS Operation:

a. Charging pumps - AT LEAST ONE RUNNING

a. IF charging pump(s) available, THEN perform the following:

1) Start charging pumps as necessary.

2) Establish greater than 20 gpm charging line flow.

IF NO charging pumps available, THEN go to step 13

b. Charging line flow - GREATER THAN 20 GPM

b. Establish charging line flow to REGEN Hx - GREATER THAN 20 GPM

c. Check letdown indications:

- Check PRZR level - GREATER THAN 13%
- Letdown flow - APPROXIMATELY 40 GPM
- Letdown flow - STABLE

c. Perform the following:

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

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

3) IF PRZR level greater than 13%, THEN go to Step 12. IF NOT, THEN continue with Step 14. WHEN PRZR level greater than 13%, THEN do Steps 12 and 13.

d. Adjust charging pump speed and HCV-142 as necessary to restore PRZR level and labyrinth seal D/P

e. Go to Step 13

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: Steps 12 and 13 may be performed concurrently.

12 Establish Normal Letdown:

a. Establish charging line flow to REGEN Hx - GREATER THAN 20 GPM

b. Place letdown controllers in MANUAL at 40% open

- TCV-130
- PCV-135

c. Open AOV-427

d. Open letdown orifice valves as necessary

e. Place TCV-130 in AUTO at 105°F

f. Place PCV-135 in AUTO at 250 psig

g. Adjust charging pump speed and HCV-142 as necessary

Perform the following steps in sequence to establish excess letdown, if desired:

o Place excess letdown divert valve, AOV-312, to NORMAL

o Ensure CCW from excess letdown open, AOV-745

o Ensure RCP seal return isolation valve open, MOV-313

o Open excess letdown isolation valve, AOV-310

o Slowly open HCV-123 to maintain excess letdown temperature less than 195°F and pressure less than 100 psig

13 Verify PRZR Heaters Restored:

o PRZR proportional heater breaker - CLOSED

o PRZR backup heater breaker - RESET/IN AUTO

IF adequate D/G capacity available for PRZR heaters (400 kw each bank), THEN perform the following:

a. Reset and close PRZR proportional heater breaker if necessary.

b. Reset PRZR backup heater breaker and return to AUTO if necessary.

IF adequate D/G capacity NOT available, THEN refer to ER-PRZR.1.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
14	Verify Normal Rod Control Restored:	
	a. Annunciator C-5, PPCS ROD SEQUENCE OR ROD DEVIATION - EXTINGUISHED	a. IF alarm is due to a loss of power to MRPI, THEN maintain rods in manual AND minimize rod motion. IF alarm is due to actual rod misalignment, THEN refer to AP-RCC.2, RCC/RPI MALFUNCTION, while continuing with this procedure.
	b. Annunciator E-28, POWER RANGE ROD DROP ROD STOP - EXTINGUISHED	b. Perform the following: 1) Place rod control bank selector switch in MANUAL. 2) Reset NIS rod drop rod stop signals (at NIS racks) as necessary.
	c. Annunciator F-15, RCS TAVG DEV 4°F - EXTINGUISHED	c. Go to step 15
	d. Place rod control bank selector switch in AUTO if desired	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
15	Establish Stable Plant Conditions:	
	a. Check Tavg - TRENDING TO TREF	a. Insert control rods or, if necessary, decrease 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.
16	Restore Normal Electric System Alignment:	
	a. Verify circuit 767 and/or 751 - AVAILABLE	a. Continue with Step 17. WHEN offsite power available, THEN do Steps 16b and c.
	b. Verify all emergency AC bus normal feed breakers - CLOSED • Bus 14 • Bus 16 • Bus 17 • Bus 18	b. Perform the following: 1) Restore emergency AC busses to normal power supply (Refer to ER-ELEC.1, RESTORATION OF OFFSITE POWER) 2) IF normal power is restored to all AC emergency buses, THEN return to step 7. IF NOT, THEN go to step 17.
	c. Stop any unloaded emergency D/G and place in standby (Refer to T-27.4)	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
17	Establish Normal Plant Conditions:	
	a. Verify 2 charging pumps - RUNNING	a. Perform the following: 1) Manually start charging pumps as necessary. 2) Place selected charging pump speed controller in AUTO if desired.
	b. Verify at least 2 CNMT recirc fans - RUNNING	b. Start CNMT recirc fans as necessary (240 kw each).
	c. Check CCW pumps - ONLY ONE RUNNING	c. Locally verify two CCW pumps running, THEN manually stop one pump.
	d. Check radiation monitoring systems: o CNMT vent sample pump - RUNNING o Plant vent sample pump - RUNNING o All area and process monitors operating as required	d. Restore sample pumps and radiation monitors as necessary. (Refer to CHA-RETS-ODCM).
18	Check Status Of DC System Loads:	
	a. Verify TDAFW pump DC oil pump - OFF IN AUTO	a. Perform the following: 1) Direct AO to locally check TDAFW AC oil pump running. IF not running, THEN start pump from MCB. 2) Stop TDAFW pump DC oil pump.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE: Inst Bus C provides power to all MCB manual controllers.

19 Check Status of Battery Chargers:

a. Battery Chargers 1A OR 1A1 - ENERGIZED.

a. IF BOTH battery chargers are deenergized, THEN direct the Electricians to crosstie TSC battery charger to main battery A (Refer to ATTACHMENT TRANSFER BATTERY TO TSC).

b. Battery Chargers 1B OR 1B1 - ENERGIZED

b. IF BOTH battery chargers are deenergized, THEN direct the Electricians to crosstie TSC battery charger to main battery B (Refer to ATTACHMENT TRANSFER BATTERY TO TSC).

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
20	Restore Equipment Alignment:	
	a. Verify annunciator L-1, AUX BLDG VENT SYSTEM CONTROL PANEL - EXTINGUISHED	a. Dispatch AO to restore AUX BLDG ventilation (Refer to T-35A, AUX AND INTERMEDIATE BUILDING VENTILATION STARTUP AND SHUTDOWN)
	b. Restore affected bus equipment as desired o SFP Cooling o Penetration cooling fans o Reactor compartment cooling fans o Hydrogen panel o PA system inverter (Battery Room A) o Auxiliary Bldg lighting (normal supply MCC D, manual throwover to MCC C)(located at MCC C) o Fire system (Refer to SC-3.16.2.3)	
	c. Check control board annunciator panels - ALARM STATUS VALID FOR PLANT CONDITIONS	c. Perform alarm response procedures for unexpected alarms.
	d. Verify control board valve alignment - NORMAL (Refer to O-6.13, DAILY SURVEILLANCE LOG)	d. Manually align valves as necessary.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

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

21	Verify emergency AC bus normal feed breakers closed o Bus 14 o Bus 16	Return to Step 7
22	Verify Inst Bus B on normal supply	Place Inst Bus B on normal supply (Refer to ER-INST.3,INSTRUMENT BUS POWER RESTORATION).
23	Reset UV relay targets on undervoltage cabinets o Bus 14 o Bus 16	
24	Notify Higher Supervision	
25	Return To Procedure Or Guidance In Effect	

-END-

AP-ELEC.14/16 APPENDIX LIST

TITLE

1) ATTACHMENT TRANSFER BATTERY TO TSC (ATT-24.0)