Complete the MODE 4 Shiftly/Daily Surveillances

Job Position(s): ☒ RO ☐ SRO

Source: ☒ New ☐ Bank ☐ Modified _____ (Facility ID No. for Bank or Modified)

K/A Reference: 2.1.18, Ability to make accurate, clear, and concise logs, records, status boards, and reports.

Method of testing: ☐ Simulated/Walk-thru Performance [Classroom/Plant]

☒ Actual Performance [Simulator/Lab]

Type: (Check all that apply)

☒ Administrative Topics ☐ Control Room Systems ☐ In-Plant Systems
☐ Alternate Path ☐ Emergency/Abnormal ☐ ESF
☐ Low-Power/Shutdown ☐ Time Critical

Task Standard: Completes the applicable portions of 24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances and notifies the CRS of any deficiencies.

Validation Time: 20 Minutes

Simulator Setup:

1. Reset the simulator to IC2 (Cold Shutdown MOL)
2. Reactor MODE switch in SHUTDOWN.
3. Withdraw SRM B until count-rate is just above 100 cps.
4. Remove power from RHR pumps C and D.
5. Throttle shut RHR B Hx Outlet valve until Rx is heating up at a very slow but visible rate, then insert an “overload” trip.
6. Actuate annunciator 3D57, CIRC H2O SYS DECANT LINE RADN MONITOR TROUBLE

Required Materials:

Marked up partially completed 24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances

General References:

24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances

Initial Conditions:

The plant is in MODE 4
You are an extra NSO on shift
The NSO assigned to perform the Mode 4 Shiftly Surveillances had to leave the site due to a family emergency before completing the procedure.

Initiating Cue:

Complete the applicable portions of 24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances.

Performance Information

Critical Steps are annotated by "**c"** and italicized text.

	ELEMENTS	STANDARDS
	NOTE:	
	3.0 Suppression Pool Water Level Torus Water Level ≥ -66"	Records suppression pool level from recorders T50-R804A & B; and initials step.
	4.0 Reactor Vessel Flange Temperature	Records temperature from B21-R007 and initials step
c	*5.0 Circulating Water Reservoir Decant Radioactivity* *Annunciator 3D57 is NOT illuminated.*	*Observes that annunciator is illuminated, indicates that step is UNSAT, reports to CRS and initiates an investigation IAW with alarm response procedure.*
c	*6.0 Residual Heat Removal (RHR)Shutdown Cooling – Cold Shutdown* *Two RHR subsystems OPERABLE* *One RHR or RR Pump operating and circulating Reactor Coolant* *Reactor Vessel Level from Flood Up Range Indicator*	*Identifies that F003B has no indication and that Div 2 MOV Overload annunciator is in alarm.* *Indicates step UNSAT. Enters comment in remarks section with reference to step.* *Reports status to CRS* *Verifies one RHR pump is running with flow through the RHR HX Bypass valve (F048)* *Records RPV Water Level from Flood Up Range Indicator.*

	ELEMENTS	STANDARDS
c 7.0	Source Range Monitoring (SRM) Instrumentation.	
	Records data for each SRM channel	Records SRM channel readings
	Verifies that each channel indicates ≥ 3.0 cps and < 1E5 cps *Performs CHANNEL CHECK*	*Recognizes that SRM channel B is reading significant lower than the other channels. Identifies that detector is not fully inserted.*
8.0	Condensate Storage Tank Level	Marks step as N/A
	Determines from initial conditions that step is N/A	
Completion –	Reviews data entries, prints and signs name, inserts initials, completion date and time, and marks appropriate completion status.	Prints and signs name, inserts initials, completion date and time, and marks appropriate completion status.
	Submits to CRS for review and approval.	Submits to CRS for review and approval.

Terminating cue: Terminate JPM when applicant submits completed package for CRS review.

EXAMINEE CUE SHEET

Initial Conditions:

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Initiating Cue:

Complete the applicable portions of 24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances.