Facility: Cook Plant Unit 1 & Unit 2 Scenario No.: COOK08-01 Op-Test No.: Sets 1 & 3

Examiners: _____ Operators: _____
_____ _____
_____ _____

Initial Conditions: IC-35 (960), MOL; 78% power, 1135 ppm Boron, 8 GWD, 567°F Tave
CBD @ 194 steps, 807 MW.

Turnover: East MDAFP has been out of service for 10 hours for an oil change. 2CD EDG has been out of service for one day for fuel rack repairs.

Event No.	Malf. No.	Event Type*	Event Description
1		N-BOP	Swap from the North to the Middle Condensate Booster Pump.
2		R-RO	Raise Turbine and Reactor Power to 100%.
3	CV09 @ 50°F	C-RO	Letdown Temperature Controller fails LOW
4	CC01A, CC02B – Preload	C-BOP TS	2E CCW pump Trips (2W CCW [Standby] Fails to Auto Start)
5	RX02E to 650°F	I-RO TS	Loop 2 Hot Leg NTP-121 Temperature Transmitter Fails High
6	RX27 to 30 over 12 min ramp	I-BOP	Main Feedwater Pump Delta-P Controller Setpoint fails low over 12 minutes.
7	RC10D to 70%	M-ALL	Loop 4 Cold Leg Primary Coolant System 700gpm Leak inside Containment over 5 minutes
8	RP13A, RP13B – Preload	C-BOP	Failure of Automatic Phase A Actuation
9	RP20B RP19G, RP20G – Preload	C-RO	Slave Relay failures: High Head Charging SI valves fail to align (also DG 2AB fails to auto start)

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Event 1 will be the swap of the Condensate Booster Pumps. The operator will place the Middle CBP in service then remove the North CBP from service in accordance with the normal operating procedure.

Event 2 will be the power escalation to 100%.

Event 3 will be a failure of the Letdown Temperature controller will cause the transmitted value to the letdown heat exchanger temperature controller and temperature indicator to fail at the selected severity level. Selection of a severity level lower than the controller setpoint (normally 120°F.) will cause the letdown temperature control valve (CRV-470) to move to its fully closed position in AUTO. Actual letdown temperature will rise resulting in a rising VCT temperatures. The operator may limit the consequences of this malfunction by taking manual control of CRV-470.

Event 4 is a trip of the operating (East) Component Cooling Water (CCW) pump. The BOP will have to start the standby pump manually (auto start failure).

Event 5 will occur after the Crew has addressed the Tech Specs for CCW. The Loop 2 Hot Leg NTP-121 Temperature Transmitter fails high. The rods will insert and power will have to be restored. The crew will need to enter an Abnormal Operating Procedure, defeat the failed channel, address Technical Specifications, and restore rod control to auto.

Event 6 occurs following the RCS Temperature restoration. The Main Feedwater Pump Delta-P Controller Setpoint fails low causing the FW pumps to slow down. The BOP will need to take manual control of FW Pump Speed to establish the proper DP to continue feeding the SGs.

Event 7- 9 (Major Event): **Event 7** will occur when the SG level has been stabilized. A 700 gpm Primary System Leak in Containment will occur requiring a Reactor Trip and SI.

On the SI, various slave relay failures **(Event 9)** will cause the High Head Charging SI injection flowpath to fail to align and the 2AB DG to fail to auto start. The RO will need to manually align the High Head Injection Valves. The auto Phase A Isolation will also fail **(Event 8)** requiring manual actuation to align Phase A equipment. The crew should progress through E-0 to E-1 to ES-1.2. The scenario will terminate once a transition has been made to ES-1.2.

Critical Tasks: Restore High Head Injection
Trip RCPs

Procedures: E-0 Reactor Trip or Safety Injection
E-1 Loss of Reactor or Secondary Coolant

Op-Test No.:**Sets 1 & 3** Scenario No.: **COOK08-01** Event No.: 1

Event Description: **Swap from the North to the Middle Condensate Booster Pump**

Time	Position	Applicant's Actions or Behavior
	US	Directs actions of 02-OHP 4021.054.001, Attachment 2, Operation of Hotwell (HW) and Condensate Booster (CB) Pumps to start the Middle CB and stop the North CB pumps.
	BOP	Performs the following to swap CB pumps as directed: 1. Places the following switches in NEUTRAL: • Standby Hotwell pump • Standby TACW pump 2. Starts the Middle CB pump 3. Monitor Condensate flow > 2E6 4. Directs operator to verify closed LP Heater Condensate Bypass valve 5. Places the following switches in AUTO: • Standby Hotwell pump • Standby TACW pump 6. Stops the North CB pump
NOTE:	**Ann. 216, Drop 52, SJAE COOLING WATER DP LOW, may momentarily annunciate when the pump is started.** **Ann. 216, Drop 73, CNDST BOOSTER PUMP DISCH PRESSURE LOW may annunciate during this evolution.**	
	US	Directs the following actions to realign condensate system: • Start the North CB pump • Stop the Middle CB pump • Notify chemistry of condensate system configuration change.

Op-Test No.:**Sets 1 & 3** Scenario No.: **COOK08-01** Event No.: 2

Event Description: **Raise Turbine Load/Reactor Power to 100%**

Time	Position	Applicant's Actions or Behavior
	RO	Calculates the dilution required per 02-OHP-4021-005-002, Attachment 9, Boration or Dilution Volume Determination.
	RO	Briefs crew on reactivity plan for power escalation.
	US	Reviews reactivity plan.
	US	Directs RO to commence Power Escalation in accordance with 02-OHP-4021-001-006.
	RO	Performs DILUTION: batch add OR Continous: • Place RC Makeup Blend control switch in STOP • Place RC Makeup Blend Control Mode switch in DILUTE or ALT DILUTE • Set desired batch on BA batch controller • Place RC Makeup Blend control switch in START
	RO/BOP	Commences escalation: • Raises turbine load (reactor power) using the DCS HMI. • Maintains Tave/Tref deviation within limits by dilution and turbine load adjustments. • Ensures Axial Flux Difference (AFD) is maintained within target band by manual control rod movement as needed.
	BOP/RO	Acts as peer checker for RO during blender operations and RO verifies appropriate reactivity feedback.
	BOP	Monitors and maintains main electrical generator temperatures within limits per: • 02-OHP-4021-059-001, Generator Stator Cooling Water System • 02-OHP-4021-080-003, Generator Hydrogen Gas System

Op-Test No.: Sets 1 & 3	Scenario No.: COOK08-01	Event No.: 3

Event Description: **CVCS Letdown Temperature Controller Output Fails Low**

Time	Position	Applicant's Actions or Behavior
	RO	Recognize and reports annunciator Panel 209 Drop 45, VOLUME CONTROL TANK TEMP HIGH, alarms which indicates a loss of CCW cooling to the letdown heat exchanger.
Note: Crew may note that LEFM (Leading Edge Flow Monitor) indication on the PPC has become unreliable and may begin looking for cause prior to letdown heat exchanger alarm.		
	US	Directs operator actions to restore proper temperature control for letdown.
	RO	Performs the following: • Places 2-CRV-470, Letdown Temperature Control valve, controller to MANUAL • Opens 2-CRV-470 and restores letdown temperature to normal • Verifies letdown flow diverted to RC Filter
Note: OP-2-5129 shows that QTS-301 (switch which causes letdown to bypass the Demineralizers) is separate from the QTC-302 controller that is failed low and causing letdown problems. The demineralizers may be placed back in service with this malfunction in place.		
	US	Initiates action to have MTI (or WIN Team) investigate problem with letdown temperature controller.
	US	May Refer to TS (LCO): • TRM 8.7.14, Leading Edge Flow Meter (Mode 1 > 3411 applicability)

Op-Test No.: **Sets 1 & 3** Scenario No.: **COOK08-01** Event No.: 4

Event Description: **2E CCW Pump Trips (Standby CCW Pump 2W Fails to Auto Start)**

Time	Position	Applicant's Actions or Behavior
	BOP	Recognizes and reports CCW annunciators on Ann. Panel 204 indicative of CCW pump trip (may include): • Drop 84, EAST CCW PUMP DISCHARGE PRESSURE LOW • Drop 93, CCW PUMP MOTOR OVERLOAD TRIP
	BOP	Recognizes and reports that running (2E) CCW pump has tripped and standby (2W) CCW pump failed to auto start.
	BOP	Manually starts 2W CCW pump in accordance with CCW Annunicator Response Procedures.
Note: The crew may attempt one restart of 2E CCW pump per the Annunciator Repsonse Procedure.		
	US	May refer to actions of 02-OHP-4022-016-001, CCW Malfunction procedure.
	BOP	If 02-OHP-4022-016-001, CCW Malfunction procedure is used, the performs the following actions as directed: 1. Ensures at least one CCW pump is running 2. Checks CCW surge tank level stable 3. Checks CCW flow to RCPs normal 4. Checks CCW Hx outlet temperature normal
	SRO	Refers to TS LCO: • TS 3.7.7, Component Cooling Water System. Condition A 2E CCW Pump is declared INOPERABLE. **Note: Low Pressure Auto Start is NOT a Required Safety Function (2W CCW pump is not INOPERABLE)**
Note: CCW Surge tank valve 2-CRV-412 may close due to loss of flow to Rad Monitor.) If 2-CRV-412 closes, SRO directs actions per 12-OHP-4024-139 #29 CCW HX Rad Monitor to address Rad Monitor Low Flow and re-open 2-CRV-412.		

Op-Test No.: Sets 1 & 3 | Scenario No.: COOK08-01 | Event No.: 5

Event Description: **Loop 2 RCS Hot Leg Temperature Transmitter (NTP-121) Fails High**

Time	Position	Applicant's Actions or Behavior
	RO	Recognizes and reports annunciators on Ann. Panel 211 which are indicative of a RCS RTD failure.
Note: Based on the response time of the crew, an auto makeup may occur for the VCT due to letdown charging mismatch due to erroneous auctioneered high Tavg indication.		
	RO	Places rod control in manual after verifying no runback in progress. Identifies that PRZ Program Level is affected by this failure.
	US	Enters and directs actions of 02-OHP-4022-012-003, Continuous Control Bank Movement procedure, if rods moved.
	RO	If 02-OHP-4022-012-003 is entered, then performs the following as directed: 1. Checks for no turbine runback 2. Ensures control rods are in manual with no rod motion 3. Checks rod position above low-low rod insertion limit **Note: Tave failure affects RIL Setpoint – Must use COLR or manually calculate.** 4. Checks axial flux difference (AFD) within target band 5. Initiates restoration of equilibrium conditions using either: • Control rod movement • Turbine load adjustment 6. Identifies failed RTD channel
	US	Enters and directs actions of 02-OHP-4022-013-007, RCS RTD Instrument Malfunction procedure.
	RO	1. Ensures control rods are in manual. 2. Reports Loop 2 as failed RCS temperature channel and aligns the following switches: • Tavg defeat switch to Loop 2 position • ΔT defeat switch to Loop 2 position • ΔT/OPΔT/OTΔT recorder switch to Loop 1, 3, or 4
	US	Initiates actions to trip bistables associated with RCS loop 2 RTD failure per Attachment B of 02-OHP 4022.013.007.

Op-Test No.: Sets 1 & 3 Scenario No.: COOK08-01 Event No.: 5

Event Description: **Loop 2 RCS Hot Leg Temperature Transmitter (NTP-121) Fails High**

Time	Position	Applicant's Actions or Behavior
	US	Refers to TS LCO: • TS 3.3.1, Reactor Trip System (RTS) Instrumentation (Table 3.3.1-1) o Function 6, *Overtemperature ΔT.* Condition D o Function 7, *Overpower ΔT.* Condition D • TS 3.3.2, Engineered Safety Feature Actuation System (ESFAS) Instrumentation (Table 3.3.2-1) o Function 4e, *Steam Line Isolation - High Steam Flow in Two Steam Lines (per steam line), Coincident with Tavg – Low Low* Condition D o Function 8c, *ESFAS Interlocks - Tavg - Low Low, P-12.* Condition D May enter the following TS if Pressure lowers to <2200 psig during the transient: • TS 3.4.1, RCS Pressure, Temperature, and Flow DNB Limits. Condition A

Op-Test No.:Sets 1 & 3 Scenario No.: COOK08-01 Event No.: 6

Event Description: **Main Feedwater Pump Delta-P Controller Setpoint Fails Low**

Time	Position	Applicant's Actions or Behavior
Note:	**Malfunction will cause the Total Steam Flow summing unit for the Feed Pump Delta-P circuit to fail low thus driving the Delta-P setpoint low.**	
	BOP	Recognizes and reports annunciator on Ann. Panel 215, Drop 53, FW Controller Failure, and indications of a failure affecting main feedwater to all steam generators (SGs): • Main FW Pump Diff Pressure Controller • All SG levels lowering • All feedwater regulating valves opening • Main feedwater pumps speed lowering **Note:** Ann. DCS-MFP, Drop C-135, DP SETPOINT STEAM FLOW XMTR FAIL, contains actions to address setpoint failure.
	BOP	Places MFP differential pressure controller (or both Main FW Pump controllers) in manual and raises output (raise MFW discharge pressure / flow) to match feedwater flow with steam flow and restore SG levels to program.
	CREW	Identifies that Main Feedwater Pump Delta-P Controller Setpoint has failed low.
	BOP	Takes manual control of FWP Delta-P. Monitors/adjusts MFP differential pressure to restore SG levels to program.
	RO	Monitors nuclear power during feedwater transient.
Note:	**Depending on the reaction time and amount of adjustments, the crew may trip the reactor. Initiate the next event if the reactor trips. If a Reactor trip is required the first three items on the following event will be NA.**	

Op-Test No.:Sets 1 & 3 Scenario No.: COOK08-01 Event No.: 7/8/9

Event Description: **Small Break LOCA Inside Containment**
Containment Isolation Phase A – Auto Failure
ECCS Slave Relay Failures

Time	Position	Applicant's Actions or Behavior
	RO/US	Acknowledge Ann. Panel 222, Drop 84, ICE CONDENSER INLET DOORS OPEN, alarm. Determines that a loss of reactor coolant is occurring based on the following: • Pressurizer and VCT level change • Charging and letdown flow mismatch • Containment radiation monitoring trend • Containment pressure rise • Containment sump level rise
	US	May enter and direct actions of 02-OHP-4022-002-020, Excessive Reactor Coolant Leakage procedure.
	RO	Performs the following actions if directed: 1. Manually raises charging flow to maintain pressurizer level 2. Manually adjusts seal injection flow (6–12 gpm / each RCP) 3. Reduces/isolates letdown flow to maintain pressurizer level 4. Attempts to determine RCS leak rate
	US	Directs RO/BOP to manually trip the reactor and initiate safety injection and perform the immediate actions of E-0, Reactor Trip or Safety Injection (based on RCS leak rate beyond charging system capability or rising Containment Pressure).
	RO/BOP	Performs the immediate actions of E-0: 1. Checks reactor trip 2. Checks turbine trip 3. Checks power to AC emergency buses 4. Checks safety injection status
	US	Ensures immediate actions of E-0 are completed
	US	Directs subsequent actions of E-0.
	RO/BOP	Reviews E-0 Foldout Page Criteria.
	BOP	Manually controls AFW flow to maintain SG narrow range levels 13% - 50% once one SG narrow range level is > 13%.

Op-Test No.:Sets 1 & 3 Scenario No.: COOK08-01 Event No.: 7/8/9

Event Description: **Small Break LOCA Inside Containment**
Containment Isolation Phase A – Auto Failure
ECCS Slave Relay Failures

Time	Position	Applicant's Actions or Behavior
	RO	Reports that 2E CCW pump is NOT running – 2E CCW pump off due to previous failure.

	US/RO
	
	Critical Task #1
		Manually opens high head safety injection valves:
		• **BIT Outlet Valves**
		  o **2-ICM-250 -AND/OR- 2-ICM-251**
		• BIT Inlet Valve (Not critical)
		  o 2-IMO-256, BIT
		
		Note: Event 9, Manually align the High Head Injection Valves.

	US/RO	Manually actuates Containment Isolation - Phase A.
	CREW **Critical Task #2**	**Manually stops all Reactor Coolant Pumps (RCPs) within 5 minutes of RCS pressure lowering below 1300 psig.**
	RO/BOP	Performs manual actions of E-0 Attachment A (for Train A components which failed to start/reposition) as directed by US.
	CREW	Completes all actions of E-0 through step 19 (Check If RCS Is Intact).
	US	Announces transition to E-1, Loss Of Reactor Or Secondary Coolant (at step 19 of E-0).
	RO/BOP	Reviews E-1 Foldout Page Criteria.
	US	Directs actions of E-1, Loss Of Reactor Or Secondary Coolant.
	BOP	Maintains SG narrow range levels 27% - 50%.
	US	Checks if SI Termination Criteria is MET: • RCS Subcooling >40°F • Secondary Heat Sink (SG >13% or AFW Flow >240x103) • RCS Pressure rising or stable • Pressurizer Level >20%
	Crew	Transition to ES-1.1, Safety Injection Termination if criteria is met. **ES-1.1 Actions are listed on Page 13.** **IF SI Termination Criteria are NOT met, THEN E-1 Actions Are Continued on Page 12.)**

Op-Test No.: Sets 1 & 3 Scenario No.: COOK08-01 Event No.: 7/8/9

Event Description: **Small Break LOCA Inside Containment**
Containment Isolation Phase A – Auto Failure
ECCS Slave Relay Failures

Time	Position	Applicant's Actions or Behavior
	RO/BOP	Performs the following as directed: 1. Resets both trains of Safety Injection 2. Stops RHR pumps if RCS pressure is stable or rising 3. Stops running Emergency Diesel Generators (EDG) 4. Dispatches operator to secure EDG jacket water pumps (for EDG Stopped) 5. Directs chemistry to initiate post accident sampling
	US	Announces transition to ES-1.2, Post LOCA Cooldown And Depressurization (at step 12 of E-1).
	CREW	**Check if transition is made to ES-1.2, then perform the following:** • Reset SI • Reset Containment Isolation: • Establish Control Air To
TERMINATE SCENARIO		

Op-Test No.: Sets 1 & 3 | Scenario No.: COOK08-01 | Event No.: 7/8/9

Event Description: **Small Break LOCA inside Containment**
Containment Isolation Phase A – Auto Failure
ECCS Slave Relay Failures

Time	Position	Applicant's Actions or Behavior
Note:	**Crew may transition to SI termination if criteria is met. This may involve stopping ECCS pumps and realigning charging until parameters change causing them to restart equipment and return to E-1 or ES-1.2. There are several points of transition to ES-1.2 from ES-1.1. The ES-1.1 Steps are listed below. The Scenario may be terminated upon transition to ES-1.2**	
	US	Announces transition to ES-1.1, Safety Injection Termination (step 6 of E-1).
	RO/BOP	Reviews ES-1.1, Foldout Page Criteria. Monitors RCS Subcooling >40°F and PZR Level >20%, if NOT realign ECCS and GO TO E-1
	US	Directs Actions of ES-1.1
	RO/BOP	Performs the following as directed: 1. Resets both trains of Safety Injection 2. Stops one Charging Pump. 3. Resets both trains of Phase A 4. Establishes Control Air to Containment
	CREW	Check if RCS Pressure is stable or Rising If Lowering, Transition to ES-1.2
	RO/BOP	Performs the following as directed: 1. Establish Normal Charging Flowpath 2. Isolate BIT Injection
	CREW	Check if: • Pressurizer Level is stable and • RCS Pressure is Stable or Rising **If NOT, Transition to ES-1.2**
	CREW	**Check if transition is made to ES-1.2, then perform the following:** • Reset SI • Reset Containment Isolation: • Establish Control Air To
		TERMINATE SCENARIO

Task	Elements	Results
#1 **Manually open high head safety injection valves**	**<u>Cueing:</u>** • **Check ECCS Flow: BIT - Flow Indicated (E-0, Step 12.a)** **-OR-** • **Check Systems In Proper Emergency Alignment: ECCS Monitor lights – Proper Status (E-0, Step 15.c)** **<u>Performance Indicators:</u>** **While in E-0 before transitioning to E-1.** • **Manually open BIT (outlet/inlet) valves to establish at least one train of high head safety injection flow.** **<u>Performance Feedback:</u>** • **BIT flow is indicated to at least one train (as indicated by flow on two cold leg BIT injection flowmeters)**	**SAT / UNSAT**
#2 **Manually trip all Reactor Coolant Pumps**	**<u>Cueing:</u>** • **RCS pressure – less than 1300 psig AND CCPs or SI pumps – at least one running** o **E-0, Foldout Page, Step 1** o **E-0, Step 19** o **E-1, Foldout Page, Step 1** o **E-1, Step 1** **<u>Performance Indicators:</u>** **Within 5 minutes of the trip criteria being met:** • **Manually stop all Reactor Coolant Pumps (RCPs) when RCS pressure is less than 1300 psig.** **<u>Performance Feedback:</u>** • **RCP ammeters – zero current** • **RCP trip low flow alarms – lit** • **RCS loop flow meters – flow lowering**	**SAT / UNSAT**

Setup:

1. Reset to IC- 35 (960), MOL; 78% power, 1135 ppm Boron, 8 GWD, 567°F Tave, CBD @ 194 steps, 807 MW.
2. Reset control rods and check group step counters
3. Place Master Annunciator Silence pushbutton lockout ring in LOCKOUT position
4. Advance chart recorder paper & clear chart recorder memory
5. Update PPC Chart Recorders VCT 20-70, PWR 70 - 100%, Tavg/Tref 565-575°F
6. Activate the following malfunctions to place 2CD EDG and East MDAFP OOS:
   - FWR61 **MRF FWR61**
   - EG10B **IMF EG10B**
   - EG06B **IMF EG06B**
   - EGR14 **IRF EGR14** Value **RO**
   - EGR15 **IRF EGR15** Value **RO**
   - EGR02 **IRF EGR02** Value **RO**
   - O101FQTCD1[GF **IOV ZLO1012QTCD1 [GRN]** Value **OFF**
   - O101FQTCD2[GF **IOV ZLO1012QTCD2 [GRN]** Value **OFF**
7. Place RED clearance tags on the following switches positioned as indicated:
   - East AFW Pump – PTL`
   - T21C3 - PTL
   - T21D8 – PTL
   - CB2DGTCD – CENTER
   - DG2CD STOP-RUN - CENTER
   - 2-QT-106-CD1 - STOP
   - 2-QT-106-CD2 - STOP

8. Go to **RUN** and acknowledge/clear alarms

9. Activate the following pre-load malfunctions:

- CC02B **CC02B** (2W CCW pump fails to auto start)
- RP13A **RP13A** (Phase A isol./ train A auto failure)
- RP13B **RP13B** (Phase A isol./ train B auto failure)
- RP19G **RP19G** (ECCS slave relay failure)
- RP20G **RP20G** (ECCS slave relay failure)
- RP20B **RP20B** (AB EDG slave relay failure)

Scenario:

EVENT #1

Report as AEO as required:

- Starting Party is standing By.
- Oil Pressure is 5 psig
- 2-CRV-224 is closed

Report as required to other departmental requests.

EVENT #2

No Additional Actions

EVENT #3

After crew has demonstrated ability to raise power, THEN

IMF CV09, Final Value **50**, to cause Letdown Temperature Controller to fail LOW

CV09

EVENT #4

While RO is occupied (to ensure BOP must address failure):

IMF CC01A, to cause the 2E CCW pump to trip [2W CCW Preloaded for fail of Auto Start]

CC01A

If dispatched to check 2E CCW breaker T21D3, report that the breaker has tripped on OC. Report no indications of problems with the pump if checked locally.

EVENT #5

IMF RX02E, final value **650,** to fail Loop 2 Hot Leg RTD (NTP-121) high

RX02E

If required, Prompt Crew as Shift Manager to Restore Reactor Power/Temperature while waiting for bistables to be tripped.

If directed to trip bistables for NTP-121 use:

Override ZLOSTMC2[7] to ON to simulate opening cabinet door

ZLOSTMC2[7]

(Override Lights/Relays – RX Flux panel)

Remote		Bistable
RPR125	RPR125	**TS-421G**
RPR127	RPR127	**TS-422D**
RPR123	RPR123	**TS-421C**
RPR126	RPR126	**TS-421H**
RPR128	RPR128	**TS-422G**
RPR124	RPR124	**TS-421D**

Override ZLOSTMC2[2] to ON to simulate lifting Test Rack

ZLOSTMC2[2]

Delete Override ZLOSTMC2[7] to simulate closing cabinet Door

ZLOSTMC2[7]

EVENT #6

IMF RX27, final value **30** over **12 min,** to fail the Main Feedpump DP controller setpoint LOW over a 12 minute period.

RX27

If contacted as MTI to investigate Feedpump Delta-P Controller malfunction, report back after some 3 min. delay that the cause cannot be determine and further testing will be required.

EVENT #7 - 9

IMF RC10D, final value **70** over **5 min,** Loop 4 Cold Leg SBLOCA (700 gpm) inside containment over a 5 minute period.

RC10D

Local actions after entry into E-0:

- Locally stop U2 Ice Condenser AHUs MRF **CHR01** to OFF

  CHR01

- Place PACHMAS in service – MRF **CHR02 or 03** with 10 min delay.

  CHR02 OR CHR03

  (both have 10 minute delay built in)

- U1 has aligned CR vent for U2 SI, Fan **2-HV-AS-1** is running.

If directed to secure EDG jacket water pumps select **OFF** then **AUTO**

Remote	**OFF**	**AUTO**
EGR 03A	EGR03A	EGR03A
EGR 03B	EGR03B	EGR03B