SEQUOYAH NUCLEAR PLANT

1603 NRC
RO/SRO ADMIN A.1.a

RO/SRO

JOB PERFORMANCE MEASURE

Task: Determine compliance with fatigue management and work hour limits

Task #: 3410970302

Task Standard: The examinee evaluates the case of five different operators and determines operator 3 may assume the shift in Unit 1 and Operator 2 may assume the shift in Unit 2.

Time Critical Task: **YES:** _____ **NO:** **X**

K/A Reference/Ratings: G 2.1.2 (3.0/4.0)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** **X**

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** **X**

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **25 min** **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	NPG-SPP-03.21	Fatigue Management and Work Hour Limits	16

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Read to the examinee:

DIRECTIONS TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 1 is in MODE 1.
2. Unit 2 is in the 17th day of a refueling outage.
3. Today's date is 3/13/2016 day shift.
4. One Licensed Operator on Unit 1 is required to be called in to assume night shift (3/13/2016 at 1900) OATC.
5. One Licensed Operator on Unit 2 is required to be called in to assume night shift (3/13/2016 at 1900) OATC.
6. ESOMS NFR program is NOT available for use.
7. For the purpose of this JPM, assume all operators took two weeks of Annual Leave for the time period prior to 2/28/2016.
8. For the purpose of this JPM, assume all operators are fit for duty.
9. For the purpose of this JPM, assume all operators assigned to Unit 2 are subject to outage work-hour limitations

INITIATING CUES:

1. Refer to the attached page for each operators work history.
2. Determine which operator (if any) may assume the shift without additional administrative measures.
3. Notify the Examiner of your results when the determination has been completed.

Start Time _____

STEP 1 :	Obtain a copy of NPG-SPP-03.21, Fatigue Management and Work Hour Limits.	___ SAT ___ UNSAT
Standard:	Copy of NPG-SPP-03.21, Fatigue Management and Work Hour Limits. is obtained.	
Cue	Provide a copy of NPG-SPP-03.21, Fatigue Management and Work Hour Limits.	
Comment		

STEP 2 :	**3.4 Title 10 Code of Federal Regulations (CFR) 26 Overtime Limits [R-21]** A. The following limits apply to covered individuals regardless of unit status [R-22, 23]: 1. No more than 16 work hours in any 24 hour period 2. No more than 26 work hours in any 48 hour period 3. No more than 72 work hours in any 7 day (168 hour) period 4. At least a 10 hour break between successive work periods. 5. A continuous break of at least 34 hours in any 9 day (216 hour) period.	___ SAT ___ UNSAT
Standard:	The examinee determines Operator 1 cannot work due to potentially exceeding 72 hours in a seven day period. The examinee determines Operator 5 cannot work due to potentially exceeding 26 hours in a 48 hour period.	**CRITICAL**
Comment		

STEP 4 :	**3.4 Title 10 Code of Federal Regulations (CFR) 26 Overtime Limits [R-21]** C. Outage Requirements [R-25] 1. While working on an outage unit, and without issuance of a waiver, an individual's required days off shall adhere to the requirements listed in Table 2 below (not an average):	___ SAT ___ UNSAT
Standard:	The examinee determines operator 4 cannot work due to potentially not having three days off in each successive 15 day period.	**CRITICAL**
Comment		

Table 2. Required Minimum Days Off (MDO) for Outages

Group	8 Hour Shift Days Off	10 Hour Shift Days Off	12 Hour Shift Days Off
Maintenance	1 day off per week	1 day off per week	1 day off per week
Operations, Radiation Protection, Chemistry, Fire Brigade (Incident Commander)	3 days off in each successive (non-rolling) 15 day period	3 days off in each successive (non-rolling) 15 day period	3 days off in each successive (non-rolling) 15 day period
Security	4 days off in each successive (non-rolling) 15 day period	4 days off in each successive (non-rolling) 15 day period	4 days off in each successive (non-rolling) 15 day period

2. Table 2 applies to: [R-26]

a. The first 60 days of a unit outage for all listed groups. The 60 days is defined from the beginning date of the unit outage and not from the date personnel arrive at the station. For example, if an individual arrives on Day 30 of the unit outage they would only be eligible to use the MDO requirements of Table 2 for the next 30 days.

STEP 5 :	**3.4 Title 10 Code of Federal Regulations (CFR) 26 Overtime Limits [R-21]** C. Outage Requirements [R-25] 5. An operator who is on outage work-hour limitations should not provide relief to the operator at the controls or the senior operator in the control room for an operating unit, unless another operator who has been on non-outage work hours is not immediately available and the operator has had two days off in the preceding seven day period. If the operator has not had two days off in the preceding seven day period and no other operator who has had two days off is immediately available, the operator may provide short-term relief (up to two hours) to the operator at the controls or the senior operator in the control room for an operating unit or long-term relief (more than two hours) under a waiver of the Minimum Days Off (MDO) requirement that is applicable to the shift schedule, as example 8, 10, or 12 hour shifts, for personnel assigned to the operating unit.	___ SAT ___ UNSAT
Standard:	The examinee determines Operator 2 and 4 are not eligible to assume the shift duties as Unit 1 OATC.	**CRITICAL**
Comment		

STEP 6 :	F. Hand Calculation of Work Hours Hand calculation of work hours shall only be used for time validation if eSOMS NFR, or other approved tracking software, is not available. If tracking software is not available, and hand calculations are required to be performed for time validation, an SR shall be generated to document the occurrence. 1. Hour and Period Rules a. The periods of "24 hours," "48 hours," "7 days," and "9 days" are considered rolling time periods. Rolling means the period is not re-zeroed (the clock is not reset) following a day off or after obtaining authorization to exceed the limits. The "24-hours," "48-hours," "7-days," and "9-days" periods do not restart after a day off, the periods continue to roll. b. Hours worked should be evaluated to determine if any limit will be exceeded based on the work schedule by picking a future time (T) on the work schedule and asking, "how many hours will have been worked during the T-24 hours, T-48 hours, or T-168 hours (T-7days)" (a backwards look at the number of hours that have or will have been worked based on a time in the future). c. If a work hour limit will be exceeded, it shall be identified before the hours are worked. To determine if the minimum days off requirements will be met (before working the additional hours) one of the following methods may be used: (1) Calculate the minimum days off based on a backwards look of the previous five weeks and determine if the extra hours worked in the next week would still meet the requirement (rolling 6 week cycle method); or (2) Ensure that sufficient days off still exist (within the shift cycle) to meet the minimum days off requirements (fixed shift cycle method). d. The period is not re-zeroed (the clock is not reset) following a day off or after obtaining authorization to exceed the limits.	____ SAT ____ UNSAT
Standard:	The examinee determines operator 3 may work in Unit 1. The examinee determines operator 2 may work in Unit 2.	**CRITICAL**
Comment		
Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 1 is in MODE 1.
2. Unit 2 is in the 17th day of a refueling outage.
3. Today's date is 3/13/2016 day shift.
4. One Licensed Operator on Unit 1 is required to be called in to assume night shift (3/13/2016 at 1900) OATC.
5. One Licensed Operator on Unit 2 is required to be called in to assume night shift (3/13/2016 at 1900) OATC.
6. ESOMS NFR program is NOT available for use.
7. For the purpose of this JPM, assume all operators took two weeks of Annual Leave for the time period prior to 2/28/2016.
8. For the purpose of this JPM, assume all operators are fit for duty.
9. For the purpose of this JPM, assume all operators assigned to Unit 2 are subject to outage work-hour limitations

INITIATING CUES:

1. Refer to the attached page for each operators work history.
2. Determine which operator (if any) may assume the shift without additional administrative measures.
3. Notify the Examiner of your results when the determination has been completed.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

Operator	2/28/2016	2/29/2016	3/1/2016	3/2/2016	3/3/2016	3/4/2016	3/5/2016
1 (Unit 1)	1900-0700		0700-1900	0700-1900	0700-1900		1900-0700
2 (Unit 2)	1900-0700	1900-0700		1900-0700			0700-1900
3 (Unit 1)	0700-1900	0700-1900	0700-1900	0700-1900			1900-0700
4 (Unit 2)	1900-0700	1900-0700	1900-0700	1900-0700	1900-0700	1900-2100	
5		0700-1730 WCC	0700-1730 WCC	0700-1730 WCC	0700-1730 WCC	0700-1730 WCC	
Operator	3/6/2016	3/7/2016	3/8/2016	3/9/2016	3/10/2016	3/11/2016	3/12/2016
1 (Unit 1)			1900-0700	1900-0700	1900-0700	1700-0700	1900-0700
2 (Unit 2)	0700-1900	0700-1900	0700-1900	0700-1900		1900-0700	1900-0700
3 (Unit 1)	1900-0700	1900-0700	1900-0700		1900-0700		0700-1900
4 (Unit 2)	2100-0700	1900-0700	1900-0700	1900-0700	1900-0700	1900-0700	
5		0700-1730 WCC	0700-1730 WCC	0700-1730 WCC	0700-1730 WCC		1800-1000 (Unit 2)

SEQUOYAH NUCLEAR PLANT

1603 NRC
RO ADMIN A.1.b

RO

JOB PERFORMANCE MEASURE

Task: Calculate required amount and time for emergency boration in preparation for cool down

Task #: 980501

Task Standard: The examinee will determine 6280 gallons from the Boric Acid Tank and a minimum boration time of 125.6 minutes is required for emergency boration for preparation for a cooldown to 350°F.

Time Critical Task: **YES:** _____ **NO:** **X**

K/A Reference/Ratings: 2.1.25 (2.8)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** **X**

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** **X**

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **10 min** **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	EA-68-4	Emergency Boration	13
2.			

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Read to the examinee:

DIRECTIONS TO TRAINEE:
I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 1 is in MODE 3.
2. EA-68-4 Emergency Boration section 4.2 Emergency Boration from BAT is in progress.
3. Control Rod L5 is indicating 15 steps.
4. Control Rod M8 rod bottom light is not lit.
5. One charging pump is in service at 87 gpm.
6. One normal Letdown orifice is in service.
7. Pressurizer Level is stable.
8. The crew will conduct an RCS cool down to 350 degrees.

INITIATING CUES:

1. The SRO has directed you to determine the following to support the cool down:
   - amount of boric acid required for RCS cool down.
   - and the minimum permissible time to add the boric acid.
2. Notify the Examiner of the amount of boration and when determination of operability has been completed.

Start Time _____

STEP 1 :	Obtain a copy of EA-68-4 Emergency Boration.	___ SAT ___ UNSAT
Standard:	Copy of EA-68-4 Emergency Boration is obtained.	
Cue	Provide a copy of EA-68-4 Emergency Boration.	
Comment		

STEP 2 :	**4.2 Emergency Boration from BAT** [10] **IF** emergency boration required for RCS cooldown, **THEN** **DETERMINE** required boric acid volume based on RCS temperature:	___ SAT ___ UNSAT

ACTUAL OR DESIRED RCS TEMPERATURE (°F)	BORIC ACID VOLUME (GALS)
350 to 301	6280

Standard:	The examinee determines 6280 gallons of boric acid is required.	**CRITICAL**
Comment		

STEP 3 :	**4.2 Emergency Boration from BAT** **NOTES** 1) If multiple RPIs are unavailable, then two additional control rods should be assumed to be stuck fully out (in addition to any rods which are known to be stuck). 2) If all RPIs are de-energized, AOP-P.05 (Loss of Unit 1 Shutdown Boards) or AOP-P.06 (Loss of Unit 2 Shutdown Boards) provide guidance on restoring power to RPIs. [11] **IF** any of the following conditions met: • 2 or more control rods at greater than 12 steps **OR** • 2 or more control rod positions CANNOT be determined	___ SAT ___ UNSAT
Standard:	The examinee determines only one control rod is greater than 12 steps and the step is N/A.	
Comment		

CAUTION

Boration flowrate greater than charging flow (minus seal return flow) will result in overfilling VCT.

STEP 4 :	**4.2 Emergency Boration from BAT** [12] **CALCULATE** time to inject boric acid volume determined in Step [10] and/or [11] at established flow rate: $\frac{\text{Required Boration Volume (gallons) in Substeps [10] and/or [11]}}{\text{Boration Flowrate (gpm)}} = \text{Boration time (minutes)}$	___ SAT ___ UNSAT
Standard:	The examinee calculates minimum time to inject boric acid is 83.7 minutes.	**CRITICAL**
Examiner Note	The maximum permissible boration flow rate under the given conditions is 75 gpm. 87 gpm (Charging Flow - 12 gpm Seal Return Flow.)	
Comment		

Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 1 is in MODE 3.
2. EA-68-4 Emergency Boration section 4.2 Emergency Boration from BAT is in progress.
3. Control Rod L5 is indicating 15 steps.
4. Control Rod M8 rod bottom light is not lit.
5. One charging pump is in service at 87 gpm.
6. One normal Letdown orifice is in service.
7. Pressurizer Level is stable.
8. The crew will conduct an RCS cool down to 350°F.

INITIATING CUES:

1. The SRO has directed you to determine the following to support the cool down:
   - amount of boric acid required for RCS cool down.
   - and the minimum permissible time to add the boric acid.
2. Notify the Examiner of the amount of boration and when determination of operability has been completed.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

SEQUOYAH NUCLEAR PLANT

1603 NRC
RO ADMIN A.2

RO

JOB PERFORMANCE MEASURE

Task: Perform Section XI Tests

Task #: 1500301

Task Standard: The examinee will complete and review data from a Section XI Valve Surveillance and determine the following:

- three valves are within the acceptable range.
- one valve is in the alert range.
- one valve is in the alert range.
- one valve is in the required action range.

The examinee will determine the valves not in the acceptable range require subsequent valve strokes. The examinee will determine the valve in the required action range is INOPERABLE.

Time Critical Task: **YES:** _____ **NO:** **X**

K/A Reference/Ratings: 2.2.12 (3.0)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** **X**

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** **X**

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **15 min** **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	0-SI-SXV-000-203.1	FULL STROKING OF POWER OPERATED VALVES REQUIRED OPERABLE DURING ALL MODES	2
2.	0-SI-SXV-063-266.0	ASME SECTION XI VALVE TESTING	27

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Read to the examinee:

DIRECTIONS TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 2 is in a Refueling Outage.

2. 0-SI-SXV-063-266.0, ASME CODE VALVE TESTING is in progress for the following valves with the listed times.

    - 2-FCV-63-1 OPEN 33.5 seconds
    - 2-FCV-63-3 CLOSE 9.2 seconds
    - 2-FCV-63-4 CLOSE 8.7 seconds
    - 2-FCV-63-5 CLOSE 11.1 seconds
    - 2-FCV-63-6 CLOSE 10.6 seconds
    - 2-FCV-63-7 CLOSE 13.3 seconds

INITIATING CUES:

1. Review the results of the valve strokes and determine all required actions, if any.

2. Notify the Examiner of results when your review has been completed.

Start Time _____

STEP 1 :	Obtain a copy of 0-SI-SXV-063-266.0, ASME SECTION XI VALVE TESTING and 0-SI-SXV-000-203.1, FULL STROKING OF POWER OPERATED VALVES REQUIRED OPERABLE DURING ALL MODES.	___ SAT ___ UNSAT
Standard:	Copy of 0-SI-SXV-063-266.0 ASME SECTION XI VALVE TESTING and 0-SI-SXV-000-203.1FULL STROKING OF POWER OPERATED VALVES REQUIRED OPERABLE DURING ALL MODES. are obtained.	
Cue	Provide a copy of 0-SI-SXV-063-266.0 ASME SECTION XI VALVE TESTING and 0-SI-SXV-000-203.1FULL STROKING OF POWER OPERATED VALVES REQUIRED OPERABLE DURING ALL MODES.	
Comment		

STEP 2 :	Evaluate 2-FCV-63-1 OPEN stroke time. **ACCEPTANCE CRITERIA** **UNIT** / **ACCEPTABLE RANGE** / **ALERT RANGE** / **REQUIRED ACTION RANGE** 2 / 33.6 to 45.4 / < 33.6 / > 45.4 to 51.3 / > 51.3 [12] **IF** First Stroke time recorded in Step 3.0[11] **DOES NOT** meet Acceptable Range Criteria, **THEN** [12.1] **REPEAT** Steps 3.0[10] and 3.0[11] twice. ☐	___ SAT ___ UNSAT
Standard:	The examinee evaluates 2-FCV-63-1 OPEN stroke time and determines the stroke time is in the ALERT range and the valve requires two additional strokes.	**CRITICAL**
Comment		

STEP 3 :	Evaluate 2-FCV-63-3 CLOSE stroke time. **ACCEPTANCE CRITERIA** **UNIT** / **ACCEPTABLE RANGE** / **ALERT RANGE** / **REQUIRED ACTION RANGE** 2 / 5.5 to 9.1 / < 5.5 / > 9.1 to 9.5 / > 9.5 [9] **IF** First stroke time recorded in Step 3.0[8] **DOES NOT** meet the acceptable range criteria **THEN** [9.1] **REPEAT** Steps 3.0[5] and 3.0[8] twice. ☐	___ SAT ___ UNSAT
Standard:	The examinee evaluates 2-FCV-63-3 CLOSED stroke time and determines the stroke time is in the ALERT range and the valve requires two additional strokes.	**CRITICAL**
Comment		

STEP 4 :	Evaluate 2-FCV-63-4 CLOSE stroke time. **ACCEPTANCE CRITERIA** **UNIT** / **ACCEPTABLE RANGE** / **ALERT RANGE** / **REQUIRED ACTION RANGE** 2 / 5.3 to 8.7 / < 5.3 / > 8.7 to 9.5 / > 9.5	___ SAT ___ UNSAT
Standard:	The examinee evaluates 2-FCV-63-4 CLOSED stroke time and determines the stroke time is in the acceptable range.	
Examiner Note		
Comment		

STEP 5 :	Evaluate 2-FCV-63-5 CLOSE stroke time. **ACCEPTANCE CRITERIA** **UNIT** / **ACCEPTABLE RANGE** / **ALERT RANGE** / **REQUIRED ACTION RANGE** 2 / 11.0 to 14.8 / < 11.0 / > 14.8 to 16.7 / > 16.7	___ SAT ___ UNSAT
Standard:	The examinee evaluates 2-FCV-63-5 CLOSED stroke time and determines the stroke time is in the acceptable range.	
Comment		

STEP 6 :	Evaluate 2-FCV-63-6 CLOSE stroke time. **ACCEPTANCE CRITERIA** **UNIT** / **ACCEPTABLE RANGE** / **ALERT RANGE** / **REQUIRED ACTION RANGE** 2 / 6.3 to 10.3 / < 6.3 / > 10.3 to 12.4 / > 12.4	___ SAT ___ UNSAT
Standard:	The examinee evaluates 2-FCV-63-6 CLOSED stroke time and determines the stroke time is in the acceptable range.	
Comment		

STEP 7 :

Evaluate 2-FCV-63-7 CLOSE stroke time.

ACCEPTANCE CRITERIA				
UNIT	ACCEPTABLE RANGE	ALERT RANGE		REQUIRED ACTION RANGE
2	6.5 to 10.7	< 6.5	> 10.7 to 12.9	> 12.9

[14] **IF** First stroke time recorded in Step 3.0[13] **DOES NOT** meet the acceptable range criteria, **THEN**

[14.1] **REPEAT** Steps 3.0[11] and 3.0[13] twice. ☐

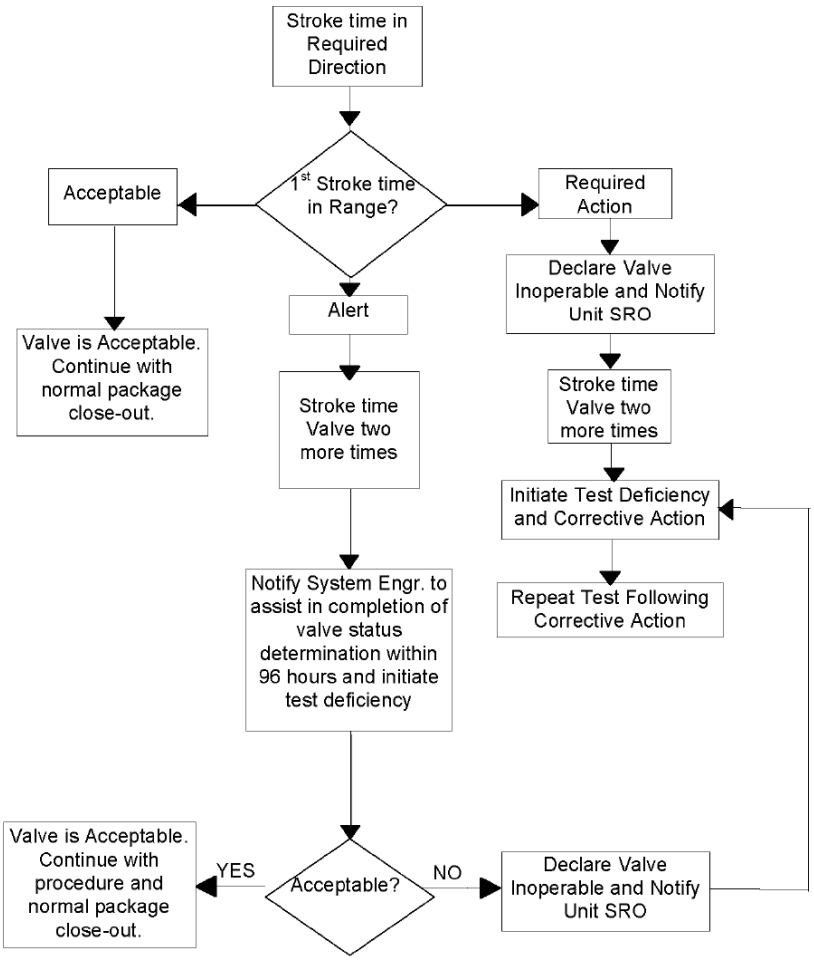
NOTE

Figure 1 may be used to assist in determining stroke testing actions.

[4] **IF** valve stroke time exceeds Required Action Time, exhibits abnormal/erratic action, and/or valve indicating system including Accident Monitoring Instrumentation does **NOT** accurately reflect valve operation, **THEN**

[4.1] **NOTIFY** SRO that valve is Inoperable for determination of system impact. ☐

Figure 1
(Page 1 of 1)
VALVE STROKE TEST FLOW CHART



___ SAT

___ UNSAT

Standard:	1) The examinee evaluates 2-FCV-63-7 CLOSED stroke time and determines the stroke time is in the REQUIRED ACTION range and the valve requires two additional strokes. 2) The examinee determines 2-FCV-63-7 is INOPERABLE and notifies the SRO	**CRITICAL**
Comment		
Examiner Note:	The second part of the standard is from 0-SI-SXV-000-203.1, FULL STROKING OF POWER OPERATED VALVES REQUIRED OPERABLE DURING ALL MODES.	

Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 2 is in a Refueling Outage.

2. 0-SI-SXV-063-266.0, ASME CODE VALVE TESTING is in progress for the following valves with the listed times.

    - 2-FCV-63-1 OPEN 33.5 seconds
    - 2-FCV-63-3 CLOSE 9.2 seconds
    - 2-FCV-63-4 CLOSE 8.7 seconds
    - 2-FCV-63-5 CLOSE 11.1 seconds
    - 2-FCV-63-6 CLOSE 10.6 seconds
    - 2-FCV-63-7 CLOSE 13.3 seconds

INITIATING CUES:

1. Review the results of the valve strokes and determine all required actions, if any.

2. Notify the Examiner of results when your review has been completed.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

SEQUOYAH NUCLEAR PLANT

1603 NRC
RO ADMIN A.4

RO

JOB PERFORMANCE MEASURE

Task: Complete a state notification form and complete an initial state notification

Task #: 0001460501

Task Standard: While acting as the Site Communicator and given data for a plant emergency, the examinee will interpret the data and complete the EPIP-5 GENERAL EMERGENCY Appendix A GENERAL EMERGENCY INITIAL NOTIFICATION FORM within 15 minutes and perform a State of Tennessee Notification within the following 15 minutes.

Time Critical Task: **YES:** X **NO:** _____

K/A Reference/Ratings: 2.4.39 (3.3)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** X

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** X

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: 10 min **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	EPIP-3	ALERT	R37
2.			

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Read to the examinee:

DIRECTIONS TO TRAINEE:
I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 1 and Unit 2 are in MODE 3.
2. 10 minutes ago River Operations notified Sequoyah that the river reservoir level is at a Stage II Flood Warning.
3. The Shift Manager declared an ALERT EAL 5.1 at _____.
4. The crew is implementing the appropriate procedures for the conditions given.
5. The CECC is NOT activated.
6. Offsite releases are within federally approved limits.

INITIATING CUES:

1. The Shift Manager has directed you to perform the following
   - Complete the ALERT INITIAL NOTIFICATION FORM.
   - Complete the STATE OF TENNESSEE NOTIFICATION.
2. There is an element of this task that is time critical.
3. For the purposes of this JPM, event time declaration is the time the examiner tells you to begin.

Start Time _____

STEP 1 :	Obtain a copy of EPIP-3 ALERT.	___ SAT ___ UNSAT
Standard:	Copy of EPIP-3 ALERT is obtained.	
Comment		
Examiner Note	Annotate start time when the examinee acknowledges the task is understood. Start time_____	

CAUTIONS

1) **Security events or severe weather may present a danger to normal staffing and other Emergency Plan implementation processes. Procedural steps during severe weather and security related events still apply.**

2) **Notification to State (15 minutes) and NRC (immediately after the notification of the State, NOT to exceed 60 minutes from classification declaration) are Time Critical.**

NOTES

1) Procedure steps can be performed concurrently. All applicable steps must be completed.

2) All procedure steps and appendices within the body of this procedure can be delegated.

3) **COMPLETED** appendices must be returned to the SED.

STEP 2 :	[1] **WHEN** TSC SED has assumed responsibilities from SM SED, **THEN** **CONTINUE** in this procedure at Appendix G. Otherwise continue in body of this procedure.	___ SAT ___ UNSAT
Standard:	The examinee addresses the procedure step.	
Comment		

NOTE

- Completion of Appendix A should be peer-checked by STA or another SRO (if available).

STEP 3 :	[1] **PERFORM** the following: [1.1] **RECORD** time of Alert Event Classification: _____ Eastern	___ SAT ___ UNSAT
Standard:	The examinee records the time of Alert Event Classification.	
Comment		

STEP 4 :	[1] **PERFORM** the following: [1.2] **IF** the CECC is **NOT** activated, **THEN** **CONTINUE** in this Section at Step 3.2[2]. otherwise continue in this step.	___ SAT ___ UNSAT
Standard:	The examinee addresses the procedure step from the initial conditions and proceeds to step 3.2[2].	
Comment		

STEP 4 :	[1] **PERFORM** the following: [2] **COMPLETE** Appendix A, "Alert Initial Notification Form."	____ SAT ____ UNSAT
Standard:	The examinee completes the ALERT INITIAL NOTIFICATION FORM with all items annotated with *.	**CRITICAL**
Examiner Note	See attached key.	
Comment		

NOTE

Notification of the State of Tennessee is required to be completed within 15 minutes from time of emergency classification declaration.

STEP 5 :	[3] **COMPLETE** Appendix B, "State of Tennessee Notification" using completed Appendix A.	____ SAT ____ UNSAT
Standard:	The examinee completes an Appendix B, "State of Tennessee Notification" using completed Appendix A. within 15 minutes of event declaration.	**CRITICAL**
Comment		

Appendix B
(Page 1 of 3)

STATE OF TENNESSEE NOTIFICATION

1.0 STATE NOTIFICATION

NOTES

1) Notification of the State of Tennessee is required to be completed as soon as possible, not to exceed 15 minutes from the time of emergency classification declaration.

2) **<REP 1>** will send a fax to TEMA, the ODS, the TSC and the CECC. (primary method).

STEP 6 :	[1] **FAX** copy of completed Appendix A to State of Tennessee: [1.1] **PRESS** the **<REP 1>** preprogrammed button. (primary method) [1.1.1] **PRESS** START and **VERIFY** transmitting. [1.2] **IF <REP 1>** fails, **THEN** **PRESS** the **<TEMA>** preprogrammed button. [1.2.1] **PRESS** START and **VERIFY** transmitting. [1.3] **IF** both preprogrammed buttons fail, **THEN** **DIAL** 1-615-242-9635. [1.3.1] **PRESS** START and **VERIFY** transmitting.	___ SAT ___ UNSAT
Standard:	The examinee transmits Appendix A, TVA Initial Notification for ALERT to the State of Tennessee (in the simulator) within 15 minutes by fax or telephone.	**CRITICAL**
Comment		
Examiner Note:	Annotate the stop time for the Initial Notification for ALERT here. _____	
Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 1 and Unit 2 are in MODE 3.
2. 10 minutes ago River Operations notified Sequoyah that the river reservoir level is at a Stage II Flood Warning.
3. The Shift Manager declared an ALERT EAL 5.1 at _____.
4. The crew is implementing the appropriate procedures for the conditions given.
5. The CECC is NOT activated.
6. Offsite releases are within federally approved limits.

INITIATING CUES:

1. The Shift Manager has directed you to perform the following
   - Complete the ALERT INITIAL NOTIFICATION FORM.
   - Complete the STATE OF TENNESSEE NOTIFICATION.
2. There is an element of this task that is time critical.
3. For the purposes of this JPM, event time declaration is the time the examiner tells you to begin.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

SEQUOYAH NUCLEAR PLANT

1603 NRC
SRO ADMIN A.1.b

SRO

JOB PERFORMANCE MEASURE

Task: Review and approve a disabled alarm checklist

Task #: 3410020302

Task Standard: The examinee will review a completed OPDP-4-1 - Disabled Alarm Checklist, will identify three embedded errors and determine the correct entries for the embedded errors.

Time Critical Task: **YES:** _____ **NO:** **X**

K/A Reference/Ratings: 2.1.1 SRO 3.8

Method of Testing:

Simulated Performance: _____ **Actual Performance:** **X**

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** **X**

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **20 min** **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	OPDP-1	Conduct of Operations	34
2.	OPDP-4	Annunciator Disablement	6
3.	1-AR-M1-A	GENERATOR AND TRANSFORMERS	53

Read to the examinee:

DIRECTIONS TO TRAINEE:
I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 1 is in MODE 1 100% power with the electric plant in a normal lineup.

2. 1-M-1A C-1 "Transformer Cool Sys Abnormal" is currently LOCKED IN due to a local alarm on USST 1A.

3. The operation of the cooling system on the 1A USST has been verified to be normal and is in service. A faulty relay has been identified as the cause of the locked in alarm.

4. It is desired to lift the appropriate leads to the local annunciator panel in order to restore annunciation capability for the 1A USST to the MCR.

5. Work order 123456 is INPLNG to replace the affected relay during the next refueling outage in approximately 6 months.

6. There are no other WOs associated with this alarm panel and no other work will be performed until the outage.

7. MEG is standing by to locally lift the appropriate leads and is requesting approval of the "Disabled Alarm Checklist" prior to commencing work.

INITIATING CUES:

1. Review the attached DISABLED ALARM CHECKLIST and determine all required actions, if any prior to approval.

2. Notify the Examiner of results when your review has been completed.

Start Time _____

STEP 1 :	Obtain a copy of OPDP-4, Annunciator Disablement and 1-AR-M1-A, GENERATOR AND TRANSFORMERS	___ SAT ___ UNSAT
Standard:	Copies of OPDP-4, Annunciator Disablement and 1-AR-M1-A, GENERATOR AND TRANSFORMERS are obtained.	
Comment		

STEP 3 :	1-AR-M1-A, GENERATOR AND TRANSFORMERS	___ SAT ___ UNSAT
Standard:	The examinee determines the source for the annunciator panel XA-55-1A window C-1 is a multi point input and needs to have leads removed to maintain monitoring availability of the other inputs to the SER.	**CRITICAL**
Comment		

Source

1.SER 2621
Main Bank phase Spare (relay 546.3, 10 - 210 sec delay) low oil flow with pump running, or undervoltage (relay 547) on 480V Emergency Supply to coolers.

1A, 1B, 1C Main Transformer cooler group 1 or 2 failure, any cooler fan or pump failure, 480V transfer to emergency power supply, loss of normal or emergency 480V supply, loss of normal or alternate 240V supply, loss of cooling control circuit power, loss of local annunciator or aux. circuit power

2.SER 2578
Spare Main Bank Transformer LVBC Flow Low 2/3 Flow Switches

3. SER 2627
USST 1A from 1-ANN-241-RW/301 inputs 4, 5, 8, 10, 11, 12. 1-RLY-241-RW/276

4. SER 2585
USST 1B from 1-ANN-241-RX/301 inputs 4, 5, 8, 10, 11, 12. 1-RLY-241-RX/276

Setpoint

1. N/A
2. Complete loss of 480V supply power to cooler groups.

15 C-1

TRANSFORMER COOL SYS ABNORMAL

(Page 1 of 4)

PANEL 1-XA-55-1A

Window/SER #	Window/SER #	Window/SER #	Window/SER #	Window/SER #	Window/SER #	Window/SER #
1/2562	2/SPARE	3/2564	4/SPARE	5/2611	6/2612	7/2565
8/2566	9/2567	10/2571	11/2568	12/SPARE	13/2613	14/SPARE
15/2585 2621 2627 2578	16/2622	17/2574 2580 2630	18/2575 2625 2631	19/2576 2626 2632	20/SPARE	21/SPARE
22/2584	23/2633	24/2610	25/2563	26/2676	27/2725	28/SPARE
29/2587	30/SPARE	31/2573	32/SPARE	33/SPARE	34/76	35/90

STEP 4 :	OPDP-4, Annunciator Disablement **Attachment 1** **(Page 1 of 2)** **Technical Evaluation and 50.59 / 72.48 Applicability** C. When an annunciator window/input must be disabled due to degraded or inoperable equipment with maintenance NOT in progress, a 50.59 / 72.48 review is required prior to disabling the alarm EXCEPT when covered by an approved plant procedure (item A) OR the Shift Manager has authorized it to be disabled due to being determined to be a distraction and it is either malfunctioning OR valid with increased monitoring and necessary interim actions. A Technical Evaluation is also required EXCEPT when covered by an approved plant procedure (item A) OR when the affected alarm function is only monitoring equipment which is inoperable/out-of-service and the alarm will be restored prior to declaring the affected equipment operable or returning it to service. The following excerpt from NEI 96-07 is an example of a degraded condition affecting multiple alarm inputs: D. If an annunciator window or input must be disabled for other reasons due to actual plant parameters which are known/suspected to be at or exceeding the alarm setpoint, then a 50.59 / 72.48 review and Technical Evaluation are required prior to disabling the alarm, EXCEPT when covered by an approved plant procedure (item A).	____ SAT ____ UNSAT
Standard:	The examinee determines a 50.59 review must be performed prior to disabling alarm.	**CRITICAL**
Examiner Note		
Comment		

STEP 5 :	OPDP-4, Annunciator Disablement **Attachment 1** **(Page 1 of 2)** **Technical Evaluation and 50.59 / 72.48 Applicability** C. When an annunciator window/input must be disabled due to degraded or inoperable equipment with maintenance NOT in progress, a 50.59 / 72.48 review is required prior to disabling the alarm EXCEPT when covered by an approved plant procedure (item A) OR the Shift Manager has authorized it to be disabled due to being determined to be a distraction and it is either malfunctioning OR valid with increased monitoring and necessary interim actions. A Technical Evaluation is also required EXCEPT when covered by an approved plant procedure (item A) OR when the affected alarm function is only monitoring equipment which is inoperable/out-of-service and the alarm will be restored prior to declaring the affected equipment operable or returning it to service. The following excerpt from NEI 96-07 is an example of a degraded condition affecting multiple alarm inputs: D. If an annunciator window or input must be disabled for other reasons due to actual plant parameters which are known/suspected to be at or exceeding the alarm setpoint, then a 50.59 / 72.48 review and Technical Evaluation are required prior to disabling the alarm, EXCEPT when covered by an approved plant procedure (item A).	____ SAT ____ UNSAT
Standard:	The examinee determines a technical evaluation must be performed.	**CRITICAL**
Comment		

Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 1 is in MODE 1 100% power with the electric plant in a normal lineup.

2. 1-M-1A C-1 “Transformer Cool Sys Abnormal” is currently LOCKED IN due to a local alarm on USST 1A.

3. The operation of the cooling system on the 1A USST has been verified to be normal and is in service. A faulty relay has been identified as the cause of the locked in alarm.

4. It is desired to lift the appropriate leads to the local annunciator panel in order to restore annunciation capability for the 1A USST to the MCR.

5. Work order 123456 is INPLNG to replace the affected relay during the next refueling outage in approximately 6 months.

6. There are no other WOs associated with this alarm panel and no other work will be performed until the outage.

7. MEG is standing by to locally lift the appropriate leads and is requesting approval of the “Disabled Alarm Checklist” prior to commencing work.

INITIATING CUES:

1. Review the attached DISABLED ALARM CHECKLIST and determine all required actions, if any prior to approval.

2. Notify the Examiner of results when your review has been completed.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

1603 NRC SRO JPM A.1.b
KEY

DISABLED ALARM CHECKLIST

DISABLED ALARM CHECKLIST	ALARM LOCATION
Site SQN Unit 1	C-1 (Window Number)
1-XA-55-1A (Panel Number)	2621 (Node/Mux/Pt or SER/Sensor)

1. Describe the function of this alarm (e.g. provide indication of abnormal operation, equipment failure, indication of an automatic trip, indication of loss of function):
Provides indication of abnormal operation of Main Bank, Spare Main Bank and USST cooling system abnormal operations.

2. Describe reason for disabling alarm/input: (Include procedure or WO number, if applicable)
1A Main Bank Transformer local annuciator panel has failed and is causing this main control room annuciation to be locked in. Reflash capability is not available for other inputs associated with SER 2621. WO 123456 will replace the local panel and return the alarm to service.

3. Describe how this alarm/alarm input will be disabled:
SER 2621 will be deleted from processing. *

	Yes	No
4. Are steps provided, in the controlling work document, to perform OPDP-4, Annunciator Disablement, Section 3.3, Enabling an Alarm?	☒	☐
5. Is a 10CFR50.59/72.48 Review required prior to disabling alarm? (Refer to Appendix A). *	☐	☒
6. Is a 10CFR50.59 Review required prior to exceeding 90 days (alarm disabled for maintenance)?	☒	☐
7. Is a Technical Evaluation (Form OPDP-4-5) required prior to disabling alarm? (Refer to Appendix A). *	☐	☒

Prepared By: _____ (Signature) _____ (Printed Name) _____ (Date)

8. Approval for annunciator disablement:

	Yes	No	N/A
If required, is 10CFR50.59 Review attached?	☐	☐	☐
If required, is Technical Evaluation (Form OPDP-4-5) attached?	☐	☐	☐
If a Technical Evaluation was performed, is Compensatory Monitoring required and acceptable?	☐	☐	☐

_____ (Signature (SM/US)) _____ (Printed Name) _____ (Date)

This alarm must be returned to service by: _____ (Date) _____ (Time) N/A if not an LCO.

KEY

DISABLED ALARM CHECKLIST

DISABLED ALARM CHECKLIST	ALARM LOCATION
Site SQN Unit 1	C-1 (Window Number)
1-XA-55-1A (Panel Number)	2621 (Node/Mux/Pt or SER/Sensor)

9. This alarm has been disabled as described in Item 3 of this form and Disabled Alarm Indicators have been placed on affected alarm window(s).

Performed by: _____ (Signature) _____ (Printed Name) _____ (Date) _____ (Time)

Verified By: _____ (Signature) _____ (Printed Name) _____ (Date) _____ (Time)

10. Describe actions necessary to restore annunciator to normal post-restoration testing.

_____

_____

_____

_____

Prepared by: _____ (Signature) _____ (Printed Name) _____ (Date) _____ (Time)

Reviewed & Approved by: _____ (SM/US Signature) _____ (Printed Name) _____ (Date) _____ (Time)

11. This alarm has been restored to normal and tested in accordance with Item 10 of this form and Disabled Alarm Indicator(s) associated with this alarm have been removed.

Performed by: _____ (Signature) _____ (Printed Name) _____ (Date) _____ (Time)

Verified By: _____ (Signature) _____ (Printed Name) _____ (Date) _____ (Time)

12. Compensatory Monitoring of this alarm is terminated and Unit Supervisor notified. N/A if no Compensatory Monitoring required.

_____ (Signature) _____ (Printed Name) _____ (Date) _____ (Time)

DISABLED ALARM CHECKLIST

DISABLED ALARM CHECKLIST	ALARM LOCATION
Site SQN Unit 1	C-1 (Window Number)
1-XA-55-1A (Panel Number)	2627 (Node/Mux/Pt or SER/Sensor)

1. Describe the function of this alarm (e.g. provide indication of abnormal operation, equipment failure, indication of an automatic trip, indication of loss of function):
   Provides indication of abnormal operation of Main Bank, Spare Main Bank and USST cooling system abnormal operations.

2. Describe reason for disabling alarm/input: (Include procedure or WO number, if applicable)
   USST 1A local annuciator panel has a failed input and is causing this main control room annuciation to be locked in. Reflash capability is not available for other inputs associated with SER 2627. Lifting the leads from this relay will restore reflash capability for the 1A USST. WO 123456 will replace the relay and re-land the annuciator leads to restore this alarm input to service.

3. Describe how this alarm/alarm input will be disabled:
   SER 2627 will be deleted from processing.

		Yes	No
4.	Are steps provided, in the controlling work document, to perform OPDP-4, Annunciator Disablement, Section 3.3, Enabling an Alarm?	☒	☐
5.	Is a 10CFR50.59/72.48 Review required prior to disabling alarm? (Refer to Appendix A).	☐	☒
6.	Is a 10CFR50.59 Review required prior to exceeding 90 days (alarm disabled for maintenance)?	☒	☐
7.	Is a Technical Evaluation (Form OPDP-4-5) required prior to disabling alarm? (Refer to Appendix A).	☐	☒

Prepared By: _____ (Signature) _____ (Printed Name) _____ (Date)

8. Approval for annunciator disablement:

	Yes	No	N/A
If required, is 10CFR50.59 Review attached?	☐	☐	☐
If required, is Technical Evaluation (Form OPDP-4-5) attached?	☐	☐	☐
If a Technical Evaluation was performed, is Compensatory Monitoring required and acceptable?	☐	☐	☐

_____ (Signature (SM/US)) _____ (Printed Name) _____ (Date)

This alarm must be returned to service by: _____ (Date) _____ (Time) N/A if not an LCO.

DISABLED ALARM CHECKLIST

DISABLED ALARM CHECKLIST	ALARM LOCATION
Site SQN Unit 1	C-1 (Window Number)
1-XA-55-1A (Panel Number)	2621 (Node/Mux/Pt or SER/Sensor)

9. This alarm has been disabled as described in Item 3 of this form and Disabled Alarm Indicators have been placed on affected alarm window(s).

	Signature	Printed Name	Date	Time
Performed by:				
Verified By:				

10. Describe actions necessary to restore annunciator to normal post-restoration testing.

	Signature	Printed Name	Date	Time
Prepared by:				
Reviewed & Approved by:	SM/US Signature			

11. This alarm has been restored to normal and tested in accordance with Item 10 of this form and Disabled Alarm Indicator(s) associated with this alarm have been removed.

	Signature	Printed Name	Date	Time
Performed by:				
Verified By:				

12. Compensatory Monitoring of this alarm is terminated and Unit Supervisor notified. N/A if no Compensatory Monitoring required.

Signature	Printed Name	Date	Time

SEQUOYAH NUCLEAR PLANT

1603 NRC
SRO ADMIN A.2

SRO

JOB PERFORMANCE MEASURE

Task: Review a Clearance

Task #: 3410280302

Task Standard: The examinee reviews the proposed clearance for the 1B Condensate Demineralizer Booster Pump and discovers four embedded errors:

- No vent or drain path is provided to establish conditions for work.
- The 1B Condensate Demineralizer Booster motor pump breaker is not tagged.
- The discharge valve for the 1B Condensate Booster Pump is tagged instead of the 1B Condensate Demineralizer Booster Pump.
- The suction valve for the 1B Condensate Demineralizer Booster Pump is tagged locally at the MOV instead of the breaker for the MOV.

Time Critical Task: **YES:** _____ **NO:** **X**

K/A Reference/Ratings: 2.2.13 (3.8)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** **X**

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** **X**

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **25 min** **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	NPG-SPP-10.2	Clearance Procedure to Safely Control Energy	15
2.			

==========

Read to the examinee:

DIRECTIONS TO TRAINEE:
I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 1 is in MODE 3.

2. An SRO from the tagging group presented you with a proposed clearance to remove Condensate Demineralizer Pump 1B for pump rebuild.

INITIATING CUES:

1. Review the proposed clearance.

2. Notify the Examiner of your results when the clearance review has been completed.

Start Time _____

STEP 1 :	Obtain a copy of NPG-SPP-10.2 Clearance Procedure to Safely Control Energy.	___ SAT ___ UNSAT
Standard:	Copy of NPG-SPP-10.2 Clearance Procedure to Safely Control Energy is obtained.	
Cue	Provide a copy of 1. NPG-SPP-10.2 Clearance Procedure to Safely Control Energy. 2. Form 17987 Request For Clearance. 3. Form 17982 Clearance Coversheet. 4. Form 17984 Clearance tag List.	
Comment		

STEP 2 :	**3.2.3 Prepare Clearance** E. The clearance shall be reviewed and verified by an RE. The clearance reviewer shall refer to Attachment 15, Checklist for Preparing and Reviewing Clearance, as reminder of requirements and items to be evaluated during clearance review. This review is an independent review, and the RE should pull all drawings, procedures, work documents, or other review sources independently.	___ SAT ___ UNSAT
Standard:	The examinee reviews the clearance and the Responsible Employee.	
Comment		

STEP 3 :	**3.2.3 Prepare Clearance** H. A non-energy-isolating device, such as local control push buttons/hand-switches, cannot be used as an energy-isolating device for a clearance; however, they should be tagged as necessary for information purposes and if they affect automatic actions.	___ SAT ___ UNSAT
Standard:	The examinee determines the pump hand switch (1-HS-2-287A Cond Demin Pmp 1B 1-CTR-732-M3 1-M-3) does not qualify as an energy isolating device.	**CRITICAL**
Comment		

STEP 4 :	**3.2.3 Prepare Clearance** I. The preparer of the clearance determines the appropriate means to control any potentially hazardous residual or stored energy in the equipment to be appropriately removed, relieved, discharged, restrained, or otherwise rendered safe. 1. An adequate number of devices, such as, vents, drains, and dump valves, used to depressurize or drain components are identified to be tagged in the open position or appropriate controls are in place in accordance with Attachment 5, Paragraph G.	___ SAT ___ UNSAT
Standard:	The examinee determines no vent or drain path is provided to establish conditions for work.	**CRITICAL**
Comment		

STEP 5 :	**3.2.3 Prepare Clearance** I. The preparer of the clearance determines the appropriate means to control any potentially hazardous residual or stored energy in the equipment to be appropriately removed, relieved, discharged, restrained, or otherwise rendered safe. 1. An adequate number of devices, such as, vents, drains, and dump valves, used to depressurize or drain components are identified to be tagged in the open position or appropriate controls are in place in accordance with Attachment 5, Paragraph G.	___ SAT ___ UNSAT
Standard:	The examinee determines the discharge valve for the 1B Condensate Booster Pump is tagged instead of the 1B Condensate Demineralizer Booster Pump.	**CRITICAL**
Comment		

STEP 6 :	**3.2.3 Prepare Clearance** U. An RE shall review the clearance. For BFN, a previously licensed person must have been licensed at BFN.	____ SAT ____ UNSAT
Standard:	The examinee reviews the clearance and the Responsible Employee.	
Comment		

STEP 7 :	**Attachment 4** **(Page 1 of 2)** **SPECIAL REQUIREMENTS FOR ELECTRICAL CLEARANCES** **1.0 REQUIREMENTS** A. Only component hand switches that meet the definition of an energy isolating device may be used as a clearance energy isolation point. B. Component hand switches not meeting the definition of a clearance isolating device may be tagged as indication/information that associated equipment is under a clearance.	____ SAT ____ UNSAT
Standard:	The examinee determines the pump hand switch (1-HS-2-287A Cond Demin Pmp 1B 1-CTR-732-M3 1-M-3) does not qualify as an energy isolating device.	**CRITICAL**
Comment		

STEP 8 :	**Attachment 14** **(Page 1 of 2)** **SPECIAL REQUIREMENTS FOR MOTOR OPERATED VALVE CLEARANCES** **1.0 BACKGROUND INFORMATION** A. Motor Operated Valves are tagged in different ways for clearances, depending upon the application of the required work. This attachment describes the requirements for clearances with Motor Operated Valves. **2.0 REQUIREMENTS** **2.1 General** A. The motive and control power SHALL be isolated and tagged for MOV maintenance activities that require electrical isolation for personal safety. B. Handswitches that are control devices in an MOV electrical circuit SHALL NOT be used as an isolation boundary for a component that is being tagged.	___ SAT ___ UNSAT
Standard:	The examinee determines the suction valve for the 1B Condensate Demineralizer Booster Pump is tagged locally at the MOV (1-FCV-2-285 Cond Demin Pmp 1B Suct Isol Valve 1-TUR-662 CDBP) instead of the breaker for the MOV.	**CRITICAL**
Comment		

Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 1 is in MODE 3.

2. An SRO from the tagging group presented you with a proposed clearance to remove Condensate Demineralizer Pump 1B for pump rebuild.

INITIATING CUES:

1. Review the proposed clearance.

2. Notify the Examiner of your results when the clearance review has been completed.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

CLEARANCE COVERSHEET

CLEARANCE SHEET

Clearance No: 1-2-123-W/W	Page _____ of _____

COMPONENT TO BE WORKED: 1-PMP-2-287 Condensate Demineralizer Pump 1B	Plant: SQN

REQUESTED BY: MMG

GROUND DISCS ISSUED? ☐ Yes

REMARKS: Condensate Demineralizer Pump 1B

PM 063605026 Refurbish Pump

Evaluate Unit conditions to determine if this clearance may be performed. (Reference 0-GO-5 App D)

Remove pump from service using 1-SO-2/3-1 section 7.3 if required

PLACEMENT INSTRUCTIONS:

1. Remove Pump from service using 1-SO-2/3-1 Section 7.3 if required.
2. Place clearance.

CAUTION TAG INFORMATION: N/A

RESTORATION INSTRUCTIONS:

Note: Procedure ensures pump is filled and vented prior to placing the pump in service.

1. Release clearance.
2. Return pump toservice to be using 1-SO-2/3-1 section 5.4.

NOTE: OPERATING PERMIT No:	DATE ISSUED:	DATE RELEASED:
OPERATING PERMIT No:	DATE ISSUED::	DATE RELEASED:
OPERATING PERMIT No:	DATE ISSUED::	DATE RELEASED:

CLEARANCE LOCKED:	DATE:	TIME:	CLEARANCE UNLOCKIED:	DATE:	TIME:

PREPARED BY: Frank Schulte	DATE: Today	TIME: Now
PLACEMENT REVIEW:	DATE:	TIME:
PLACEMENT APPROVED:	DATE:	TIME:
ISSUED STATUS:	DATE:	TIME:
RESTORATION MODIFIED:	DATE:	TIME:
RESTORATION REVIEWED & APPROVED:	DATE:	TIME:
CLEARANCE CLOSED:	DATE:	TIME:

Tennessee Valley Authority

Clearance Tag List and Operational Steps

Clearance Sheet | **Clearance No.** | **Page** of

Apparatus:

Equipment ID Equipment Description Equipment Location	Tag Serial No.	Tag Type	Place. Seq.	Place. Config.	Place. 1st Verifier	Place. 2nd Verifier	Rest. Seq.	Restore Config.	As left Confg.	Restore 1st Verifier	Restore 2nd Verifier	Tag Notes
1-HS-2-287A Cond Demin Pmp 1B 1-CTR-732-M3 1-M-3		Danger	1	NA Stop			2	NA Stop				
1-HS-2-287B Cond Demin Pmp 1B 1-TUR-662 Local Control Sta.		Danger	2	Safe Stop			1	Reset				
1-FCV-2-285 Cond Demin Pmp 1B Suct Isol Valve 1-TUR-662 CDBP		Danger	2	Disengaged			1	Disengaged				
1-VLV-2-608 Conds Boo Pmp 1B Disc Isol 1-TUR-662-CBP		Danger	2	Closed			1	Open				

Request for Clearance

Date of Request:	**Today**	Work Order No.:	**12345**
Requester's name and phone number	**M.M. Forman**	Requester's Org.:	**MMG**
Date and time work to begin:	Tomorrow	Outage Work:	☐ Yes ☒ No
Date and time work to be complete:	Tomorrow	Planned Outage:	☐ Yes ☒ No
Duration:	1 day	Forced Outage:	☐ Yes ☒ No
Equipment can be returned to service in emergency:	☐ Yes ☒ No	Grounds Required:	☐ Yes ☒ No
Time required to return to service:	N/A	Temporary Lift:	☐ Yes ☒ No

Equipment/System to be cleared: SQN-1-PMP-002-0287 1B Condensate Demineralizer Booster Pump

Detailed description/scope of work to be performed:
This work order is planned to rebuild pump. The work will require a mechanical flow blocking clearance with the system drained and vented on system 002 and an electrical clearance on the pump motor. Request that the mechanical portion of the hold order released first to ensure adequate water supply to the seal.

Attached drawings/DCAs, marked up to show recommended clearance boundary: 47W804-1, 47W804-2, 45N777-8

Potential adverse affects:

Other systems affected:

Reference drawings:

Operations Management Review:

_____ _____
Signature *Date*

Management approval for GSA/Grounding Plan (if required):

_____ _____
Signature *Date*

Clearance Number: _____

Operating Permit Required in conjunction with Clearance: ☐ Yes ☐ No

Clearance Temporary Lift Required: ☐ Yes ☐ No

Other clearances required to be held for this work: _____

Special instructions or notes associated with this clearance:

SEQUOYAH NUCLEAR PLANT

1603 NRC
SRO ADMIN A.3

SRO

JOB PERFORMANCE MEASURE

Task: Perform required administrative actions after a Radiation Monitor is removed from service.

Task #: 0730990102

Task Standard: The examinee evaluates a work package and determines LCO 3.3.7 condition must be entered and RM-90-125 is required to be blocked prior to removing RM-90-125 from service. The examinee subsequently determines the isolation relay for 0-RE-90-125 must be removed prior to unblocking 0-RE-90-125.

Time Critical Task: **YES:** _____ **NO:** **X**

K/A Reference/Ratings: 2.3.11 (3.2)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** **X**

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** **X**

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **min** _____ **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

1. Critical steps are identified in step SAT/UNSAT column by bold print 'Critical Step.'

2. Any UNSAT requires comments.

Tools/Equipment/Procedures Needed:

1. Non LAN connected computer

References:

	Reference	Title	Rev No.
1.	0-SO-90-2	GASEOUS PROCESS RADIATION MONITORING SYSTEM	25
2.		SEQUOYAH NUCLEAR PLANT OFFSITE DOSE CALCULATION MANUAL	58
3.		Unit 1 Technical Specifications	

==========

Read to the examinee:

DIRECTIONS TO TRAINEE:
I will explain the initial conditions, and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

INITIAL CONDITIONS:

1. Unit 1 is in MODE 1, 100% power, dayshift.

2. MIG has arrived in the Control Room with an approved work package on 0-RE-90-125 to troubleshoot and/or replace the sample pump due to a high vibration condition.

3. Return to service is expected to be between one to three days.

4. Scheduled maintenance will occur on 0-RE-90-102 Train A Spent Fuel Pit Area Rad Monitor on the upcoming night shift.

5. No Train A Radiation Monitors are blocked.

INITIATING CUES:

1. Determine all requirements (if any) that must be performed prior to granting approval to commence maintenance.

2. Notify the Examiner of results when complete.

Start Time _____

STEP 1 :	Obtain a copy of 0-SO-90-2 GASEOUS PROCESS RADIATION MONITORING SYSTEM, SEQUOYAH NUCLEAR PLANT OFFSITE DOSE CALCULATION MANUAL and Sequoyah Unit 1 Improved Tech Specs.	____ SAT ____ UNSAT
Standard:	Copy of 0-SO-90-2 GASEOUS PROCESS RADIATION MONITORING SYSTEM, SEQUOYAH NUCLEAR PLANT OFFSITE DOSE CALCULATION MANUAL and Sequoyah Unit 1 Improved Tech Specs are obtained.	
Cue	Provide a copy of 0-SO-90-2 GASEOUS PROCESS RADIATION MONITORING SYSTEM, SEQUOYAH NUCLEAR PLANT OFFSITE DOSE CALCULATION MANUAL and Sequoyah Unit 1 Improved Tech Specs.	
Comment		

STEP 2 :	**7.0 SHUTDOWN** **7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **[1]** **IF [CTS]** is applicable, **THEN** **REFER** to applicable LCOs and ODCM for Rad Monitor being removed from service. _____ **IF [ITS]** is applicable, **THEN** **REFER** to applicable Tech Specs and ODCM for Rad Monitor being removed from service. _____	____ SAT ____ UNSAT
Standard:	The examinee refers to Sequoyah Unit 1 Improved Tech Specs LCO 3.3.7.	
Comment		

STEP 3 :

3.3.7 Control Room Emergency Ventilation System (CREVS) Actuation Instrumentation

LCO 3.3.7 The CREVS actuation instrumentation for each Function in Table 3.3.7-1 shall be OPERABLE.

APPLICABILITY: According to Table 3.3.7-1.

ACTIONS

----------NOTE----------
Separate Condition entry is allowed for each Function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one channel or train inoperable.	A.1 Place one CREVS train in recirculation mode.	7 days

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	TRIP SETPOINT
1. Manual Initiation	1, 2, 3, 4, 5, 6, (a)	2 trains	SR 3.3.7.6	NA
2. Automatic Actuation Logic and Actuation Relays	1, 2, 3, 4, 5, 6, (a)	2 trains	SR 3.3.7.3 SR 3.3.7.4 SR 3.3.7.5	NA
3. Control Room Radiation				
a. Control Room Air Intakes	1, 2, 3, 4, 5, 6, (a)	2	SR 3.3.7.1 SR 3.3.7.2 SR 3.3.7.7	≤ 400 cpm [(b)]
4. Safety Injection	Refer to LCO 3.3.2, "ESFAS Instrumentation," Function 1, for all initiation functions and requirements.			

(a) During movement of irradiated fuel assemblies, During CORE ALTERATIONS.

(b) Equivalent to 1.0×10^{-5} µCi/cc.

___ SAT

___ UNSAT

Standard: The examinee determines LCO 3.3.7 condition A must be entered. **CRITICAL**

Comment

STEP 4 :	**7.0 SHUTDOWN** **7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **[1] IF [CTS]** is applicable, **THEN** **REFER** to applicable LCOs and ODCM for Rad Monitor being removed from service. _____ **IF [ITS]** is applicable, **THEN** **REFER** to applicable Tech Specs and ODCM for Rad Monitor being removed from service. _____	____ SAT ____ UNSAT
Standard:	The examinee refers to SEQUOYAH NUCLEAR PLANT OFFSITE DOSE CALCULATION MANUAL and determines no additional actions are required.	
Comment		

STEP 5 :	**7.0 SHUTDOWN** **7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **[2] PERFORM** Section 8.2,Blocking ESF actuations, **AND** return to step **[3]**. _____	____ SAT ____ UNSAT
Standard:	The examinee goes to Section 8.2, Blocking ESF actuations, **AND** return to step **[3]**.	
Comment		

STEP 6 :	**8.2 Blocking Rad Monitor Automatic Functions.** **NOTE** Mark steps N/A for rad monitors not blocked. **[1]** **IF [CTS]** is applicable, **THEN** **REFER** to applicable LCOs and ODCM for Rad Monitor function being removed from service. _____ **IF [ITS]** is applicable, **THEN** **REFER** to applicable Tech Specs and ODCM for Rad Monitor function being removed from service. _____	____ SAT ____ UNSAT
Standard:	The examinee determines LCO 3.3.7 condition A must be entered.	**CRITICAL**
Examiner Note:	The examinee previously determined entry into LCO 3.3.7 condition A, required action A.1 was required in JPM step 4 (CRITICAL) and no additional ODCM actions are required in JPM step 5 (NOT CRITICAL).	
Comment		

STEP 7 :	**8.2 Blocking Rad Monitor Automatic Functions.** (continued) **[2]** **DETERMINE** applicable step: **[a]** **IF** automatic functions for **[0-RE-90-101B]** to be BLOCKED, **THEN** GO TO step **[3]**. ☐ **[b]** **IF** automatic functions for **[0-RE-90-102]** to be BLOCKED, **THEN** GO TO step **[4]**. ☐ **[c]** **IF** automatic functions for **[0-RE-90-103]** to be BLOCKED, **THEN** GO TO step **[5]**. ☐ **[d]** **IF** automatic functions for **[0-RE-90-125]** to be BLOCKED, **THEN** GO TO step **[6]**. ☐ **[e]** **IF** automatic functions for **[0-RE-90-126]** to be BLOCKED, **THEN** GO TO step **[7]**. ☐	____ SAT ____ UNSAT
Standard:	The examinee goes to step 6.	
Comment		

STEP 8 :	**8.2 Blocking Rad Monitor Automatic Functions.** (continued) **[6] ENSURE [0-RE-90-125]** removed from service to prevent initiation of an ESF actuation by performing the following: (N/A any actions not required) **[a] IF** 0-RE-90-125 previously removed from service , **THEN** **VERIFY** 0-RE-90-125 BLOCKED or high rad relays removed. _____	___ SAT ___ UNSAT
Standard:	The examinee determines the step is N/A based on the initial conditions.	
Comment		

STEP 9 :	**8.2 Blocking Rad Monitor Automatic Functions.** (continued) **[6] ENSURE [0-RE-90-125]** removed from service to prevent initiation of an ESF actuation by performing the following: (N/A any actions not required) **CAUTION If 0-HS-90-136A1 in a position other than OFF or 0-125, DO NOT proceed with this section until switch position status investigated.** **NOTE** Reference **[CTS]** TS 3.3.3.1 & 3.7.7 **[ITS]** Tech Spec 3.3.7 & 3.7.10. **[b] IF** Train A rad monitor block switch 0-HS-90-136A1 is in OFF position, **THEN** **ROTATE [0-HS-90-136A1]** to the 0-125 position and PULL OUT position. _____ 1st _____ CV	___ SAT ___ UNSAT
Standard:	The examinee determines [0-HS-90-136A1] needs to be rotated to the 0-125 position and PULL OUT position. (Blocks 0-RM-90-125).	**CRITICAL**
Comment		

STEP 10 :	**8.2 Blocking Rad Monitor Automatic Functions.** (continued) **[6] ENSURE [0-RE-90-125]** removed from service to prevent initiation of an ESF actuation by performing the following: (N/A any actions not required) **[c] IF** 0-RE-90-102 CANNOT be blocked using block switch, **OR** **IF** removal of the high rad relay is preferred, **THEN** **NOTIFY** I & C to remove 0-RE-90-102 high rad isolation relay _____	___ SAT ___ UNSAT
Standard:	The examinee determines the step in N/A based on the initial conditions.	
Examiner Note;	The examinee will proceed back to section 7.1 step 3.	
Comment		

STEP 11 :	**7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **[3] INFORM** MCR about to receive Radiation Monitor Instrument Malfunction alarm. _____	___ SAT ___ UNSAT
Standard:	The examinee addresses the procedure step.	
Comment		

STEP 12 :	**7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **[4] STOP** Radiation Monitor pump with local hand switch. **MONITOR** / **UNID** / **INITIALS** 0-RE-90-125 / 0-HS-90-125-A / _____ 0-RE-90-126 / 0-HS-90-126-B / _____	___ SAT ___ UNSAT
Standard:	The examinee addresses the procedure step.	
Comment		

STEP 13 :	**7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **[5] VERIFY** low flow alarm comes in by RED light LIT. _____	___ SAT ___ UNSAT
Standard:	The examinee addresses the procedure step.	
Comment		

STEP 14 :	**7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **NOTE 1** The next steps may be N/A if removing isolation relay will prevent performing test on the Rad Monitor. **NOTE 2** Removing the Rad Monitor isolation relay from an out-of service Rad Monitor will allow other Rad Monitors using the same block switch to be blocked. **[C.2]** **[7] IF** Radiation Monitor 0-RE-90-125 or 126 will be out of service for extended maintenance or testing, **THEN** **[a] ENSURE** Rad Monitor is in the **BLOCK** position **[0-HS-90-136A]**. _____	___ SAT ___ UNSAT
Standard:	The examinee determines [0-HS-90-136A1] was be rotated to the 0-102 position and PULL OUT position in JPM step 9. (Blocks 0-RM-90-125).	**CRITICAL**
Comment		

STEP 15 :	**7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **NOTE 1** The next steps may be N/A if removing isolation relay will prevent performing test on the Rad Monitor. **NOTE 2** Removing the Rad Monitor isolation relay from an out-of service Rad Monitor will allow other Rad Monitors using the same block switch to be blocked. **[C.2]** **[7] IF** Radiation Monitor 0-RE-90-125 or 126 will be out of service for extended maintenance or testing, **THEN** **[b] REQUEST** Instrumentation and Control Section to remove Radiation Monitor isolation relay according to the applicable procedure or Service Request (SR). **[C.2]** _____ Procedure or SR # _____	____ SAT ____ UNSAT
Standard:	The examinee determines I&C must remove the isolation relay for 0-RE-90-125.	**CRITICAL**
Comment		

STEP 16 :	**7.1 Removing MCR Intake Monitors (0-RE-90-125 or 0-RE-90-126) From Service** **NOTE 1** The next steps may be N/A if removing isolation relay will prevent performing test on the Rad Monitor. **NOTE 2** Removing the Rad Monitor isolation relay from an out-of service Rad Monitor will allow other Rad Monitors using the same block switch to be blocked. **[C.2]** **[7] IF** Radiation Monitor 0-RE-90-125 or 126 will be out of service for extended maintenance or testing, **THEN** **[c] WHEN** isolation relay has been removed, **THEN** **PLACE** Rad Monitor **BLOCK** switches in the **NORMAL** position. _____	____ SAT ____ UNSAT
Standard:	The examinee determines Rad Monitor Block Switch 0-HS-90-136A1 will be placed to NORMAL when the isolation relay for 0-RE-90-125 is removed.	
Comment		

Terminating Cue:	**The JPM is complete when the Examinee returns the cue sheet to the Evaluator.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

1. Unit 1 is in MODE 1, 100% power, dayshift.

2. MIG has arrived in the Control Room with an approved work package on 0-RE-90-125 to troubleshoot and/or replace the sample pump due to a high vibration condition.

3. Return to service is expected to be between one to three days.

4. Scheduled maintenance will occur on 0-RE-90-102 Train A Spent Fuel Pit Area Rad Monitor on the upcoming night shift.

5. No Train A Radiation Monitors are blocked.

INITIATING CUES:

1. Determine all requirements (if any) that must be performed prior to granting approval to commence maintenance.

2. Notify the Examiner of results when complete.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.

SEQUOYAH NUCLEAR PLANT

1603 NRC
SRO ADMIN A.4

SRO

JOB PERFORMANCE MEASURE

Task: Classify the Event using the EPIP-1 and Complete a TVA INITIAL NOTIFICATION.

Task #: 3440190302

Task Standard: During a dual unit event, the examinee will evaluate plant conditions and classifies the event as a SITE AREA EMERGENCY based on EAL 3.1 within 15 minutes and the examinee completes a TVA Initial Notification for Site Area Emergency form with no errors on items noted with an * within the subsequent 15 minutes.

Time Critical Task: **YES:** X **NO:** _____

K/A Reference/Ratings: 2.4.41. (2.9/4.6)

Method of Testing:

Simulated Performance: _____ **Actual Performance:** X

Evaluation Method:

Simulator _____ **In-Plant** _____ **Classroom** X

Main Control Room _____ **Mock-up** _____

Performer: _____
Trainee Name

Evaluator: _____ / _____ _____
Name / Signature DATE

Performance Rating: **SAT:** _____ **UNSAT:** _____

Validation Time: **20 minutes** **Total Time:** _____

Performance Time: **Start Time:** _____ **Finish Time:** _____

COMMENTS

_____

_____

SPECIAL INSTRUCTIONS TO EVALUATOR:

Tools/Equipment/Procedures Needed:

1. EPIP- 1, EMERGENCY PLAN CLASSIFICATION MATRIX

2. EPIP-4 SITE AREA EMERGENCY.

3. A clock must be available in classroom that all examinees and evaluator can see

References:

	Reference	Title	Rev No.
1.	EPIP-1	Emergency Plan Classification Matrix	52
2.	EPIP-4	SITE AREA EMERGENCY	38

==========

Read to the examinee:

DIRECTIONS TO TRAINEE:
I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!

Initial Conditions

Unit 1	Unit 2
MODE 5.	MODE 1.
RCS temperature is 196°F.	2B EDG is OOS for a maintenance outage.
Both RHR pumps in service.	
Two RCP's in service.	

1. A loss of offsite power has occurred.
2. The crews are implementing the appropriate procedures for the conditions given.

Final Conditions

Unit 1	Unit 2
Core Exit Thermocouple temperature is 202 °F.	MODE 3.
The crew is establishing conditions to start an RHR pump.	2A EDG 6.9 kv Breaker to Shutdown Board 2A (1922) will not close. A team has been notified to inspect the breaker.

1. The TSC has NOT been activated.

INITIATING CUES:

2. Using the data provided and the applicable procedure (s) classify the event.
3. Do not use SED Judgment as the basis for your classification.
4. Raise your hand when you have classified the event.
5. Complete the required INITIAL NOTIFICATION FORM.
6. Raise your hand when you have completed the Complete the required INITIAL NOTIFICATION FORM.
7. There is (are) element(s) of this task that is (are) time critical.
8. For the purposes of this JPM, initial event time zero and the start time for classification will begin when the examiner tells you to begin.

Start Time

STEP 1 :	Obtain a copy of EPIP-1, EMERGENCY PLAN CLASSIFICATION MATRIX.	____ SAT ____ UNSAT
Standard:	Examinee obtains a copy of EPIP-1, EMERGENCY PLAN CLASSIFICATION MATRIX.	
Cue	Provide a copy of EPIP-1, EMERGENCY PLAN CLASSIFICATION MATRIX.	
Comment		
Examiner Note	Annotate start time when the examinee acknowledges the task is understood. Start time_____	

STEP 3 :	A. Classify the Event. To determine the classification of the emergency, the responsible individual shall review the Initiating Conditions of the Events described in this procedure with the known or suspected conditions and classify the event. B. Declare the Event. **3.1 Loss of AC (Power Ops)** **Mode:** 1, 2, 3, 4 **Initiating / Condition:** Loss of all offsite and all onsite AC power to either unit for > 15 Minutes. 1. Both unit related 6.9 KV shutdown boards de-energized for > 15 minutes. **SITE AREA**	____ SAT ____ UNSAT
Standard:	The Examinee declares the event as a SITE AREA EMERGENCY based on criterion contained in EAL 3.1.	**CRITICAL**
Comment		
EXAMINER NOTE:	Annotate the stop time for the event classification here. _____	
EXAMINER NOTE:	Annotate the start time for the TVA Initial Notification for Site Area Emergency here. _____	
EXAMINER NOTE:	The start data is provided to the examinee on the JPM briefing sheet.	
EXAMINER NOTE:	Examinee transitions to EPIP-4, SITE AREA EMERGENCY	

STEP 4 :	EPIP-4 SITE AREA EMERGENCY.	___ SAT ___ UNSAT
Standard:	Examinee obtains a copy of EPIP-4 SITE AREA EMERGENCY.	
Cue	Provide a copy of EPIP-4 SITE AREA EMERGENCY.	
Comment		

CAUTIONS

1) **Security events or severe weather may present a danger to normal staffing and other Emergency Plan implementation processes. Procedural steps during severe weather and security related events still apply.**
2) **Notification to State (15 minutes) and NRC (immediately after the notification of the State, NOT to exceed 60 minutes from classification declaration) are Time Critical.**

NOTES

1) Procedure steps can be performed concurrently. All procedure steps must be completed.
2) All procedure steps and appendices within the body of this procedure can be delegated.
3) Completed appendices must be returned to the SED.

STEP 5 :	[1] **WHEN** TSC SED has assumed responsibilities from SM SED **THEN** **CONTINUE** in this procedure at Appendix G. Otherwise continue in body of this procedure.	___ SAT ___ UNSAT
Standard:	The examinee continues in the procedure based on the initial conditions.	
Comment		

NOTE

Completion of Appendix A should be peer-checked by STA or another SRO (if available).

STEP 6 :	[1] **PERFORM** the following: [1.1] **RECORD** time of Site Area Emergency Classification: _____ Eastern	___ SAT ___ UNSAT
Standard:	The examinee records the classification time on the Appendix A.	
Comment		

STEP 7 :	[1.2] **IF** the CECC is **NOT** activated, **THEN** **CONTINUE** in this Section at Step 3.2[2].	___ SAT ___ UNSAT
Standard:	The examinee addresses the procedure step from the initial conditions and proceeds to step 3.2[2].	
Comment		

STEP 8 :	[1] **PERFORM** the following: [2] **COMPLETE** Appendix A, "Alert Initial Notification Form."	____ SAT ____ UNSAT
Standard:	The examinee completes the ALERT INITIAL NOTIFICATION FORM with all items annotated with *.	**CRITICAL**
Examiner Note	See attached key.	
Comment		
Examiner Note:	Annotate the stop time for the Initial Notification for SITE AREA EMERGENCY here. _____	

Terminating Cue:	**The task is complete when the Examinee completes the TVA Initial Notification for Site Area Emergency.**	**STOP**

Stop Time _____

JPM BRIEFING SHEET

DIRECTIONS TO TRAINEE:

The examiner will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

Initial Conditions

Unit 1	Unit 2
MODE 5.	MODE 1.
RCS temperature is 196°F.	2B EDG is OOS for a maintenance outage.
Both RHR pumps in service.	
Two RCP's in service.	

1. A loss of offsite power has occurred.
2. The crews are implementing the appropriate procedures for the conditions given.

Final Conditions

Unit 1	Unit 2
Core Exit Thermocouple temperature is 202 °F.	MODE 3.
The crew is establishing conditions to start an RHR pump.	2A EDG 6.9 kv Breaker to Shutdown Board 2A (1922) will not close. A team has been notified to inspect the breaker.

1. The TSC has NOT been activated.

INITIATING CUES:

1. Using the data provided and the applicable procedure (s) classify the event.
2. Do not use SED Judgment as the basis for your classification.
3. Raise your hand when you have classified the event.
4. Complete the required INITIAL NOTIFICATION FORM.
5. Raise your hand when you have completed the Complete the required INITIAL NOTIFICATION FORM.
6. There is (are) element(s) of this task that is (are) time critical.
7. For the purposes of this JPM, initial event time zero and the start time for classification will begin when the examiner tells you to begin.

Acknowledge to the examiner when you are ready to begin.

HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.