A. PURPOSE

This procedure provides actions to verify proper response of the automatic protection systems following manual or automatic actuation of a reactor trip or safety injection, to assess plant conditions, and to identify the appropriate recovery procedure.

B. SYMPTOMS OR ENTRY CONDITIONS

1. Any symptom that requires a manual reactor trip listed in ATTACHMENT A, if one has not occurred.

2. The following are symptoms of a reactor trip:

   a. Any reactor trip annunciator lit.

   b. Rapid decrease in neutron level indicated by nuclear instrumentation.

   c. All shutdown and control rods are fully inserted. Rod bottom lights are lit.

3. Any symptom that requires a manual reactor trip and safety injection listed in ATTACHMENT B, if one has not occurred.

4. The following are symptoms of a reactor trip and safety injection:

   a. Any SI annunciator or status lamp lit.

   b. ECCS pumps in service.

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OPERATOR ACTION SUMMARY FOR E-0 SERIES PROCEDURES

1. RCP TRIP CRITERIA

Trip all RCPs if ANY conditions listed below occur:

- CCPs or SI pumps - AT LEAST ONE RUNNING
  - AND -
  RCS Subcooling - LESS THAN 30°F
- Phase B containment isolation (loss of PCCW)
- RCP seal ΔP - LESS THAN 220 PSID
- RCP #1 seal leakoff flow - LESS THAN 0.2 GPM

2. ECCS ACTUATION CRITERIA

Actuate SI and go to E-0, REACTOR TRIP OR SAFETY INJECTION, Step 1, if EITHER condition listed below occurs:

- RCS subcooling - LESS THAN 30°F
  - OR -
- Pressurizer level - CANNOT BE MAINTAINED GREATER THAN 5% [(50)% FOR ADVERSE CONTAINMENT]

3. EFW SUPPLY

Commence CST makeup as soon as possible to avoid low inventory problems.

4. RED PATH SUMMARY - ATTACHMENT F

5. KEY CAUTIONS

- If offsite power is lost after SI reset, manual action may be required to restart safeguard equipment.
- RCS pressure should be monitored. If RCS pressure drops below 200 PSIG, RHR pumps must be manually restarted to supply water to RCS.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
	NOTE • Steps 1 through 14 are IMMEDIATE ACTION steps. • Initiate monitoring of critical safety function status trees at Step 27 OR if exiting from this procedure. • Review OPERATOR ACTION SUMMARY periodically.	
1	Verify Reactor Trip: • Rod bottom lights - LIT • Reactor trip and bypass breakers - OPEN • Neutron flux - DECREASING	Manually trip reactor. IF reactor will NOT trip, THEN go to FR-S.1, RESPONSE TO NUCLEAR POWER GENERATION/ATWS, Step 1.
2	Verify Turbine Trip:	
	a. All turbine stop valves - CLOSED	a. Manually trip turbine. IF turbine will NOT trip, THEN close MSIVs and open generator breaker.
3	Verify Power To AC Emergency Busses:	
	a. AC emergency busses - AT LEAST ONE ENERGIZED • E-5 Voltmeter • E-6 Voltmeter	a. Try to restore power to at least one ac emergency bus. IF power can NOT be restored to at least one ac emergency bus, THEN go to ECA-0.0, LOSS OF ALL AC POWER, Step 1.
	b. AC emergency busses - ALL ENERGIZED	b. Try to restore power to deenergized ac emergency busses.

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
4	Check If SI Is Actuated: • SI Annunciator - TRAIN A - OR - • SI Annunciator - TRAIN B MANUALLY ACTUATE SI IF ANY TRAIN UNACTUATED	Check if SI is required. SI IS REQUIRED IF: 1) Pressurizer pressure - LESS THAN 1850 PSIG AND DECREASING - OR - 2) Containment pressure - GREATER THAN 4.0 PSIG - OR - 3) Steamline pressure - LESS THAN 585 PSIG AND DECREASING - OR - 4) RCS subcooling - LESS THAN 30°F - OR - 5) Pressurizer level - LESS THAN 5% DECREASING IF SI is required, THEN manually actuate. IF SI is NOT required, THEN go to ES-0.1, REACTOR TRIP RESPONSE, Step 1.
5	Verify Feedwater Isolation: a. Check feed regulating valves - CLOSED b. Check feed regulating bypass valves - CLOSED c. Check feedwater isolation valves - CLOSED d. Check main feedwater pump turbines - TRIPPED e. Check main feedwater pump discharge valves - CLOSED	Manually close valves or trip main feedwater pumps as necessary.

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
6	Verify Containment Isolation Phase A Actuation:	
	a. Phase A components - ALL STATUS PANEL LIGHTS LIT • TRAIN A • TRAIN B	a. Manually actuate 'T' signal for BOTH trains. Align equipment as necessary by status panels.
7	Verify EFW Pumps Running:	
	a. Motor-driven pump - RUNNING	a. Manually start pump.
	b. Turbine-driven pump - RUNNING • MS-V127 - OPEN • MS-V128 - OPEN • TRIP VALVE MS-V129 - OPEN	b. Manually open at least one steam supply valve or reset trip valve as necessary.
8	Verify ECCS Pumps Running: • CCPs - TRAIN A AND B • SI pumps - TRAIN A AND B • RHR pumps - TRAIN A AND B	Manually start pumps.
9	Verify PCCW Pumps - RUNNING: a. Loop A - ONE PUMP RUNNING b. Loop B - ONE PUMP RUNNING c. Thermal barrier cooling pumps - AT LEAST ONE PUMP RUNNING	Manually start pumps.

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
10	Verify Ultimate Heat Sink Operation: a. Train A - RUNNING • One SW pump - OR - • One CT pump AND CT fan in TA mode b. Train B - RUNNING • One SW pump - OR - • One CT pump AND CT fan in TA mode	Manually start SW pumps or actuate TA as necessary.
11	Verify SW Cooling To DCCW: a. Train A cooling established: 1) SW-V16 - OPEN 2) Flow indicated - GREATER THAN 1700 GPM b. Train B cooling established: 1) SW-V18 - OPEN 2) Flow indicated - GREATER THAN 1700 GPM	1) Manually or locally open SW-V16. 1) Manually or locally open SW-V18.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
12	Verify Containment Enclosure Cooling And Exhaust:	
	a. Verify at least one containment enclosure cooling fan - RUNNING • FN-5A • FN-5B	a. Start at least one cooling unit.
	b. Verify containment enclosure negative pressure - BETWEEN (-)0.15 AND (-)0.35 INCHES W.C.	b. Adjust enclosure pressure as necessary to keep it negative. IF static pressure controllers do NOT control pressure in range, THEN place modulating dampers to open position. • DP-29A OPEN • DP-29B OPEN
13	Check If Main Steamlines Should Be Isolated:	
	a. Steam line isolation is REQUIRED IF: • Any steamline - LESS THAN OR EQUAL TO 585 PSIG WITHOUT PRIOR P-11 BLOCK - OR - • Containment pressure is - GREATER THAN OR EQUAL TO 4.3 PSIG - OR - • Main steamline pressure negative rate bistable trip light(s) - LIT	a. Go to Step 14.
	b. Verify MSIV AND MSIV bypass valves - CLOSED	b. Manually close valves.

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
14	Check Containment Pressure - HAS REMAINED LESS THAN 18 PSIG BY PRESSURE RECORDING	IF pressure has exceeded 18 PSIG, THEN: a. Verify containment spray initiated: 1) Train A in operation: • CBS Pump A - RUNNING • CBS-V11 - OPEN • CBS Pump A discharge pressure - LESS THAN 290 PSIG • Miniflows - CLOSED 2) Train B in operation: • CBS Pump B - RUNNING • CBS-V17 - OPEN • CBS Pump B discharge pressure - LESS THAN 290 PSIG • Miniflows - CLOSED 3) SAT outlet valves - AT LEAST ONE OPEN • CBS-V38 • CBS-V43 IF NOT initiated, THEN manually initiate. a. HOLD BOTH manual activate switches in a train AND place to ACTUATE. b. Verify containment Phase B ('P' signal) actuated. 1) All Phase B status lights - LIT • TRAIN A AND • TRAIN B Manually align valves and equipment as necessary. c. Stop ALL RCPs.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
15	Verify ECCS Flow:	
	a. CCP flow indicator - CHECK FOR FLOW THROUGH BIT PATH	a. Manually start pumps and align valves.
	b. RCS pressure - LESS THAN 1450 PSIG	b. Go to Step 16.
	c. SI pump flow indicators - CHECK FOR FLOW • TRAIN A • TRAIN B	c. Manually start pumps and align valves.
	d. RCS pressure - LESS THAN 130 PSIG	d. Go to Step 16.
	e. RHR pump flow indicators - CHECK FOR FLOW • TRAIN A • TRAIN B	e. Manually start pumps and align valves.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
16	Verify EFW Flow - GREATER THAN 470 GPM TOTAL COMBINED FLOW TO AT LEAST TWO SGs	Manually start pumps. IF proper flow can NOT be established, THEN go to FR-H.1, RESPONSE TO LOSS OF SECONDARY HEAT SINK, STEP 1.

NOTE High EFW flow to a faulted SG will cause automatic closure of that SG's EFW flow control valves.

17 Verify EFW Valve Alignment - PROPER EMERGENCY ALIGNMENT

Manually align valves as necessary.

IF valves to a SG are closed, THEN verify that the SG is faulted. DO NOT reopen valves to a faulted SG.

IF SG is NOT faulted, THEN check that EFW line is intact before reestablishing EFW flow to that SG.

SG	VALVE NOMENCLATURE	NORMAL POSITION
A	FV-4214A, FLOW CONTROL FV-4214B, FLOW CONTROL	OPEN OPEN
B	FV-4224A, FLOW CONTROL FV-4224B, FLOW CONTROL	OPEN OPEN
C	FV-4234A, FLOW CONTROL FV-4234B, FLOW CONTROL	OPEN OPEN
D	FV-4244A, FLOW CONTROL FV-4244B, FLOW CONTROL	OPEN OPEN

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
18	Verify ECCS Valve Alignment - PROPER EMERGENCY ALIGNMENT INDICATED ON STATUS PANELS • TRAIN A - COLD LEG INJECTION • TRAIN B - COLD LEG INJECTION	Manually align valves as necessary. ECCS valve alignment checklists are provided as ATTACHMENTS C, D and E.
19	Check RCS Temperature - STABLE AT OR TRENDING TO 557°F • WR LOOP COLD LEG TEMPERATURE RECORDERS - OR - • TAVG RECORDER IF RCPs RUNNING	IF temperature less than 557°F and decreasing, THEN: a. Stop dumping steam. • Condenser • Atmosphere b. Check MS to MSRs isolated. c. IF cooldown continues, THEN THROTTLE EFW flow. Maintain WR level above top of SG U-tubes.

LEVEL ABOVE SG U-TUBES	
ADVERSE CONTM	NORMAL CONTM
NARROW RANGE LEVEL GREATER THAN 35%	NARROW RANGE LEVEL GREATER THAN 5%

d. IF cooldown continues, THEN close MSIVs AND MSIV bypass valves.

IF temperature greater than 557°F and increasing, THEN:

• Reset low-low Tavg interlock if necessary, and dump steam to condenser.

- OR -

• Dump steam with SG ASDVs.

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
20	Check PRZR PORVs And Spray Valves:	
	a. PORVs - CLOSED LTOP SETPOINT CURVE FIGURE E-0-1	a. IF PRZR pressure less than 2385 psig or LTOP setpoint, THEN manually close PORVs. IF any valve can NOT be closed, THEN manually close its block valve. IF block valve can NOT be closed, THEN go to E-1, LOSS OF REACTOR OR SECONDARY COOLANT, Step 1.
	b. Normal PRZR spray valves - CLOSED	b. IF PRZR pressure less than 2260 psig, THEN manually close valves. IF valves can NOT be closed, THEN stop RCP(s) supplying failed spray valve(s). • PCV-455A - RC-P-1C • PCV-455B - RC-P-1A
	NOTE Seal injection flow should be maintained to all RCPs.	
21	Check If RCPs Should Be Stopped:	
	a. High Head ECCS Pumps - AT LEAST ONE RUNNING • CCP -OR- • SI Pump	a. Go to Step 22.
	b. RCS subcooling - LESS THAN 30°F	b. Go to Step 22.
	c. Stop all RCPs	

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
22	Check If SG Pressure Boundary Is Intact: a. Check pressures in all SGs - • NO SG PRESSURE DECREASING IN AN UNCONTROLLED MANNER - OR - • NO SG COMPLETELY DEPRESSURIZED	a. Go to E-2, FAULTED STEAM GENERATOR ISOLATION, Step 1.
23	Check If SG U-Tubes Are Intact: • Main steamline radiation - NORMAL ON EACH LINE • Condenser effluent radiation - NORMAL	Go to E-3, STEAM GENERATOR TUBE RUPTURE, Step 1.
24	Check If RCS Is Intact: • Containment radiation - NORMAL • Containment pressure - NORMAL • Containment building level - NORMAL	Go to E-1, LOSS OF REACTOR OR SECONDARY COOLANT, Step 1.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
25	Check If ECCS Flow Should Be Reduced:	
	a. RCS subcooling based on core exit TCs - GREATER THAN 30°F	a. DO NOT STOP ECCS PUMPS. Go to Step 27.
	b. Secondary heat sink: • Total EFW flow to intact SGs - GREATER THAN 470 GPM TOTAL COMBINED FLOW - OR - • NR level in at least one intact SG - GREATER THAN 5%	b. IF neither condition satisfied, THEN DO NOT STOP CENTRIFUGAL CHARGING PUMPS OR SI PUMPS. Go to Step 27.
	c. RCS pressure - STABLE OR INCREASING	c. DO NOT STOP ECCS PUMPS. Go to Step 27.
	d. PRZR level - GREATER THAN 5%	d. DO NOT STOP ECCS PUMPS. Try to stabilize RCS pressure with normal spray. Return to Step 25a.
26	Go To ES-1.1, SI TERMINATION, Step 1	
27	Initiate Monitoring Of Critical Safety Function Status Trees	

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

CAUTION CST makeup should commence as early as possible to avoid low inventory problems.

28	Check SG Levels:	
	a. NR level - GREATER THAN 5%	a. Maintain EFW flow greater than 470 GPM to intact SGs until NR level greater than 5% in at least one SG.
	b. Control EFW flow to maintain NR level - BETWEEN 5% AND 50%	b. IF NR level in any SG continues to increase in an uncontrolled manner, THEN go to E-3, STEAM GENERATOR TUBE RUPTURE, Step 1.
29	Check Secondary Radiation - NORMAL USING RDMS: • Main steamline radiation - NORMAL ON EACH LINE • Condenser effluent radiation - NORMAL	Go to E-3, STEAM GENERATOR TUBE RUPTURE, Step 1.

29

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
30	Check Auxiliary Building Radiation - NORMAL USING RDMS	Evaluate cause of abnormal conditions. IF the cause is a loss of RCS inventory outside containment, THEN go to ECA-1.2, LOCA OUTSIDE CONTAINMENT, Step 1.
31	Check PRT Conditions - NORMAL • PORV OR SAFETY valve tailpipe temperature - LESS THAN 140°F • Pressure - BETWEEN 2 PSIG AND 4 PSIG • Level - BETWEEN 50% AND 86% • Temperature - LESS THAN 120°F	Evaluate cause of abnormal conditions. • Pressurizer PORV's and safeties • RHR relief valves • Letdown relief valve • Seal return header relief valve • Reactor vessel head vent

CAUTION If offsite power is lost after SI reset, manual action may be required to restart safeguard equipment.

32	Reset SI	
33	Reset Containment Isolation Phase 'A' AND Phase 'B'	

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

NOTE If a LOP has occurred, reset EPS-KM0.

34 Reestablish Instrument Air Supplies:

a. Restore service air compressor operation as follows:

1) Open SW isolation valves to SCCW

- SW-V4
- SW-V5

IF on CT, OPEN SW-V74 AND SW-V76, CLOSE SW-V75

2) Verify at least one SCCW pump - RUNNING

3) Start at least one service air compressor, if necessary

a. Open fire water cooling to service air compressors and start at least one service air compressor as necessary.

b. Restore containment air compressor operation as follows:

1) Open PCCW containment isolation valves

TRAIN A, LOOP A	TRAIN B, LOOP B
CC-V168	CC-V175
CC-V57	CC-V176
CC-V122	CC-V257
CC-V121	CC-V256

b. IF phase B isolation has previously occurred, AND a compressor can NOT be restarted, THEN continue with this procedure.

2) Start one containment air compressor, if necessary

- IA-C-4A (Loop A cooled)
- IA-C-4B (Loop B cooled)

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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

CAUTION RCS pressure should be monitored. If RCS pressure drops below 270 PSIG, RHR pumps must be manually restarted to supply water to RCS.

35 Check If RHR Pumps Should Be Stopped:

a. Check RCS pressure:

1) Pressure - GREATER THAN 270 PSIG — 1) Go to E-1, LOSS OF REACTOR OR SECONDARY COOLANT, Step 1.

2) Pressure - STABLE OR INCREASING — 2) Go to Step 36.

b. Stop RHR pumps and place in standby

36 Check If Emergency Diesel Generators Should Be Stopped:

a. Verify AC emergency busses - ENERGIZED BY UATs OR RATs — a. Try to restore offsite power to AC emergency busses. IF offsite power can NOT be restored, THEN RESET EPS - RMO.

1) Go to Step 37

b. Stop emergency diesel - generators and reset for AUTO START

1) Stop diesel generator

2) Reset diesel generator

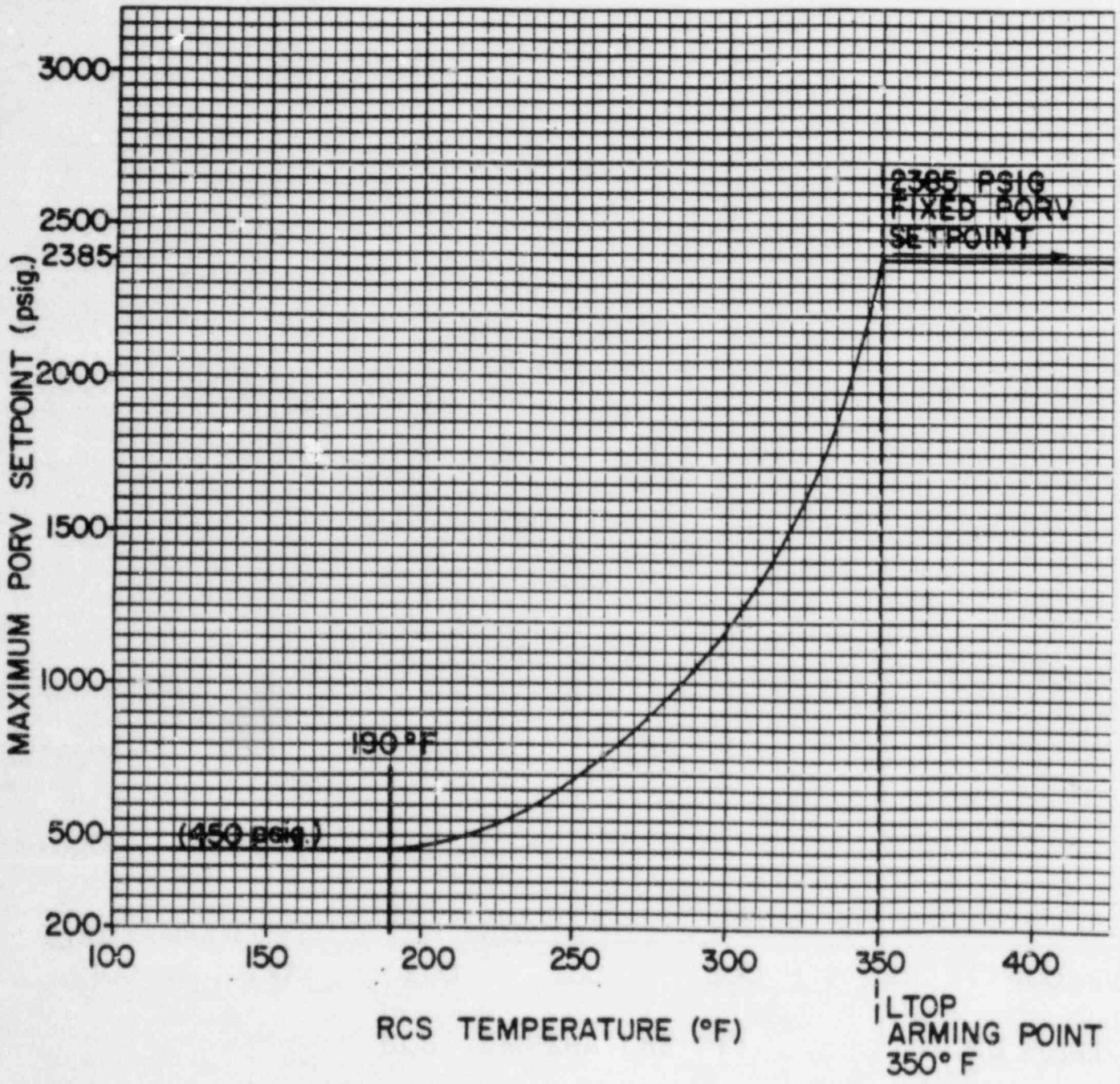
3) Isolate SW to DCCW

37 Return To Step 19

- END -

FIGURE E-0-1

LTOP SETPOINT CURVE



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ATTACHMENT A

The following are symptoms that require a reactor trip, if one has not occurred:

	FUNCTIONAL UNIT	TRIP SETPOINT
A.	POWER RANGE NEUTRON FLUX:	
	1) LOW SETPOINT	$\leq$ 25% OF RTP
	2) HIGH SETPOINT	$\leq$ 109% OF RTP
B.	POWER RANGE, NEUTRON FLUX, HIGH POSITIVE RATE	$\leq$ 5% OF RTP WITH A TIME CONSTANT $\geq$ 2 SECONDS
C.	POWER RANGE, NEUTRON FLUX, HIGH NEGATIVE RATE	$\leq$ 5% OF RTP WITH A TIME CONSTANT $\geq$ 2 SECONDS
D.	INTERMEDIATE RANGE, NEUTRON FLUX	$\leq$ 25% OF RTP
E.	SOURCE RANGE, NEUTRON FLUX	$\leq 10^5$ CPS
F.	OVERTEMPERATURE ΔT	$\leq$ 109.95% $\pm$ PENALTIES
G.	OVERPOWER ΔT	$\leq$ 109% - PENALTIES
H.	PRESSURIZER PRESSURE -- LOW	$\geq$ 1945 PSIG
I.	PRESSURIZER PRESSURE -- HIGH	$\leq$ 2385 PSIG
J.	PRESSURIZER WATER LEVEL--HIGH	$\leq$ 92% OF INSTRUMENT SPAN
K.	LOSS OF FLOW	$\geq$ 90% OF LOOP DESIGN FLOW

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ATTACHMENT A
(cont.)

The following are symptoms that require a reactor trip, if one has not occurred:

	FUNCTIONAL UNIT	TRIP SETPOINT
L.	STEAM GENERATOR WATER LEVEL - LOW-LOW	$\geq$ 18.1% OF NARROW RANGE INSTRUMENT SPAN
M.	UNDERVOLTAGE - REACTOR COOLANT PUMPS	$\geq$ 70% OF NOMINAL BUS VOLTAGE
N.	UNDERFREQUENCY - REACTOR COOLANT PUMPS	$\geq$ 55.4 Hz
P.	TURBINE TRIP	
	1) LOW TRIP SYSTEM PRESSURE	$\geq$ 800 PSIG
	2) TURBINE STOP VALVE CLOSURE	$\geq$ 1% OPEN
Q.	SAFETY INJECTION INPUT FROM ESF	NA
R.	GENERAL WARNING	NA

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ATTACHMENT B

The following are symptoms that require a reactor trip and safety injection, if one has not occurred:

AUTOMATIC ACTUATION		
	FUNCTIONAL UNIT	SI SETPOINT
A.	PRESSURIZER PRESSURE - LOW	$\leq$ 1850 PSIG
B.	CONTAINMENT PRESSURE - HIGH	$\geq$ 4.3 PSIG
C.	STEAMLINE PRESSURE - LOW	$\leq$ 585 PSIG

MANUAL ACTUATION	
A.	RCS SUBCOOLING - LESS THAN 30°F
B.	PRESSURIZER LEVEL - LESS THAN 5%

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ATTACHMENT C

ECCS VALVE ALIGNMENT - CCP
VIA BIT TO RCS COLD LEGS

VALVE	NOMENCLATURE	POSITION
CS-V142	CHARGING ISOL.	CLOSED
CS-V143	CHARGING ISOL.	CLOSED
CS-LCV-112B	CVCT OUTLET	CLOSED
CS-LCV-112C	CVCT OUTLET	CLOSED
CS-LCV-112D	RWST OUTLET	OPEN
CS-LCV-112E	RWST OUTLET	OPEN
CS-V844	BIT INLET	OPEN
CS-V65	BIT INLET	OPEN
CS-V845	BIT INLET	OPEN
CS-V66	BIT INLET	OPEN
CS-V846	BIT BYPASS	CLOSED
CS-V847	BIT BYPASS	CLOSED
CS-V165	BIT RECIRC. PUMP DISCHG.	CLOSED
CS-V173	BIT RECIRC. ISOL.	CLOSED
CS-V174	BIT RECIRC. ISOL.	CLOSED
SI-V138	BIT OUTLET TO RCS	OPEN
SI-V139	BIT OUTLET TO RCS	OPEN

ATTACHMENT D

- ECCS VALVE ALIGNMENT - SIP - TO RCS COLD LEGS

VALVE	NOMENCLATURE	POSITION
CBS-V47	SI PUMP A SUCTION FROM RWST	OPEN
CBS-V49	SI PUMP A SUCTION FROM RWST	OPEN
SI-V90	SI PUMP A MIN FLOW TO RWST	OPEN
SI-V102	SI TO HOT LEGS	CLOSED
SI-V112	SI TO COLD LEGS	OPEN
SI-V114	SI TO COLD LEGS	OPEN
CS-V460	SI PUMP A SUCTION CROSSOVER	CLOSED
CS-V461	SI PUMP A SUCTION CROSSOVER	CLOSED
CS-V475	SI PUMP A SUCTION CROSSOVER	OPEN
CBS-V51	SI PUMP B SUCTION FROM RWST	OPEN
CBS-V53	SI PUMP B SUCTION FROM RWST	OPEN
SI-V89	SI PUMP B MIN FLOW TO RWST	OPEN
SI-V93	SI PUMP A & B MIN FLOW TO RWST	OPEN
SI-V111	SI TO COLD LEGS	OPEN
SI-V77	SI TO HOT LEGS	CLOSED

ATTACHMENT E

- ECCS VALVE ALIGNMENT - RHR - PUMP TO RCS COLD LEGS

VALVE	NOMENCLATURE	POSITION
CBS-V8	CONTM SUMP TO RHR PUMP A & CBS PUMP A	CLOSED
CBS-V2	RWST TO CBS PUMP A & RHR PUMP A	OPEN
RC-V23	RHR SUCTION FROM RCS	CLOSED
RC-V88	RHR SUCTION FROM RCS	CLOSED
RC-V87	RHR SUCTION FROM RCS	CLOSED
RC-V22	RHR SUCTION FROM RCS	CLOSED
CBS-V5	RWST TO CBS PUMP B & RHR PUMP B	OPEN
CBS-V14	CONTM SUMP TO RHR PUMP B & CBS PUMP B	CLOSED
RH-V36	RHR TRAIN B TO SUCTION OF SI PUMP B	CLOSED
RH-V35	RHR TRAIN A TO SUCTION OF SI PUMP A	CLOSED
RH-V21	RHR SYSTEM B TO HOT LEGS	OPEN
RH-V32	RHR A/B TO HOT LEGS	CLOSED
RH-V26	RHR TRAIN B TO COLD LEGS	OPEN
RH-V22	RHR SYSTEM A TO HOT LEGS	OPEN
RH-V70	RHR A/B TO HOT LEGS	CLOSED
RH-V14	RHR TRAIN A TO COLD LEGS	OPEN

ATTACHMENT F

RED PATH SUMMARY

SUBCRITICALITY - Neutron flux greater than 5% RTP

CORE COOLING - Core exit TCs greater than 1200°F

- OR -

Core exit TCs greater than 700°F AND RVLIS less than 40% with no RCPs running

HEAT SINK - SG inventory less than required in table AND EFW flow capability less than 470 GPM total combined flow

NORMAL CONTAINMENT	ADVERSE CONTAINMENT
5% NR	35% NR

INTEGRITY - Cold leg temperature decrease greater than 100°F in last 60 minutes AND RCS cold leg temperature less than 250°F

CONTAINMENT - Containment pressure greater than 52.0 psig