

CATEGORY 1

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AUTH.NAME . AUTHOR AFFILIATION
WIDAY,J.A. Rochester Gas & Electric Corp.
RECIP.NAME RECIPIENT AFFILIATION
VISSING,G.S.

Revised
3/2/99
[Signature]

SUBJECT: Forwards revised Emergency Operating Procedures for plant.

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January 14, 1999

U.S. Nuclear Regulatory Commission
Document Control Desk
Attn: Guy S. Vissing
Project Directorate I-1
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):

210092

AP Index	ATT-5.2, Rev 3
ATT- Index	ATT-8.0, Rev 5
E Index	ATT-14.6, Rev 1
ECA Index	E-1, Rev 17
ES Index	ECA-1.1, Rev 16
FR Index	ES-1.3, Rev 26
AP-SW.1, Rev 14	FR-Z.2, Rev 4

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PDR ADOCK 05000244
F PDR

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REPORT NO. 01
REPORT: NPSP0200
DOC TYPE: PRAP

GINNA NUCLEAR POWER PLANT
PROCEDURES INDEX
ABNORMAL PROCEDURE

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PARAMETERS: DOC TYPES - PRAP PRE PRECA PRER PRES 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	013	10/30/98	05/01/98	05/01/03	EF
AP-CCW.2	LOSS OF CCW DURING POWER OPERATION	012	02/24/96	08/30/94	08/30/99	EF
AP-CCW.3	LOSS OF CCW - PLANT SHUTDOWN	010	03/29/96	08/30/94	08/30/99	EF
AP-CR.1	CONTROL ROOM INACCESSIBILITY	015	01/26/98	11/17/94	11/17/99	EF
AP-CVCS.1	CVCS LEAK	012	05/01/98	05/01/98	05/01/03	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	016	05/01/98	05/01/98	05/01/03	EF
AP-ELEC.2	SAFEGUARD BUSSES LOW VOLTAGE OR SYSTEM LOW FREQUENCY	008	01/26/98	02/11/94	02/11/99	EF
AP-ELEC.3	LOSS OF 12A AND/OR 12B TRANSFORMER (BELOW 350 F)	005	05/01/98	05/01/98	05/01/03	EF
AP-ELEC.14/16	LOSS OF SAFEGUARDS BUS 14/16	000	06/09/97	06/09/97	06/09/02	EF
AP-ELEC.17/18	LOSS OF SAFEGUARDS BUS 17/18	001	02/27/98	06/09/97	06/09/02	EF
AP-FW.1	PARTIAL OR COMPLETE LOSS OF MAIN FEEDWATER	011	02/27/98	02/27/98	02/27/03	EF
AP-IA.1	LOSS OF INSTRUMENT AIR	015	05/01/98	05/01/98	05/01/03	EF
AP-PRZR.1	ABNORMAL PRESSURIZER PRESSURE	009	06/03/96	09/29/94	09/29/99	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	012	05/01/98	05/01/98	05/01/03	EF
AP-RCS.1	REACTOR COOLANT LEAK	013	05/01/98	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	009	05/01/98	05/01/98	05/01/03	EF
AP-RHR.1	LOSS OF RHR	012	05/01/98	05/01/98	05/01/03	EF
AP-RHR.2	LOSS OF RHR WHILE OPERATING AT RCS REDUCED INVENTORY CONDITIONS	007	05/15/97	03/21/95	03/21/00	EF

50-244 Superseded Ref Rev's to EOP's Dtd 1/14/99
9901220051

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GINNA NUCLEAR POWER PLANT
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ABNORMAL PROCEDURE

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PARAMETERS: DOC TYPES - PRAP PRE PRECA PRER PRES STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
AP-SW.1	SERVICE WATER LEAK	013	08/24/98	06/03/98	06/03/03	EF
AP-TURB.1	TURBINE TRIP WITHOUT RX TRIP REQUIRED	009	10/10/97	10/10/97	10/10/02	EF
AP-TURB.2	TURBINE LOAD REJECTION	016	02/27/98	05/13/98	05/13/03	EF
AP-TURB.3	TURBINE VIBRATION	008	12/04/96	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	003	02/27/98	07/10/95	07/10/00	EF
TOTAL FOR PRAP	30					

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GINNA NUCLEAR POWER PLANT
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EOP ATTACHMENTS

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PARAMETERS: DOC TYPES - PRATT

STATUS:

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-2.0	ATTACHMENT AUX BLDG SW	XX	06/26/98			DE
ATT-2.1	ATTACHMENT MIN SW	004	06/26/98	02/10/98	02/10/03	EF
ATT-2.2	ATTACHMENT SW ISOLATION	005	10/30/98	08/11/98	08/11/03	EF
ATT-2.3	ATTACHMENT SW LOADS IN CNMT	003	01/25/95	01/25/95	01/25/00	EF
ATT-3.0	ATTACHMENT CI/CVI	004	02/27/98	02/11/94	02/11/99	EF
ATT-3.1	ATTACHMENT CNMT CLOSURE	002	07/26/94	02/11/94	02/11/99	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	01/25/95	01/25/00	EF
ATT-5.1	ATTACHMENT SAFW	006	07/07/98	11/08/94	11/08/99	EF
ATT-5.2	ATTACHMENT FIRE WATER COOLING TO TDAFW PUMP	002	10/26/95	03/04/94	03/04/99	EF
ATT-6.0	ATTACHMENT COND VACUUM	003	12/18/96	02/10/98	02/10/03	EF
ATT-7.0	ATTACHMENT CR EVAC	004	05/04/98	02/10/98	02/10/03	EF
ATT-8.0	ATTACHMENT DC LOADS	004	06/03/98	01/26/94	01/26/99	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	005	07/26/94	02/11/94	02/11/99	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	006	04/07/97	01/26/94	01/26/99	EF
ATT-9.1	ATTACHMENT EXCESS L/D	002	07/26/94	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	000	04/03/98	04/03/98	04/03/03	EF

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EOP ATTACHMENTS

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PARAMETERS: DOC TYPES - PRATT

STATUS:

5 YEARS ONLY:

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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	10/19/94	10/19/99	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	01/26/94	01/26/99	EF
ATT-14.4	ATTACHMENT RHR SAMPLE	001	07/26/94	01/26/94	01/26/99	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	000	04/07/94	04/07/94	04/07/99	EF
ATT-15.0	ATTACHMENT RCP START	005	05/22/97	04/20/95	04/20/00	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	008	03/17/98	11/08/94	11/08/99	EF
ATT-17.0	ATTACHMENT SD-1	006	11/03/95	02/03/95	02/03/00	EF
ATT-17.1	ATTACHMENT SD-2	005	09/26/96	01/26/94	01/26/99	EF
ATT-18.0	ATTACHMENT SFP - RWST	004	10/08/97	02/10/98	02/10/03	EF
ATT-19.0	ATTACHMENT SI FLUSH	XX	01/25/95			DE
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	000	03/24/97	03/24/97	03/24/02	EF

TOTAL FOR PRATT

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GINNA NUCLEAR POWER PLANT
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EMERGENCY PROCEDURE

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PARAMETERS: DOC TYPES - PRAP PRE PRECA PRER PRES STATUS: EF QU 5 YEARS ONLY:

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E-0	REACTOR TRIP OR SAFETY INJECTION	024	05/01/98	05/01/98	05/01/03	EF
E-1	LOSS OF REACTOR OR SECONDARY COOLANT	016	05/01/98	05/01/98	05/01/03	EF
E-2	FAULTED STEAM GENERATOR ISOLATION	008	05/01/98	05/01/98	05/01/03	EF
E-3	STEAM GENERATOR TUBE RUPTURE	023	12/14/98	05/01/98	05/01/03	EF

TOTAL FOR PRE

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PARAMETERS: DOC TYPES - PRAP PRE PRECA PRER PRES STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
ECA-0.0	LOSS OF ALL AC POWER	019	12/14/98	05/01/98	05/01/03	EF
ECA-0.1	LOSS OF ALL AC POWER RECOVERY WITHOUT SI REQUIRED	015	06/26/98	05/01/98	05/01/03	EF
ECA-0.2	LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED	011	12/14/98	05/01/98	05/01/03	EF
ECA-1.1	LOSS OF EMERGENCY COOLANT RECIRCULATION	015	05/01/98	05/01/98	05/01/03	EF
ECA-1.2	LOCA OUTSIDE CONTAINMENT	005	05/01/98	05/01/98	05/01/03	EF
ECA-2.1	UNCONTROLLED DEPRESSURIZATION OF BOTH STEAM GENERATORS	017	06/26/98	05/01/98	05/01/03	EF
ECA-3.1	SGTR WITH LOSS OF REACTOR COOLANT-SUBCOOLED RECOVERY DESIRED	016	06/26/98	05/01/98	05/01/03	EF
ECA-3.2	SGTR WITH LOSS OF REACTOR COOLANT-SATURATED RECOVERY DESIRED	020	06/26/98	05/01/98	05/01/03	EF
ECA-3.3	SGTR WITHOUT PRESSURIZER PRESSURE CONTROL	020	06/26/98	05/01/98	05/01/03	EF

TOTAL FOR PRECA 9



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EQUIPMENT SUB-PROCEDURE.

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PARAMETERS: DOC TYPES - PRAP PRE PRECA PRER PRES STATUS: EF QU 5 YEARS ONLY:

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ES-0.0	REDIAGNOSIS	010	05/01/98	05/01/98	05/01/03	EF
ES-0.1	REACTOR TRIP RESPONSE	015	12/14/98	05/01/98	05/01/03	EF
ES-0.2	NATURAL CIRCULATION COOLDOWN	012	05/01/98	05/01/98	05/01/03	EF
ES-0.3	NATURAL CIRCULATION COOLDOWN WITH STEAM VOID IN VESSEL	008	05/01/98	05/01/98	05/01/03	EF
ES-1.1	SI TERMINATION	015	06/26/98	05/01/98	05/01/03	EF
ES-1.2	POST LOCA COOLDOWN AND DEPRESSURIZATION	018	06/26/98	05/01/98	05/01/03	EF
ES-1.3	TRANSFER TO COLD LEG RECIRCULATION	025	06/26/98	05/01/98	05/01/03	EF
ES-3.1	POST-SGTR COOLDOWN USING BACKFILL	013	05/01/98	05/01/98	05/01/03	EF
ES-3.2	POST-SGTR COOLDOWN USING BLOWDOWN	014	05/01/98	05/01/98	05/01/03	EF
ES-3.3	POST-SGTR COOLDOWN USING STEAM PUMP	014	05/01/98	05/01/98	05/01/03	EF
TOTAL FOR PRES	10					

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GINNA NUCLEAR POWER PLANT
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FUNCTIONAL RESTORATION GUIDELINE PROC

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PARAMETERS: DOC TYPES - PRFR

STATUS: EF QU 5 YEARS ONLY:

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
FR-C.1	RESPONSE TO INADEQUATE CORE COOLING	016	12/14/98	05/01/98	05/01/03	EF
FR-C.2	RESPONSE TO DEGRADED CORE COOLING	014	05/01/98	05/01/98	05/01/03	EF
FR-C.3	RESPONSE TO SATURATED CORE COOLING	008	05/01/98	05/01/98	05/01/03	EF
FR-H.1	RESPONSE TO LOSS OF SECONDARY HEAT SINK	020	06/26/98	05/01/98	05/01/03	EF
FR-H.2	RESPONSE TO STEAM GENERATOR OVERPRESSURE	004	05/01/98	05/01/98	05/01/03	EF
FR-H.3	RESPONSE TO STEAM GENERATOR HIGH LEVEL	005	05/01/98	05/01/98	05/01/03	EF
FR-H.4	RESPONSE TO LOSS OF NORMAL STEAM RELEASE CAPABILITIES	004	05/01/98	05/01/98	05/01/03	EF
FR-H.5	RESPONSE TO STEAM GENERATOR LOW LEVEL	004	05/01/98	05/01/98	05/01/03	EF
FR-I.1	RESPONSE TO HIGH PRESSURIZER LEVEL	009	06/26/98	05/01/98	05/01/03	EF
FR-I.2	RESPONSE TO LOW PRESSURIZER LEVEL	006	11/16/98	05/01/98	05/01/03	EF
FR-I.3	RESPONSE TO VOIDS IN REACTOR VESSEL	011	06/26/98	05/01/98	05/01/03	EF
FR-P.1	RESPONSE TO IMMINENT PRESSURIZED THERMAL SHOCK CONDITION	019	12/14/98	05/01/98	05/01/03	EF
FR-P.2	RESPONSE TO ANTICIPATED PRESSURIZED THERMAL SHOCK CONDITION	007	05/01/98	05/01/98	05/01/03	EF
FR-S.1	RESPONSE TO REACTOR RESTART/ATWS	013	12/14/98	05/01/98	05/01/03	EF
FR-S.2	RESPONSE TO LOSS OF CORE SHUTDOWN	008	05/01/98	05/01/98	05/01/03	EF
FR-Z.1	RESPONSE TO HIGH CONTAINMENT PRESSURE	005	12/14/98	05/01/98	05/01/03	EF
FR-Z.2	RESPONSE TO CONTAINMENT FLOODING	003	05/01/98	05/01/98	05/01/03	EF
FR-Z.3	RESPONSE TO HIGH CONTAINMENT RADIATION LEVEL	004	05/01/98	05/01/98	05/01/03	EF
TOTAL FOR PRFR	18					

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 1 of 10
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ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER

23

Residehryn

RESPONSIBLE MANAGER

8-24-98

EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 2 of 10
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A. PURPOSE - This procedure provides the necessary instructions to respond to a service water system leak.

B. ENTRY CONDITIONS/SYMPTOMS

1. SYMPTOMS - The symptoms of SERVICE WATER LEAK are:

- a. Service water header pressure low alarms on computer, or
- b. Sump pump activity increases in containment, the AUX BLDG, or INT BLDG, OR
- c. Unexplained increase in the waste hold-up tank, or
- d. Visual observation of a SW leak, or
- e. Annunciator C-2, CONTAINMENT RECIRC CLRS WATER OUTLET HI TEMP 217°F, lit, or
- f. Annunciator C-10, CONTAINMENT RECIRC CLRS WATER OUTLET LO FLOW 920 GPM, lit, or
- g. Annunciator E-31, CONTAINMENT RECIRC FAN CONDENSATE HI-HI LEVEL alarm, exhibits an unexplained increase in frequency, or
- h. Annunciator H-6, CCW SERVICE WATER LO FLOW 1000 GPM, lit.

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 3 of 10
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p>*****</p> <p style="text-align: center;"><u>CAUTION</u></p> <p>o IF, AT ANY TIME DURING THIS PROCEDURE, A REACTOR TRIP OR SI OCCURS, E-0, REACTOR TRIP OR SAFETY INJECTION, SHALL BE PERFORMED.</p> <p>o IF EITHER D/G RUNNING WITHOUT SW COOLING AVAILABLE, THEN STOP THE AFFECTED D/G TO PREVENT OVERHEATING.</p> <p>*****</p>		
1	Verify 480V AC Emergency Busses 17 and 18 - ENERGIZED	Ensure associated D/G(s) running and attempt to manually load busses 17 and/or 18 onto the D/G(s) if necessary.
2	Verify At Least One SW Pump Running In Each Loop: <ul style="list-style-type: none"> A or B pump in loop A C or D pump in loop B 	<u>IF</u> a SW pump has tripped, <u>THEN</u> ensure other pump in the affected loop is running.

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 4 of 10
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p><u>NOTE:</u> Abnormally low pressure in either SW loop may indicate that the idle pump check valve is open. This may be corrected by restarting or isolating the idle pump.</p> <p>3 Check SW System Status:</p> <p>a. Check SW loop header pressures:</p> <ul style="list-style-type: none"> o Pressure in both loops - APPROXIMATELY EQUAL o PPCS SW low pressure alarm status - NOT LOW o Pressure in both loops - STABLE OR INCREASING <p>b. Check SW loop header pressures - GREATER THAN 55 PSIG</p>		
		<p>a. <u>IF</u> three SW pumps operating and either loop pressure less than 40 psig, <u>THEN</u> trip the reactor and go to E-0, REACTOR TRIP OR SAFETY INJECTION.</p> <p><u>IF</u> only two SW pumps operating and either loop pressure less than 45 psig, <u>THEN</u> start one additional SW pump (243 kw each pump).</p> <p>b. <u>IF</u> either SW loop pressure is less than 55 PSIG with three SW pumps running <u>AND</u> cause can <u>NOT</u> be corrected, <u>THEN</u> initiate a controlled shutdown while continuing with this procedure (Refer to O-2.1, NORMAL SHUTDOWN TO HOT SHUTDOWN).</p>

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p><u>NOTE:</u> o If SW is lost to any safeguards equipment, the affected component should be declared inoperable and appropriate actions taken as required by ITS, Section 3.</p> <p>o CNMT sump A level of 10 feet is approximately 6 feet 6 inches below the bottom of the reactor vessel.</p> <p>4 Check For SW Leakage In CNMT:</p> <p>a. Check Sump A indication</p> <p>o Sump A level - INCREASING</p> <p>-OR-</p> <p>o Sump A pump start frequency - INCREASING (Refer to RCS Daily Leakage Log)</p> <p>b. Evaluate Sump A conditions:</p> <p>1) Verify Leakage within capacity of one Sump A pump (50 gpm)</p> <p>2) Check Sump A level - LESS THAN 10 FEET</p> <p>c. Direct RP to establish conditions for CNMT entry</p>		
		<p>a. <u>IF</u> the SW leak is <u>NOT</u> in the CNMT, <u>THEN</u> go to Step 6.</p> <p>b. Plant shutdown should be considered, consult plant staff.</p>

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 6 of 10
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p>*****</p> <p style="text-align: center;"><u>CAUTION</u></p> <p>BEFORE ISOLATING SW TO CNMT RECIRC FANS, REFER TO ITS SECTION 3.6.6 FOR OPERABILITY REQUIREMENTS.</p> <p>*****</p> <p><u>NOTE:</u> o One Reactor Compartment cooling fan should be running whenever RCS temperature is greater than 135°F.</p> <p> o CNMT recirc fan condensate collector level indicators may be helpful in identifying a leaking fan cooler.</p> <p>5 Check CNMT fan indications:</p> <p> o CNMT recirc fan collector dump frequency - NORMAL (Refer to RCS Daily Leakage Log)</p> <p> o CNMT recirc fan SW flows - APPROXIMATELY EQUAL (INTER BLDG basement by IBELIP)</p> <p> o Reactor compartment cooler SW outlet pressures - APPROXIMATELY EQUAL (INTER BLDG SAMPLE HOOD AREA)</p> <p> • Cooler A - PI 2232</p> <p> • Cooler B - PI 2141</p> <p> Dispatch AO to perform Attachment SW LOADS IN CNMT as necessary. <u>WHEN</u> CNMT SW leak location identified, <u>THEN</u> go to Step 9.</p>		

EOP:

AP-SW.1

TITLE:

SERVICE WATER LEAK

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

6 Dispatch AO To Screenhouse To Perform The Following:

a. Verify idle SW pump check valve closed

- o Idle pump shaft stopped
- o Idle pump discharge pressure - ZERO (unisolate and check local pressure indicator)

b. Investigate for SW leak in Screenhouse - NO EXCESSIVE LEAKAGE INDICATED

a. Notify Control Room of any indication of check valve failure.

b. Perform the following:

1) Identify leak location.

IF increase in leakage from underground header indicated, THEN isolation of header should be considered (Refer to Attachment SW ISOLATION)

2) Notify Control Room of leak location.

NOTE: Refer to Attachment SW ISOLATION for a list of the major non-safeguards loads supplied by each service water header.

7 Check Indications For Leak Location:

- o AUX BLDG sump pump start frequency - NORMAL (Refer to RCS Daily Leakage Log)
- o Annunciator L-9, AUX BLDG SUMP HI LEVEL - EXTINGUISHED
- o Annunciator L-17, INTER BLDG SUMP HI LEVEL - EXTINGUISHED

Dispatch AO to the specific area to investigate for leakage.



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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
8	Dispatch AO To Locally Investigate For SW Leakage And To Monitor Operating Equipment <ul style="list-style-type: none">• Turbine BLDG• SAFW pump room	

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 9 of 10
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p><u>NOTE:</u> If SW is lost to either D/G, refer to ER-D/G.2, ALTERNATE COOLING FOR EMERGENCY D/Gs, if cooling is required.</p> <p>9 Evaluate SW Leak Concerns</p>		
a.	Check SW pump status - AT LEAST THREE PUMPS RUNNING	a. <u>IF</u> either SW header pressure less than 45 psig, <u>THEN</u> start third SW pump.
b.	Intact SW loop header pressure - GREATER THAN 45 PSIG	b. Dispatch A0 to perform the following: <ul style="list-style-type: none"> 1) Split A and B SW headers: <ul style="list-style-type: none"> o Close V-4669 <u>OR</u> V-4760 in B D/G room. o Close V-4611 <u>OR</u> V-4612 in Screenhouse. o Close V-4625 <u>OR</u> V-4626 in INT BLDG clean side. o Close V-4639 <u>OR</u> V-4756 in INT BLDG clean side. 2) <u>IF</u> plant at power, <u>THEN</u> initiate a controlled shutdown (Refer to O-2.1, NORMAL SHUTDOWN TO HOT SHUTDOWN). 3) Go to Step 10.
c.	Verify leak location - IDENTIFIED	c. Return to Step 3.
d.	Verify plant operating at power	d. Verify SW system conditions appropriate for plant mode (Refer to ITS Section 3.7.8) and go to Step 10.
e.	Leak isolation at power - ACCEPTABLE	e. <u>IF</u> plant shutdown required, <u>THEN</u> refer to O-2.1, NORMAL SHUTDOWN TO HOT SHUTDOWN.



EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 10 of 10
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
10	Dispatch AO(s) To Locally Isolate SW Leak As Necessary	
11	Verify SW Leak Isolated	
	<ul style="list-style-type: none"> a. Monitor SW System Operation <ul style="list-style-type: none"> o SW loop header pressure - RESTORED TO PRE-EVENT VALUE Archive PPCS point ID loop A P2160 OR loop B P2161) o Both SW loop header pressures - STABLE b. Verify at least one SW pump available from each screenhouse AC Emergency bus <ul style="list-style-type: none"> • Bus 17 SW pumps B or D • Bus 18 SW pumps A or C 	<ul style="list-style-type: none"> a. <u>IF</u> SW leak can <u>NOT</u> be isolated within the affected header, <u>THEN</u> stop SW pumps in the affected loop and go to Step 12. b. Refer to ITS Section 3.7.8 for limiting conditions for operation.
	<p><u>NOTE:</u></p> <ul style="list-style-type: none"> o Refer to 0-9.3, NRC IMMEDIATE NOTIFICATION, for reporting requirements. o An Action Report, per IP-CAP.1, should be submitted for a SW leak in CNMT. 	
12	Notify Higher Supervision	

-END-

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 13 PAGE 1 of 1
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AP-SW.1 APPENDIX LIST

TITLE

- 1) ATTACHMENT SW ISOLATION (ATT-2.2)
- 2) ATTACHMENT SW LOADS IN CNMT (ATT-2.3)



EOP: ATT-5.2	TITLE: ATTACHMENT FIRE WATER COOLING TO TDAFW PUMP	REV: 1 PAGE 1 of 1
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Superintendent. *Paul M. Smith*

Date

7-26-94

To provide Fire Water Cooling to the TDAFW Pump perform the following:

NOTE: A 12 inch "crescent" wrench will be needed to make the connections.

1. Obtain the hose from the Turbine Bldg. hose locker (top floor KEY #79).
2. CLOSE service water root valve to the TDAFW pump thrust bearing and lube oil cooler V-4087C (located on the south side of the pump below MOV-4013).
3. Check OPEN instrument root valve to PI-2134 SW inlet to TDAFW oil cooler V-4288 (located at the north west corner of the oil sump).
4. Connect the hose between PI-2134 and the Fire Water Main at valve V-9226. (V-9226 is located by the S/G blowdown CNMT Isol Valves)

NOTE: The following action may result in an automatic start of the Diesel Driven Fire Pump.

5. OPEN Containment hose reel supply drain & test connection valve V-9226.
6. VERIFY water is being supplied to the TDAFW pump thrust bearing by observing flow past valve V-4089A TDAFW Thrust bearing SW outlet block valve. Verify PI-2134 indicates less than 150 psig.
7. Notify the Control Room the attachment is complete.



EOP: ATT-8.0	TITLE: ATTACHMENT DC LOADS	REV: 3 PAGE 1 of 1
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Superintendent *[Signature]*

Date 7-26-94

- A) The A and B MFP oil pumps should be shed within 15 minutes to reduce battery load to guarantee design battery life.
- B) The following DC loads could be shed from the A and B DC busses, if necessary (obtain DC panel key from SS):

1A MAIN DC DISTRIBUTION PANEL (A battery room):

- o Switchgear breaker test cabinet, position 1
- o Rod drive MG set control panel, position 4
- o Iso phase control, position 5
- o Exciter equipment panel, position 6

1B MAIN DC DISTRIBUTION PANEL (B battery room):

- o Rod drive MG set control panel, position 3

AUX BLDG DC DIST PANEL 1B (south end bus 16 on column near SI pump recirc valves)

- o Aux Bldg Heat & Vent cont panel, position 1

SCREENHOUSE DC DISTRIBUTION PANEL B (screenhouse near MCC G)

- o Traveling screen control, position 1

TURB BLDG DC DISTRIBUTION PANEL (TURB BLDG basement near fire water storage tank)

- o Hydrogen panel for #1 generator, position 3
(after degassification)
- o MCC F, position 5
- o Water treatment panel, position 6

