

Facility: PALISADES NUCLEAR PLANT Scenario No.: 1 Op-Test No.: 1

Examiners: _____ Operators: _____

Initial Conditions: The Unit is 74% power, middle of core life. P-54A, Containment Spray pump is tagged OOS for seal cooler inspection.

Turnover: Shift orders are to alternate operating CCW pumps and continue the power escalation to full power.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	ATC (N) SRO (N)	Alternate operating CCW pumps
2	N/A	ATC (R) SRO (R)	Commence power escalation
3		ATC (C) SRO (C)	Primary water totalizer failure to stop at programmed value (during ramp, manual action required to secure dilution)
4		BOP (I) SRO (I,T)	West ESS room ventilation rad monitor failure
5		ATC (C) SRO (C,T)	Loss of Preferred AC Bus Y-10 (inverter failure)
6		BOP (C) SRO (C)	Turbine Governor Valve GV3 and GV4 fail shut
7		BOP (C)	Failure of turbine to auto trip
8		ALL (M)	ESDE (Main Steamline Rupture) inside containment (ramped in at time of trip)
9		ATC (C) SRO (C)	Left Channel Containment Spray fails to auto or manually actuate (requires manual alignment and start of P-54B)

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

Facility: PALISADES NUCLEAR PLANT Scenario No.: 2 Op-Test No.: 1

Examiners: _____ Operators: _____

Initial Conditions:

The Unit is at 100% RTP in the middle of core life. P-66B HPSI Pump is tagged out of service for an impeller replacement.

Turnover: Shift orders are to cycle control valves per Section 7.9.1 of SOP-3.

Event No.	Malf. No.	Event Type*	Event Description
1		ATC (N) SRO (N)	Cycle Control Valves CV-3055, CV-3223, and CV-3212 per SOP-3
2		BOP (C) SRO (C)	Main Generator Voltage Regulator fails with concurrent fluctuation in grid voltage
3		BOP (I) SRO (I,T)	S/G 'A' level transmitter LT-701 output fails low
4		ATC (I) SRO (I,T)	Hot Leg #1 RTD fails low
5		BOP (C) ATC (R) SRO (C,R)	Cooling Tower Pump P-39B trips and Rapid Downpower (due to degrading vacuum)
6		ATC (C) SRO (C,T)	P-50D lower seal failure. 4 minutes later, the middle seal fails, requiring the Unit to be taken offline.
7		ALL (M)	Small Break LOCA (350 gpm leakage from charging line piping at reactor vessel)
8		ATC (C) SRO (C)	Failure of SIAS to automatically or manually actuate (must manually start/align equipment)
9		ATC (C)	HPSI Pump P-66A trips on ground O/C when manually started (no HPSI flow available)

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

Facility: PALISADES NUCLEAR PLANT Scenario No.: 3 Op-Test No.: 1

Examiners: _____ Operators: _____

Initial Conditions:

The Unit is middle of core life at 45% RTP. P-1B Main Feedwater pump has just been returned to service following repair of an oil leak.

Turnover: P-55A charging pump is OOS for a seal leak. P-8A AF pump is OOS to support a breaker inspection. Shift orders to place the second Heater Drain pump online per SOP-10 and continue power ascension to full power.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	BOP (N) SRO (N)	Start second Heater Drain pump per SOP-10
2	N/A	ATC (R) SRO (R)	Commence power escalation
3		BOP (C) SRO (C,T)	Loss of 'A' Control Room HVAC Train
4		ATC (I) SRO (I,T)	Channel 'B' Pressurizer Pressure controller failure
5		ATC (C) BOP (C) SRO (C,T)	Loss of DC Panel ED-11-1 (prevents left train from generating AFAS)
6		ALL (M)	LOOP coincident with spurious closure of 'B' MSIV. Security calls and reports and earthquake.
7		BOP (C) SRO (C)	When Aux Feedwater is actuated (auto or manual), S/G 'B' Control Valve CV-0736A fails to open, requiring manual operation to feed S/G 'B' with P-8C.
8		BOP (C) SRO (C)	2 'B' MSSVs stick open (2 minutes after the 'B' MSIV closes).

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