OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

STATION: SALEM 1 & 2

SYSTEM: ADMINISTRATIVE

TASK: Review a completed surveillance to calculate the Quadrant Power Tilt Ratio.

TASK NUMBER: 0150020201

JPM NUMBER: INDIA ILT Audit SRO Admin 1.1

ALTERNATE PATH: [X]

K/A NUMBER: 2.1.7

IMPORTANCE FACTOR: RO: ____ SRO: 4.4

APPLICABILITY:

EO [ ] RO [ ] STA [X] SRO [X]

EVALUATION SETTING/METHOD: Classroom / Perform

REFERENCES: S1.OP-ST.NIS-0002(Q), Rev. 11 Power Distribution - QPTR
Salem Unit 1 Technical Specifications

TOOLS AND EQUIPMENT: Calculator

VALIDATED JPM COMPLETION TIME: Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVAL:

N/A		
Bargaining Unit Representative	**OPS Training Supervisor**	**OPS Manager or designee**

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**

1. **Permission from the SM or Unit CRS;**
2. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
3. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: Minutes

ACTUAL TIME CRITICAL COMPLETION: N/A

JPM PERFORMED BY: _____ **GRADE:** [ ] **SAT** [ ] **UNSAT**

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Administrative

TASK: Review the completed surveillance to Calculate a Quadrant Power Tilt Ratio.

TASK NUMBER: 114 503 03 01

INITIAL CONDITIONS: Reactor Power has been maintained at 100% for the last 180 days.

INITIATING CUE: The following detector voltages have been recorded from the Power Range NI Detectors:

	N41	N42	N43	N44
UPPER	169	166	145	165
LOWER	168	176	140	168

You have been directed to review the completed surveillance to calculate the existing Quadrant Power Tilt Ratio.

The current time is 2230 on October 5, 2006.

Document any discrepancies that you identify or actions that you would take on Attachment 4, Section 1.0, Comments.

Successful Completion Criteria:

1. All critical steps completed
2. All sequential steps completed in order
3. All time-critical steps completed within allotted time
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

OPERATOR TRAINING PROGRAM **NAME:**_____

JOB PERFORMANCE MEASURE **DATE:**_____

System: ADMINISTRATIVE

Task: Review the completed surveillance to Calculate a Quadrant Power Tilt Ratio.

* #	STEP NO.	STEP (* Denotes a Critical Step) (# Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Obtains completed copy of procedure S1.OP-ST.NIS-0002(Q).	Provide completed surveillance.		
	5.4.2	Candidate is performing Step 5.4.3 to review the completed surveillance for accuracy and completeness.	Candidate should review procedure for completeness. ***NOTE:*** If candidate identifies that Independent Verification has not been completed, then give direction to continue with the review and document discrepancy and action as necessary. The missing IV should be documented in the Comments Section of Att. 5.		
	5.1.1	If one Power Range Channel is inoperable and reactor thermal power is >75%, ...	Determines that all 4 Power Range Channels were operable.		

OPERATOR TRAINING PROGRAM **NAME:**_____

JOB PERFORMANCE MEASURE **DATE:**_____

System: ADMINISTRATIVE

Task: Review the completed surveillance to Calculate a Quadrant Power Tilt Ratio.

* #	STEP NO.	STEP (* Denotes a Critical Step) (# Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.1.2	Reviews the following data on Attachment 2: A. Date B. Time C. Reactor Power D. Reason for performing QPTR	Determines that data is recorded correctly on Attachment 2. Reason for QPTR performance is identified on Initial Conditions.		
	5.1.3	Ensures on Attachment 1 that the Upper and Lower Detector currents are recorded, and the respective 100% NI Current Values for Channels N-41, N-42, N-43 and N-44 Detectors from S2.RE-RA.ZZ-0011, (RE Manual), Table 2.	Reviews that detector currents are recorded on the correct Attachments.		

OPERATOR TRAINING PROGRAM **NAME:**_____

JOB PERFORMANCE MEASURE **DATE:**_____

System: ADMINISTRATIVE

Task: Review the completed surveillance to Calculate a Quadrant Power Tilt Ratio.

* #	STEP NO.	STEP (* Denotes a Critical Step) (# Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.1.4	Review Attachment 1 calculations	Reviews calculations and determines that Section 1.0 UPPER DETECTORS, **SUM OF DETECTOR RATIOS** is incorrect. It should be 3.997. Determines the **AVERAGE UPPER DETECTOR RATIO** is incorrect. It should be 0.994. This makes ALL the Upper Detector Power Tilts incorrect. The correct values are: Sum Of Detector Ratios = 3.997 Average Upper Detector Ratio = 0.994 <u>POWER TILT</u> N41=1.027 N42=0.997 N43=0.984 N44=0.993 Determines Section 2.0, LOWER DETECTORS numbers and calculations are correct		

OPERATOR TRAINING PROGRAM **NAME:**_____

JOB PERFORMANCE MEASURE **DATE:**_____

System: ADMINISTRATIVE

Task: Review the completed surveillance to Calculate a Quadrant Power Tilt Ratio.

* #	STEP NO.	STEP (* Denotes a Critical Step) (# Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.1.5	Reviews Attachment 2.	Identifies that erroneous calculation on Section 1.0 of Attachment 1 have been carried over to Attachment 2, in the Upper Section Power Tilt and the Maximum Power Tilt. The Power Tilt (1) Upper Detector numbers should be the same as in the previous step (5.1.4) above. Identifies that the Maximum Power Tilt (1) for the Upper Detectors is incorrect and determines the Maximum Tilt should be 1.027 Documents in Comments Section.		
	5.1.6	Reviews Attachment 1 for second verification	Identifies that Second Verification was signed off as being completed, but was NOT performed. Documents in Comments Section.		

OPERATOR TRAINING PROGRAM **NAME:**_____

JOB PERFORMANCE MEASURE **DATE:**_____

System: ADMINISTRATIVE

Task: Review the completed surveillance to Calculate a Quadrant Power Tilt Ratio.

* #	STEP NO.	STEP (* Denotes a Critical Step) (# Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.1.7	IF the Maximum Power Tilt for any detector exceeds 1.02, THEN refer to T/S 3.2.4 for corrective actions.	Identifies Maximum Power Tilt is 1.027. Identifies that the entry into TS 3.2.4 is required. Identifies that ACTION must be taken IAW TS 3.2.4 within 2 hours. *** Within 2 hours of 2200, either QPTR must be restored to less than 1.02, or Rx thermal power must be reduced 3% from RATED THERMAL POWER for each 1% QPTR is in excess of 1.0. To comply with TS, power must be reduced less than 91% by 2400 on 10/6/06. Documents in Comments Section.		
*	6	Test results documented by initializing the SAT or UNSAT column IAW the stated Acceptance Criteria.	Determines that the procedure was completed improperly because of miscalculation. Documents in Comments Section.		

Terminating Cue: NONE, JPM is complete when candidate turns in completed JPM with comments in the Documentation section.

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

Reactor Power has been maintained at 100% for the last 180 days.

All Power Range Nuclear Instrumentation are indicating normally for the current power level.

OHA E-38 UPPER SECT DEV ABV 50% PWR is in alarm. The Annunciator Response Procedure requires performance of a QPTR surveillance. Section 5.1 was used to complete the surveillance and the procedure is ready for SM/CRS review.

Document any discrepancies or actions that you would take on Attachment 4, Section 1.0, Comments.

Inform Evaluator when you have completed the Documentation Section, Attachment 4.

INITIATING CUE:

You have been directed to perform the CRS review of the attached surveillance procedure for accuracy and completeness.

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

SYSTEM: Administrative

TASK: Verify a Shutdown Margin Surveillance

TASK NUMBER: 1200030301

JPM NUMBER: INDIA Admin A1-2

K/A NUMBER: 2.1.25

APPLICABILITY:

IMPORTANCE FACTOR: 3.1

E	RO	SR	RO	SRO
		X		

EVALUATION SETTING/METHOD: Simulator or Control Room

REFERENCES: SC.RE-ST.ZZ-0002, Rev. 15 Shutdown Margin Calculation; S1.RE-RA.ZZ-0012, Rev. 107 Figures (Cycle 18)

TOOLS AND EQUIPMENT: Calculator

VALIDATED JPM COMPLETION TIME: 15 MIN

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED: **N/A**

Bargaining Unit Representative	OTM	Operations Director or designee

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**

1. **Permission from the SM or Unit CRS;**
2. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
3. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: _____

JPM PERFORMED _____ **GRADE** ☐ **SAT** ☐ **UNSAT**

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

SETUP INSTRUCTIONS

SYSTEM: Administrative

TASK: Verify a Shutdown Margin Surveillance

TASK NUMBER: 1200030301

SIMULATOR IC: **N/A**

MALFUNCTIONS REQUIRED: NONE

OVERRIDES REQUIRED: NONE

SPECIAL INSTRUCTIONS:

Complete SC.RE-ST.ZZ-0002 up through step 5.2 including Attachment 3.
Att. 3 values are
100
800
D @ 228
11,200
1
3150
3585
595
595
2100 (This value should be 0)
-3445 (This value should be –5545)
-3445 (This value should be –5545)
614
2025
-806 (This value should be 2906)

Complete section 4.4 as if the SDM was -806 pcm…..UNSAT

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Administrative

TASK: Verify a Shutdown Margin Surveillance

TASK NUMBER: 1200030301

INITIAL CONDITIONS:

1. Unit 1 is operating at 100% power.
2. 1 control rod in Control Bank A has been declared INOPERABLE due to a determination that non-qualified repair parts were used on the Rod Control circuitry.
3. Core exposure is 11,200 GWD/MTU.

INITIATING CUE:

The NCO assigned to perform the Shutdown Margin calculation IAW TSAS 3.1.3.1 Action C.3, reports that SDM is below the minimum required for MODE 1 operation and that Rapid Boration is required.

Review the attached SDM calculation procedure SC.RE-ST.ZZ-0002, and determine if Rapid Boration is required. Note any discrepancies on Attachment 7.

Successful Completion Criteria:

1. **All critical steps completed.**
2. **All sequential steps completed in order.**
3. **All time-critical steps completed within allotted time.**
4. **JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).**

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
	1	Provide the candidate with the marked up copy of SC.RE-ST.ZZ-0002 and Att. 1	Ensures section 3 and 4 are completed.		

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
	2	Review Section 5 to ensure the correct Attachment was performed.	Reviews Section 5 and determines the correct Attachment (3) was performed.		

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
	3	Review the completed Shutdown Margin Calculation by verifying the following:			
		• Power Level	Verifies power is 100% from stem initial conditions.		
		• Boron Concentration	Using Figure 30, verifies boron concentration is 800 ppm. **CUE**: If candidate asks for RCS boron concentration, state 800 ppm. This would normally be available to the condidate in the control room from Control Room Logs.		
		• Burnup	Verifies burnup from stem initial conditions.		
		• # of INOPERABLE Rods	Verifies 1 from stem.		
		• Step 4.2.1	Verifies 3150 from Figure 15		
		• Step 4.2.2	Verifies 3585 from Figure 16		
		• Step 4.2.3	Verifies 595 from Figure 17		
		• Step 4.2.4	Verifies 595 for 1 control rod.		
*		• Step 4.2.5	Determines INTEGRAL ROD WORTH INSERTED has been improperly determined. Correct number should be ZERO, since there are no rods inserted.		
*		• Step 4.2.6	Determines the TRIPPABLE ROD WORTH is incorrect because of 4.2.5 being incorrect. Correct number should be 5545.		

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
*	Cont	• Step 4.3.1 • Step 4.3.2 • Step 4.3.3	Determines error propagation continues. Correct number should be 5545. Determines 614 is correct number for 10% penalty.		
*		• Step 4.3.4	Determines Power Defect is correct Determines SDM is incorrect. Actual SDM is 2906 pcm. Due to graph interpolation requirements, a =/- 200 pcm range is acceptable for actual SDM.		
*	4	Acceptance Criteria	Determines Acceptance criteria are actually met, and Rapid Boration is NOT required. Terminate the JPM once the attachment has been reviewed and correct values obtained, AND the candidate determines Rapid Boration is NOT required.		

INITIAL CONDITIONS:

1. Unit 1 is operating at 100% power.

2. 1 control rod in Control Bank A has been declared INOPERABLE due to a determination that non-qualified repair parts were used on the Rod Control circuitry.

3. Core exposure is 11,200 GWD/MTU.

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

INITIATING CUE:

The NCO assigned to perform the Shutdown Margin calculation IAW TSAS 3.1.3.1 Action C.3, reports that SDM is below the minimum required for MODE 1 operation and that Rapid Boration is required.

Review the attached SDM calculation procedure SC.RE-ST.ZZ-0002, and determine if Rapid Boration is required. Note any discrepancies on Attachment 7.

STATION: SALEM

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

TASK NUMBER: **1220050302**

JPM NUMBER: INDIA NRC – SRO ADMIN A.2

ALTERNATE PATH: [ ]

K/A NUMBER: 2.2.13

IMPORTANCE FACTOR: RO: ____ SRO: 3.8

APPLICABILITY:

EO [ ] **RO** [ ] **STA** [ ] **SRO** [X]

EVALUATION SETTING/METHOD: Perform (In-Plant or Classroom)

REFERENCES: NC.NA-AP.ZZ-0015, REV. 19 SH.OP-AP.ZZ-0015, REV.20
P&IDs 205334, 203061

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 15 mins.

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVAL:

BARGAINING UNIT REPRESENTATIVE	OPERATIONS TRAINING MANAGER	OPERATIONS DIRECTOR Or designee

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**

4. **Permission from the OS or Unit CRS;**
5. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
6. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: _____ Minutes

ACTUAL TIME CRITICAL COMPLETION: _____ Minutes

JPM PERFORMED BY: _____ **GRADE:** ☐ **SAT** ☐ **UNSAT**

REASON. IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

TASK NUMBER: 1220050302

INITIAL CONDITIONS:

1. Unit 2 is at 100% power.
2. A small leak has developed on an instrument connection for 21 SI Pump. The leak location is just upstream of 21SJ92, SI PUMP DISCH PRESS TAP The SM has authorized clearing and tagging 21 SI Pump to allow maintenance to replace the line.
3. No other ECCS-related technical specification action statements are in effect.

INITIATING CUE:

You are the Unit 2 CRS. The Work Control Center has forwarded this Tagging Request for your review and approval. If there is any enhancement or correction required to WCD, record it on the Initial Conditions paperwork.

Successful Completion Criteria:
1. **All critical steps completed.**
2. **All sequential steps completed in order.**
3. **All time-critical steps completed within allotted time.**
4. **JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.**

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Prove candidate with "Tear-off Sheet" and the Tagging Request.			
		START TIME: _____			
	1	Refers to SH.OP-AP.ZZ-0015 or NC.NA-AP.ZZ-0015, as necessary.	***NOTE:*** Ensure that a reference-grade copy of SH.OP-AP.ZZ-0015 and NC.NA-AP.ZZ-0015 are available.		
*	2	Reviews tagging request against P&ID blocking points	Notes that: 1. 2SJ30, RWST to SI Pump Stop Valve, is listed as a blocking point. Closing 2SJ30 would render both 21 and 22 SI Pumps inoperable. The proper blocking point should be 21SJ33 instead of 2SJ30.		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	2 (cont)		2. 21 SI pump Recirculation Line is not isolated from a potential energy source. Check valves are NOT relied upon for personnel protection. Isolation valve 21SJ65 should be tagged in the closed position.		
*	2 (cont)		3. ECCS cross-connect line going from pump suction to the 21SJ113 and 22SJ113 is not tagged. **NOTE:** These valves are located on a different print that has NOT been provided to the candidate. The candidate may request drawing 205334 Sheet 1 to determine which valves need to be added OR the applicant may state the 21/22SJ113s from memory.		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	2 (cont)		4. Returns Tagging Request to WCC, with changes requested. **NOTE:** If candidate identifies vent or drain valves as required for maintenance, these valves could be tagged (not incorrect), but are not required for a full correct answer.		
	4	TERMINATE JPM			
	5	STOP TIME: _____			

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. Unit 2 is at 100% power.
2. A small leak has developed on an instrument connection for 21 SI Pump. The leak location is just upstream of 21SJ92, SI PUMP DISCH PRESS TAP The SM has authorized clearing and tagging 21 SI Pump to allow maintenance to replace the line.
3. No other ECCS-related technical specification action statements are in effect.

INITIATING CUE:

You are the Unit 2 CRS. The Work Control Center has forwarded this Tagging Request for your review and approval. If there is any enhancement or correction required to WCD, record it on the Initial Conditions paperwork.

STATION: SALEM

SYSTEM: ADMINISTRATIVE (ALARA)

TASK: **Determine Radiological Conditions For Personnel Exposure**

TASK NUMBER: **N1200100104**

JPM NUMBER: INDIA NRC – SRO ADMIN A.3

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

ALTERNATE PATH: [ ] **K/A NUMBER:** 2.3.2

IMPORTANCE FACTOR: RO: ____ SRO: 2.9

APPLICABILITY:

EO [ ] **RO** [ ] **STA** [ ] **SRO** [X]

EVALUATION SETTING/METHOD: Classroom

REFERENCES: **NC.NA-AP.ZZ-0024(Q), Radiation Protection Program**
NC.RP-TI.ZZ-0602(Q), Radiation and Contamination Surveys
NC.RP-TI.ZZ-0204(Q), Posting of Radiological Signs and Barriers

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 5 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVAL:

BARGAINING UNIT REPRESENTATIVE	OPERATIONS TRAINING MANAGER	OPERATIONS DIRECTOR Or designee

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**

7. **Permission from the OS or Unit CRS;**
8. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
9. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: _____ Minutes

ACTUAL TIME CRITICAL COMPLETION: _____ Minutes

JPM PERFORMED BY: _____ **GRADE:** [ ] **SAT** [ ] **UNSAT**

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: ADMINISTRATIVE (ALARA)

TASK: **Determine Radiological Conditions For Personnel Exposure**

TASK NUMBER: N1200100104

INITIAL CONDITIONS:

4. Unit 1 is at 100% power.

5. Preparations are being made to start 11 RHR pump IAW S1.OP-SO.RHR-0001, INITIATING RHR, to sample the 11 RHR loop.

INITIATING CUE:

You are the Unit 1 Field Supervisor and have been directed to go to 11 RHR Pump to oversee the pump start. Upon arrival to the pump room, you have been informed that there will be a slight delay in starting the pump. Given the survey map, identify the individual doses that will be received by three (3) operators standing at the following locations in 11 RHR pump room:

Operator 1 waits at the bottom of the ladder for 30 minutes.
Operator 2 waits at the point furthest from the ladder for 12 minutes.
Operator 3 waits next to 11 RHR pump, on the side closest to the ladder, for 15 minutes.

Successful Completion Criteria:
5. **All critical steps completed.**
6. **All sequential steps completed in order.**
7. **All time-critical steps completed within allotted time.**
8. **JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.**

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Prove candidate with "Tear-off Sheet"			
		START TIME: _____			
	1	Obtain survey map	Provide the attached survey map.		
*	2	Determine Operator doses.	Operator One is standing in a 2 mrem/hr area. Standing for 30 minutes would result in 1 mrem. Operator 2 is standing in a 15 mrem/hr area. Standing for 12 minutes would result in 3 mrem Operator 3 is standing in a 10 mrem/hr area. Standing for 15 minutes would result in 5 mrem. ***TERMINATING CUE:*** **Candidate provides doses for operators..**		
	4	TERMINATE JPM			

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: ADMINISTRATIVE (TAGGING)

TASK: Review, for approval, a Tagging Request

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5	STOP TIME: _____			

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. Unit 1 is at 100% power.
2. Preparations are being made to start 11 RHR pump IAW S1.OP-SO.RHR-0001, INITIATING RHR, to sample the 11 RHR loop.

INITIATING CUE:

You are the Unit 1 Field Supervisor and have been directed to go to 11 RHR Pump to oversee the pump start. Upon arrival to the pump room, you have been informed that there will be a slight delay in starting the pump. Given the survey map, identify the individual doses that will be received by three (3) operators standing at the following locations in 11 RHR pump room:

Operator 1 waits at the bottom of the ladder for 30 minutes.
Operator 2 waits at the point furthest from the ladder for 12 minutes.
Operator 3 waits next to 11 RHR pump, on the side closest to the ladder, for 15 minutes.

STATION: SALEM

SYSTEM: Emergency Plan

TASK: Classify an event and complete an ICMF within the regulatory committed time limit (ESG-1)

TASK NUMBER: **1240020502**

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

JPM NUMBER: India NRC – SROA.4 ***(ESG-1)***

ALTERNATE PATH: ☐ **K/A NUMBER:** 2.4.38

IMPORTANCE FACTOR: N/A (**RO**) 4.0 (**SRO**)

APPLICABILITY:
EO ☐ **RO** ☐ **STA** ☐ **SRO** ☒

EVALUATION SETTING/METHOD: Simulate (Simulator or Classroom)

REFERENCES: Salem ECG

TOOLS AND EQUIPMENT: *Inform Simulator Operators – DO NOT ERASE ANY PROCEDURES UNTIL THE SRO EVALUATOR APPROVES*

VALIDATED JPM COMPLETION TIME: 12 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: 15 minutes

APPROVAL:

N/A		
BARGAINING UNIT REPRESENTATIVE	**OTM or designee**	**OPERATIONS DIRECTOR or designee**

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**
10. **Permission from the OS or Unit CRS;**
11. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
12. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION: _____

JPM PERFORMED BY: _____ **GRADE:** ☐ **SAT** ☐ **UNSAT**

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Emergency Plan

TASK: Classify an event and complete an ICMF within the regulatory committed time limit (ESG-1)

TASK NUMBER: 1240020502

INITIAL CONDITIONS:

6. You have a maximum of 5 minutes to review the Emergency Operating Procedures used during this scenario to refresh your memory of all events/paths. At the end of your review you will become the Shift Manager (SM). Inform the Evaluator when you are ready to assume SM duties. You may continue to reference the procedures or to look at the control board but "the clock will be running." If there are multiple ECG calls, classify the most severe.

INITIATING CUE:

You are the Duty SM. Classify the event, complete the Attachment and provide an ICMF to the Primary Communicator within the required time limit.

Successful Completion Criteria:
9. All critical steps completed.
10. All sequential steps completed in order.
11. All time-critical steps completed within allotted time.
12. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-1)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Provide candidate with "Tear-off sheet"	Reviews initial conditions and EOP's (as necessary – 5 minute limit prior to starting)		
		*START TIME: _____ *Start time begins when candidate reports he/she is ready to assume OS duties	***CUE:*** The regulatory commitment time clock has started		
	1	Reviews ECG to classify event	***NOTE:*** It is acceptable to use the laminated tables in the simulator, rather than the ECG		
	2	Classifies the event	Determines the classification of the event and refers to ECG Attachment 2		
	3	Fills out Section A of the Attachment	• Unit: 2 • EAL#(s): 3.2.3.a • Time: NOW • Date: TODAY • Initials as EC		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-1)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	4	Call communicators to the Control Room	Pages communicators ***CUE:*** I am the Primary Communicator		
*	5	Complete the ICMF ***CUE:***. ***KEY ATTACHED***	Fills out Section II: • Ensures the correct Attachment 2 for ALERT • Time: NOW • Date: TODAY • EAL#(s): 3.2.3.a • *Description of Event: Brief description capturing the major elements Fills out Section III: • No release in progress Fills out Section IV: ***CUE:*** Wind direction is from 265°, 12 mph Initials for approval to transmit		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-1)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	6	Provide the ICMF to the Primary Communicator (CM1) and direct the CM1 to implement ECG Attachment 6	Provides ICMF to CM1 within 15 minutes of START TIME COMPLETION TIME: _____		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. You have a maximum of 5 minutes to review the Emergency Operating Procedures used during this scenario to refresh your memory of all events/paths. At the end of your review you will become the Shift Manager (SM). Inform the Evaluator when you are ready to assume SM duties. You may continue to reference the procedures or to look at the control board but "the clock will be running."

INITIATING CUE:

You are the Duty SM. Classify the event, complete the Attachment and provide an ICMF to the Primary Communicator within the required time limit.

STATION: SALEM

SYSTEM: Emergency Plan

TASK: Classify an event and complete an ICMF within the regulatory committed time limit (ESG-2)

TASK NUMBER: **1240020502**

JPM NUMBER: India NRC – SROA.4 ***(ESG-2)***

ALTERNATE PATH: [ ]

K/A NUMBER: 2.4.38

	RO	SRO
IMPORTANCE FACTOR:	N/A	4.0

APPLICABILITY:

EO [ ] **RO** [ ] **STA** [ ] **SRO** [X]

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

EVALUATION SETTING/METHOD: Simulate (Simulator or Classroom)

REFERENCES: Salem ECG

TOOLS AND EQUIPMENT: *Inform Simulator Operators – DO NOT ERASE ANY PROCEDURES UNTIL THE SRO EVALUATOR APPROVES*

VALIDATED JPM COMPLETION TIME: 12 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: 15 minutes

APPROVAL:

N/A		
BARGAINING UNIT REPRESENTATIVE	**OTM or designee**	**OPERATIONS DIRECTOR or designee**

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**

13. **Permission from the OS or Unit CRS;**
14. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
15. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION: _____

JPM PERFORMED BY: _____ **GRADE:** ☐ **SAT** ☐ **UNSAT**

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Emergency Plan

TASK: Classify an event and complete an ICMF within the regulatory committed time limit (ESG-1)

TASK NUMBER: 1240020502

INITIAL CONDITIONS:

7. You have a maximum of 5 minutes to review the Emergency Operating Procedures used during this scenario to refresh your memory of all events/paths. At the end of your review you will become the Shift Manager (SM). Inform the Evaluator when you are ready to assume SM duties. You may continue to reference the procedures or to look at the control board but "the clock will be running." If there are multiple ECG calls, classify the most severe.

INITIATING CUE:

You are the Duty SM. Classify the event, complete the Attachment and provide an ICMF to the Primary Communicator within the required time limit.

Successful Completion Criteria:
13. All critical steps completed.
14. All sequential steps completed in order.
15. All time-critical steps completed within allotted time.
16. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-2)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Provide candidate with "Tear-off sheet"	Reviews initial conditions and EOP's (as necessary – 5 minute limit prior to starting)		
		*START TIME: _____ *Start time begins when candidate reports he/she is ready to assume OS duties	***CUE:*** The regulatory commitment time clock has started		
	1	Reviews ECG to classify event	***NOTE:*** It is acceptable to use the laminated tables in the simulator, rather than the ECG		
	2	Classifies the event	Determines the classification of the event and refers to ECG Attachment 2		
	3	Fills out Section A of the Attachment	• Unit: 2 • EAL#(s): 3.2.2.b • Time: NOW • Date: TODAY • Initials as EC		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-2)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	4	Call communicators to the Control Room	Pages communicators ***CUE:*** I am the Primary Communicator		
*	5	Complete the ICMF ***KEY ATTACHED***	<u>Fills out Section II</u>: • Ensures that the correct Attachment is used for Alert • Time: NOW • Date: TODAY • EAL#(s): 3.2.2.b • *Description of Event: Brief description capturing the major elements <u>Fills out Section III:</u> • No release in progress <u>Fills out Section IV</u>: ***CUE:*** Wind direction is from 265°, 12 mph <u>Initials for approval to transmit</u>		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-2)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	6	Provide the ICMF to the Primary Communicator (CM1) and direct the CM1 to implement ECG Attachment 6	Provides ICMF to CM1 within 15 minutes of START TIME COMPLETION TIME: _____		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

2. You have a maximum of 5 minutes to review the Emergency Operating Procedures used during this scenario to refresh your memory of all events/paths. At the end of your review you will become the Shift Manager (SM). Inform the Evaluator when you are ready to assume SM duties. You may continue to reference the procedures or to look at the control board but "the clock will be running."

INITIATING CUE:

You are the Duty SM. Classify the event, complete the Attachment and provide an ICMF to the Primary Communicator within the required time limit.

STATION:	SALEM
SYSTEM:	Emergency Plan
TASK:	Classify an event and complete an ICMF within the regulatory committed time limit (ESG-3)
TASK NUMBER:	**1240020502**
JPM NUMBER:	India NRC – SROA.4 ***(ESG-3)***

ALTERNATE PATH: [ ]

	RO	SRO
K/A NUMBER:	2.4.38	
IMPORTANCE FACTOR:	N/A	4.0

APPLICABILITY:

EO [ ] **RO** [ ] **STA** [ ] **SRO** [X]

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

EVALUATION SETTING/METHOD: Simulate (Simulator or Classroom)

REFERENCES: Salem ECG

TOOLS AND EQUIPMENT: *Inform Simulator Operators – DO NOT ERASE ANY PROCEDURES UNTIL THE SRO EVALUATOR APPROVES*

VALIDATED JPM COMPLETION TIME: 12 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: 15 minutes

APPROVAL:

N/A		
BARGAINING UNIT REPRESENTATIVE	**OTM or designee**	**OPERATIONS DIRECTOR or designee**

CAUTION: **No plant equipment shall be operated during the performance of a JPM without the following:**

16. **Permission from the OS or Unit CRS;**
17. **Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).**
18. **Verification of the "as left" condition by a qualified individual.**

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION: _____

JPM PERFORMED BY: _____ **GRADE:** ☐ **SAT** ☐ **UNSAT**

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Emergency Plan

TASK: Classify an event and complete an ICMF within the regulatory committed time limit (ESG-3)

TASK NUMBER: 1240020502

INITIAL CONDITIONS:

8. You have a maximum of 5 minutes to review the Emergency Operating Procedures used during this scenario to refresh your memory of all events/paths. At the end of your review you will become the Shift Manager (SM). Inform the Evaluator when you are ready to assume SM duties. You may continue to reference the procedures or to look at the control board but "the clock will be running." If there are multiple ECG calls, classify the most severe.

INITIATING CUE:

You are the Duty SM. Classify the event, complete the Attachment and provide an ICMF to the Primary Communicator within the required time limit.

Successful Completion Criteria:
17. **All critical steps completed.**
18. **All sequential steps completed in order.**
19. **All time-critical steps completed within allotted time.**
20. **JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.**

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-3)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Provide candidate with "Tear-off sheet"	Reviews initial conditions and EOP's (as necessary – 5 minute limit prior to starting)		
		*START TIME: _____ *Start time begins when candidate reports he/she is ready to assume SM duties	***CUE:*** The regulatory commitment time clock has started		
	1	Reviews ECG to classify event	***NOTE:*** It is acceptable to use the laminated tables in the simulator, rather than the ECG		
	2	Classifies the event	Determines the classification of the event and refers to ECG Attachment 3		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-3)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	3	Fills out Section A of the Attachment	• Unit: 2 • EAL#(s): 3.1.1.b AND 3.2.1.b OR 8.1.3.c • Time: NOW • Date: TODAY • Initials as EC		
	4	Call communicators to the Control Room	Pages communicators ***CUE:*** I am the Primary Communicator		

OPERATOR TRAINING PROGRAM **NAME:** _____
JOB PERFORMANCE MEASURE **DATE:** _____

SYSTEM: Emergency Plan

TASK: **Classify an event and complete an ICMF within the regulatory committed time limit (ESG-3)**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5	Complete the ICMF ***KEY ATTACHED***	Fills out Section II: • Ensures the correct Attachment 3 for SAE • Time: NOW • Date: TODAY • EAL#(s): 3.1.1.b AND 3.2.1.b OR 8.1.3.c • *Description of Event: Brief description capturing the major elements Fills out Section III: • No release in progress Fills out Section IV: ***CUE:*** Wind direction is from 265°, 12 mph Initials for approval to transmit		
*	6	Provide the ICMF to the Primary Communicator (CM1) and direct the CM1 to implement ECG Attachment 6	Provides ICMF to CM1 within 15 minutes of START TIME COMPLETION TIME: _____		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

INITIAL CONDITIONS:

3. You have a maximum of 5 minutes to review the Emergency Operating Procedures used during this scenario to refresh your memory of all events/paths. At the end of your review you will become the Shift Manager (SM). Inform the Evaluator when you are ready to assume SM duties. You may continue to reference the procedures or to look at the control board but "the clock will be running."

INITIATING CUE:

You are the Duty SM. Classify the event, complete the Attachment and provide an ICMF to the Primary Communicator within the required time limit.