ECA-0.2

TITLE:

LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED

REV: 11

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ROCHESTER GAS AND ELECTRIC CORPORATION
GINNA STATION
CONTROLLED COPY NUMBER 23

RESPONSIBLE MANAGER

12-14-98 EFFECTIVE DATE

CATEGORY 1.0

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A. PURPOSE - This procedure provides actions to use engineered safeguards systems to recover plant conditions following restoration of AC emergency power.

- B. ENTRY CONDITIONS/SYMPTOMS
 - 1. ENTRY CONDITIONS This procedure is entered from:
 - a. ECA-0.0, LOSS OF ALL AC POWER, when AC emergency power is restored and SI is required.
 - b. ECA-0.1, LOSS OF ALL AC POWER RECOVERY WITHOUT SI REQUIRED, if SI is required.

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT UBTAINED

NOTE: o CSFSTs should be monitored for information only. FR procedures should not be implemented prior to completion of Step 10.

- o Adverse CNMT values should be used whenever CNMT pressure is greater than 4 psig or CNMT radiation is greater than 10^{+05} R/hr.
- 1 Reset SI
- 2 Check RCP CCW Isolation
 Status:
 - a. CCW pumps BOTH PUMPS OFF
 - b. RCP CCW return valves CLOSED
 - . MOV-759A
 - MOV-759B

- a. Go to Step 3.
- b. Manually close valves as necessary:
 - o RCP CCW thermal barrier outlet valves
 - · AOV-754A
 - · AOV-754B

- OR -

- o RCP CCW supply valves
 - · MOV-749A
 - · MOV-749B

3 Check RWST Level - GREATER THAN 28%

Co to ES-1.3, TRANSFER TO COLD LEG RECIRCULATION, Step 1.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE: SI actuation to establish safeguards valve alignment is not recommended.

- 4 Manually Align SI And RHR Pumps To Establish SI Injection:
 - a. SI pump suction valves from RWST a. Ensure at least one SI pump - OPEN
 - MOV-825A
 - MOV-825B
 - b. Verify SI pump C discharge b. Manually open valves as valves - OPEN
 - MOV-871A
 - MOV-871B
 - deluge OPEN
 - MOV-852A
 - MOV-852B

- suction valve from RWST open.
 - MOV-825A
 - MOV-825B
- necessary.
- c. RHR pump discharge to Rx vessel c. Ensure at least one deluge valve open.
 - MOV-852A
 - MOV-852B

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

CAUTION

THE LOADS PLACED ON THE ENERGIZED AC EMERGENCY BUS SHOULD NOT EXCEED THE CAPACITY OF THE POWER SOURCE.

- 5 Manually Load Following Safeguards Equipment On AC Emergency Bus:
 - a. Start all SI pumps

- a. Perform the following:
 - 1) Start available SI pumps.
 - 2) <u>IF</u> SI pump A or B <u>NOT</u> available. <u>THEN</u> verify SI pump C aligned as follows:
 - o <u>IF SI pump A NOT</u> available. <u>THEN</u> ensure MOV-871B closed.
 - o <u>IF</u> SI pump B <u>NOT</u> available, <u>THEN</u> ensure MOV-871A closed.
- b. Manually start both RHR pumps and go to Step 5d.
- b. Check RCS pressure:
 - o Pressure GREATER THAN 250 psig [465 psig adverse CNMT]
 - o Pressure STABLE OR INCREASING
- c. Place RHR pump switches in AUTO
- d. Start all available CNMT RECIRC fans

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

CAUTION

- O IF CST LEVEL DECREASES TO LESS THAN 5 FEET, THEN ALTERNATE WATER SOURCES FOR AFW PUMPS WILL BE NECESSARY (REFER TO ER-AFW.1, ALTERNATE WATER SUPPLY TO AFW PUMPS).
- O IF S/G NR LEVEL DECREASES TO LESS THAN 5% [25% ADVERSE CNMT] AND FEED FLOW IS LESS THAN 200 GPM. THEN THE MDAFW PUMPS SHOULD BE MANUALLY LOADED ON AC EMERGENCY BUS TO SUPPLY WATER TO THE S/G(S).

NOTE: o If MDAFW pump operation is not required, pump switches should be maintained in PULL-STOP to prevent automatic start.

- o TDAFW pump flow control valves fail open on loss of IA.
- * 6 Monitor Intact S/G Levels:
 - a. Narrow range level GREATER THAN 5% [25% adverse CNMT]
- a. Maintain total feed flow greater than 200 gpm until narrow range level greater than 5% [25% adverse CNMT] in at least one S/G.

IF feed flow less than 200 gpm, THEN perform the following:

- Verify MDAFW pump discharge valve to intact S/G(s) open.
 - . S/G A, MOV-4007
 - S/G B, MOV-4008
- Manually start MDAFW pumps as necessary (228 KW).
- b. Control feed flow to maintain narrow range level between 17% [25% adverse CNMT] and 50%

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- 7 Verify CI And CVI:

 - a. CI and CVI annunciators LIT a. Depress manual CI pushbutton.
 - · Annunciator A-26, CNMT ISOLATION
 - Annunciator A-25, CONTAINMENT VENTILATION ISOLATION
 - b. Verify CI and CVI valve status lights - BRIGHT
 - Attachment CI/CVI). c. CNMT RECIRC fan coolers SW
 - outlet valve status lights -BRIGHT
 - · AOV-4561
 - · AOV-4562

- b. Manually close CI and CVI valves. IF valves can NOT be verified closed by MCB indication, THEN dispatch AO to locally close valves (Refer to
- c. Dispatch AO to locally fail open valves.

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STEP ACTION

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

- 8 Verify CNMT Spray Not Required:
 - o Annunciator A-27, CNMT SPRAY EXTINGUISHED
 - o CNMT pressure LESS THAN 28 PSIG

<u>IF</u> CNMT pressure is less than 28 psig, <u>THEN</u> perform the following:

- a. Reset CNMT spray.
- b. Place CNMT spray pump discharge valve switches to CLOSE to deenergize open contactor.

IF NOT. THEN perform the following:

- a. Depress manual CNMT spray pushbuttons (2 of 2).
- Ensure CNMT spray pump discharge valves open.
 - o CNMT spray pump A:
 - MOV-860A
 - MOV-860B
 - o CNMT spray pump B:
 - MOV-860C
 - MOV-860D
- c. Ensure NaOH tank outlet valves open.
 - . AOV-836A
 - · AOV-836B
- d. Start both CNMT spray pumps.
- e. Go to step 10.

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ACTION/EXPECTED RESPONSE STEP

RESPONSE NOT OBTAINED

- 9 Place CNMT Spray Pumps In AUTO
- 10 Check RCP Seal Injection Locally close valves before Needle Valves CLOSED starting charging pump.

- . V-300A
- V-300B

NOTE: FR procedures may now be implemented as necessary.

11 Go to E-1, LOSS OF REACTOR OR SECONDARY COOLANT, Step 1

-END-

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ECA-0.2 APPENDIX LIST

TITLE

1) ATTACHMENT CI/CVI (ATT-3.0)