

# **SEQUOYAH NUCLEAR PLANT**

## **SRO ADMIN A.1.a**

### **Calculate Subcooling Margin**

**SRO**  
**JOB PERFORMANCE MEASURE**

**Task:** Calculate Subcooling with no Subcooling Monitors and NO Plant computers available.

**Task #:** 3440100302

**Task Standard:** Examinee calculates RCS subcooling of 49 degrees based on initial conditions and determines SI Termination is permissible.

**Time Critical Task:** YES: \_\_\_\_\_ NO:  X

**K/A Reference/Ratings:** 2.1.45 (4.3)

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:**  14 min  **Total Time:** \_\_\_\_\_

**Performance Time:** **Start Time:** \_\_\_\_\_ **Finish Time:** \_\_\_\_\_

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**COMMENTS**

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**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. Calculator
2. 2-68-PIP-004 Saturation Table
3. AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM

**References:**

|    | Reference | Title                                | Rev No. |
|----|-----------|--------------------------------------|---------|
| 1. | AOP-C.04  | SHUTDOWN FROM AUXILIARY CONTROL ROOM | 25      |

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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 MODE 3
2. RCS Loop 1 Th is 540 Loop 2 Th is 545, Loop 3 Th is 560 and Loop 4 Th is 565.
3. RCS Pressure is 1700 psig
4. An event has occurred requiring Control Room Abandonment.
5. A valid SI signal has occurred.
6. AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM is in progress at step 26 RNO.

**INITIATING CUES:**

1. You are to calculate RCS subcooling using AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM Appendix F and the provided saturation table.
2. When you have calculated RCS subcooling, then determine if SI flow is required based on subcooling.
3. Inform the evaluator when you are complete.

Start Time \_\_\_\_\_

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|------------------|---|--|
| STEP 1 :         | Obtain a copy of 2-68-PIP-004 Saturation Table and AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM                              | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u> | Examinee obtains a copy of 2-68-PIP-004 Saturation Table and AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM Appendix F.        |  |
| <u>Cue</u>       | Provide a copy of 2-68-PIP-004 Saturation Table and AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM Appendix F to the examinee. |  |
| <u>Comment</u>   |   |  |

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| <u>Procedure Note</u> | NOTE 1      Conditions (such as an unisolable LOCA) which require maintaining ECCS flow are outside the scope of this procedure. |  |
| <u>Procedure Note</u> | NOTE 2      Arc flash protection requirements are waived in this procedure.  |  |
| STEP 2 :              | 1. IDENTIFY applicable unit:<br><ul style="list-style-type: none"> <li>• Unit 1 _____</li> <li>• Unit 2 _____</li> </ul>         | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u>      | Examinee records Unit 2 as the applicable unit based on information provided in the initiating cue.                              |  |
| <u>Comment</u>        |  |  |

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| STEP 3 :         | 2. IF terminating spurious SI during Appendix R fire event,<br>THEN<br>GO TO Note prior to Step 5. | ___ SAT<br>___ UNSAT |
| <u>Standard:</u> | Examinee determines step is N/A based on information provided in the initiating cue.               |                      |
| <u>Comment</u>   |  |                      |

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| STEP 4 :             | 3. DETERMINE RCS subcooling:<br><br>a. RECORD RCS pressure. [L-10] _____ psig   | ___ SAT<br>___ UNSAT |
| <u>Standard:</u>     | Examinee records RCS pressure of 1700 based on information provided in the initiating cue.  | <b>Critical Step</b> |
| <u>Comment</u>       |   |                      |
| <u>Examiner Note</u> | This step is critical because the correct answer will be calculated only if the information placed into the calculation is correct. |                      |

|                             |  |                                 |
|-----------------------------|--|---------------------------------|
| <p>STEP 5 :</p>             | <p>3. DETERMINE RCS subcooling: _____</p> <p>b. DETERMINE saturation temperature for current RCS pressure USING posted saturation table. [L-10] _____ °F</p> | <p>___ SAT</p> <p>___ UNSAT</p> |
| <p><u>Standard:</u></p>     | <p>Examinee determines the saturation temperature of 614 based on information provided in 2-68-PIP-004 Saturation Table.</p>                                 | <p><b>Critical Step</b></p>     |
| <p><u>Comment</u></p>       |  |                                 |
| <p><u>Examiner Note</u></p> | <p>This step is critical because the correct answer will be calculated only if the information placed into the calculation is correct.</p>                   |                                 |

|                             |  |                                 |
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| <p>STEP 6 :</p>             | <p>3. DETERMINE RCS subcooling: _____</p> <p>c. RECORD highest RCS T-hot. [L-10] _____ °F</p>  | <p>___ SAT</p> <p>___ UNSAT</p> |
| <p><u>Standard:</u></p>     | <p>Examinee records RCS the highest RCS T<sub>hot</sub> of 565 based on information provided in the initiating cue.</p>                    | <p><b>Critical Step</b></p>     |
| <p><u>Comment</u></p>       |  |                                 |
| <p><u>Examiner Note</u></p> | <p>This step is critical because the correct answer will be calculated only if the information placed into the calculation is correct.</p> |                                 |

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| STEP 7 :             | <p>3. DETERMINE RCS subcooling:</p> <p>d. CALCULATE subcooling:</p> $\frac{\text{sat temp}}{\text{sat temp}} - \frac{\text{T-hot}}{\text{T-hot}} = \text{subcooling}$ | <p>___ SAT</p> <p>___ UNSAT</p> <p><b>Critical Step</b></p> |
| <u>Standard:</u>     | The examinee calculates a subcooling value of 49  |   |
| <u>Comment</u>       |   |   |
| <u>Examiner Note</u> | This step is critical because SI flow cannot be terminated until RCS subcooling is calculated at a value of greater than 40 deg.                                      |   |

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|----------------------|--|---|
| STEP 8 :             | <p>4. MONITOR SI flow NOT required:</p> <ul style="list-style-type: none"> <li>RCS subcooling (step 3) greater than 40°F.</li> </ul> | <p>___ SAT</p> <p>___ UNSAT</p> <p><b>Critical Step</b></p> |
| <u>Standard:</u>     | Examinee determines SI flow is NOT required based on RCS subcooling calculated is greater than 40°F.                                 |   |
| <u>Comment</u>       |  |   |
| <u>Examiner Note</u> | This step is critical because SI flow cannot be terminated until RCS subcooling is calculated at a value of greater than 40 deg.     |   |

|                         |   |             |
|-------------------------|---|-------------|
| <b>Terminating Cue:</b> | <b>When the examinee determines that RCS subcooling is greater than the SI flow termination requirement, provide the following cue, "Another Operator will complete the remaining steps of this procedure."</b> | <b>STOP</b> |
|-------------------------|---|-------------|

Stop Time \_\_\_\_\_

## ***JPM BRIEFING SHEET***

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 MODE 3
2. RCS Loop 1 Th is 540 Loop 2 Th is 545, Loop 3 Th is 560 and Loop 4 Th is 565.
3. RCS Pressure is 1700 psig
4. An event has occurred requiring Control Room Abandonment.
5. A valid SI signal has occurred.
6. AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM is in progress at step 26 RNO.

### **INITIATING CUES:**

1. You are to calculate RCS subcooling using AOP-C.04 SHUTDOWN FROM AUXILIARY CONTROL ROOM Appendix F and the provided saturation table.
2. When you have calculated RCS subcooling, then determine if SI flow is required based on subcooling.
3. Inform the evaluator when you are 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**

## **SRO ADMIN A.1.b**

### **Review and Evaluate Shift Daily Surveillance Log Mode One**

**SRO  
JOB PERFORMANCE MEASURE**

**Task:** Review and Evaluate Shift Daily Surveillance Log Mode One  
**Task #:** SRO 1190070301 Analyze operating loop for trends and out of specification conditions  
**Task Standard:** Correctly review data on Appendix A to determine whether or not the surveillance meets acceptable criteria and identify all required LCO action statements..

**Time Critical Task:** YES: \_\_\_\_\_ NO:  X

**K/A Reference/Ratings:** 2.1.18 (3.6/3.8)

**Method of Testing:**

**Simulated Performance:** \_\_\_\_\_ **Actual Performance:**  X

**Evaluation Method:**

**Simulator** \_\_\_\_\_ **In-Plant** \_\_\_\_\_ **Classroom**  X

**Main Control Room** \_\_\_\_\_ **Mock-up** \_\_\_\_\_

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**Performer:** \_\_\_\_\_  
Trainee Name

**Evaluator:** \_\_\_\_\_ / \_\_\_\_\_  
Name / Signature DATE

**Performance Rating:** SAT: \_\_\_\_\_ UNSAT: \_\_\_\_\_

**Validation Time:**  24 minutes  **Total Time:** \_\_\_\_\_

**Performance Time:** **Start Time:** \_\_\_\_\_ **Finish Time:** \_\_\_\_\_

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**COMMENTS**

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**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. 1-SI-OPS-000-002.0, Shift Log, Appendix A
2. Technical Specifications, Unit 1
3. Chronological Test Log

**References:**

|    | Reference          | Title                           | Rev No. |
|----|--------------------|---------------------------------|---------|
| 1. | 1-SI-OPS-000-002.0 | Shift Log, Appendix A           | 96      |
| 2. |                    | Unit 1 Technical Specifications |         |

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***Read to the examinee:***

**DIRECTIONS TO TRAINEE:**

I will explain the initial conditions, and state the administrative 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 has been operating at 100% rated thermal power and has been stable for the last 30 days. No LCO entries at this time.
2. Portions of the field data have been entered by ROs and AUOs.
3. Data takers are present.
4. You are the Unit Supervisor and the Shift Manager has assigned you to review only the data that is currently logged on 1-SI-OPS-000-002.0, "Shift Log, Appendix A" for the 0630-1830 shift for discrepancies and take appropriate action(s) if any, once the review is complete.

**INITIATING CUES:**

1. The Shift Manager directs you to review the data logged on the sections of Appendix A. (Another SRO will review the rest of the SI-2 data)
2. When you have finished reviewing the assigned pages of Appendix A, Identify and address any deviations on the Chronological Test Log.
3. Notify the Shift Manager when you have completed your task.

**Start Time** \_\_\_\_\_

|                  |  |                      |
|------------------|--|----------------------|
| <b>STEP 1</b> :  | Obtain a copy of 1-SI-OPS-000-002.0, Shift Log, Appendix A and a Chronological Test Log            | ___ SAT<br>___ UNSAT |
| <u>Standard:</u> | Copy of 1-SI-OPS-000-002.0, Shift Log, Appendix A and a Chronological Test Log have been obtained. |                      |
| <u>Cue</u>       | Provide a copy of a marked up Appendix A and a Chronological Test Log to applicant.                |                      |
| <u>Comment</u>   |  |                      |

|                  |   |             |      |         |  |
|------------------|---|-------------|------|---------|--|
| <u>STEP 2</u> :  | Reviews data for CST A and CST B Level  |             |      |         | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u> | Applicant reviews readings for CST Level 0-LI-2-230A and 0-LI-2-233A recorded on the data sheet, determines that the values meets T.S. limit of $\geq 240,000$ gallons. |             |      |         |  |
|                  | >240,000 gals<br>Operable   | 0-LI-2-230A | gals | 300,000 |  |
| <u>Comment</u>   |   | 0-LI-2-233A | Gals | 320,000 |  |

|                                  |   |  |             |            |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|----------------------------------|---|--|-------------|------------|----|----|----------|------------|---|----|----------|------------|---|----|----------|------------|---|----|----------|------------|---|----|----------|------------|---|----|----------|------------|---|----|----------|------------|---|----|----------|------------|---|----|----------|-------------|---|----|----------|-------------|---|----|----------|-------------|---|----|--|
| STEP 3 :                         | Reviews data in SG Level data table, check Operable, Channel Check, and MCD < 6.0%.   | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |             |            |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
| Standard:                        | <p>Applicant reviews current readings for SG level on the data sheet and determines that SG 2 Level channel 2-LI-3-52 is not within MCD of &lt;6.0%. The candidate will identify the associated Tech Spec LCO Action and write them on the Chronological Test Log.</p> <p>Tech Specs:</p> <p>3.3.1.1, Action 9</p> <p>3.3.2.1, Action 17</p> <p>3.3.2.1, Action 36</p> <p>3.3.3.7, Action 1</p> <table border="1" data-bbox="373 735 1250 1386"> <tr> <td rowspan="12">SG Water Level Channel Deviation</td> <td>Operable</td> <td>#1 LI-3-42</td> <td>%</td> <td>44</td> </tr> <tr> <td>Operable</td> <td>#1 LI-3-39</td> <td>%</td> <td>42</td> </tr> <tr> <td>Operable</td> <td>#1 LI-3-38</td> <td>%</td> <td>45</td> </tr> <tr> <td>Operable</td> <td>#2 LI-3-55</td> <td>%</td> <td>46</td> </tr> <tr> <td>Operable</td> <td>#2 LI-3-52</td> <td>%</td> <td>38</td> </tr> <tr> <td>Operable</td> <td>#2 LI-3-51</td> <td>%</td> <td>42</td> </tr> <tr> <td>Operable</td> <td>#3 LI-3-97</td> <td>%</td> <td>44</td> </tr> <tr> <td>Operable</td> <td>#3 LI-3-94</td> <td>%</td> <td>44</td> </tr> <tr> <td>Operable</td> <td>#3 LI-3-93</td> <td>%</td> <td>45</td> </tr> <tr> <td>Operable</td> <td>#4 LI-3-110</td> <td>%</td> <td>46</td> </tr> <tr> <td>Operable</td> <td>#4 LI-3-107</td> <td>%</td> <td>44</td> </tr> <tr> <td>Operable</td> <td>#4 LI-3-106</td> <td>%</td> <td>42</td> </tr> </table> | SG Water Level Channel Deviation                               | Operable    | #1 LI-3-42 | %  | 44 | Operable | #1 LI-3-39 | % | 42 | Operable | #1 LI-3-38 | % | 45 | Operable | #2 LI-3-55 | % | 46 | Operable | #2 LI-3-52 | % | 38 | Operable | #2 LI-3-51 | % | 42 | Operable | #3 LI-3-97 | % | 44 | Operable | #3 LI-3-94 | % | 44 | Operable | #3 LI-3-93 | % | 45 | Operable | #4 LI-3-110 | % | 46 | Operable | #4 LI-3-107 | % | 44 | Operable | #4 LI-3-106 | % | 42 | <p><b>Critical Step</b><br/> <b>(Shaded portions critical)</b></p> |
| SG Water Level Channel Deviation | Operable  |  | #1 LI-3-42  | %          | 44 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #1 LI-3-39  | %          | 42 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #1 LI-3-38  | %          | 45 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #2 LI-3-55  | %          | 46 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #2 LI-3-52  | %          | 38 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #2 LI-3-51  | %          | 42 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #3 LI-3-97  | %          | 44 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #3 LI-3-94  | %          | 44 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #3 LI-3-93  | %          | 45 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #4 LI-3-110 | %          | 46 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  |  | #4 LI-3-107 | %          | 44 |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
|                                  | Operable  | #4 LI-3-106  | %           | 42         |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
| <u>Examiner Note:</u>            | If asked: Respond as the RO who took the data that the MCB still indicates as transcribed onto the data sheet.  |  |             |            |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
| <u>Examiner Note:</u>            | If asked to review previous shifts SI-2 data, inform the candidate that all previous data on this instrumentation was within MCD prior to today.  |  |             |            |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
| <u>Examiner Note:</u>            | If asked the color of the placard for 2-LI-3-52 (to deduce if it is a PAMS instrument), respond that it is a black placard.   |  |             |            |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |
| <u>Comment</u>                   |   |  |             |            |    |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |            |   |    |          |             |   |    |          |             |   |    |          |             |   |    |  |

|                     |   |                        |             |            |      |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|---------------------|---|------------------------|-------------|------------|------|-----|----------|------------|------|-----|----------|-----------|------|-----|----------|------------|------|-----|----------|------------|------|-----|----------|------------|------|-----|----------|-------------|------|-----|----------|-------------|------|-----|----------|------------|------|-----|----------|-------------|------|-----|----------|-------------|------|-----|----------|------------|------|-----|--|
| <b>STEP 4 :</b>     | Reviews data in SG Pressure data table, check Operable, Channel Check, and MCD $\leq$ 60 psig.  | ____ SAT<br>____ UNSAT |             |            |      |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
| <u>Standard:</u>    | <p>Applicant reviews readings for SG Pressure on the data sheet, determines that the channels are operable, channel checked and MCD is within <math>\leq</math> 60 psig.</p> <table border="1" data-bbox="375 516 1265 1188"> <tr> <td rowspan="12" style="text-align: center; vertical-align: middle;">Steam Line Pressure</td> <td>Operable</td> <td>#1 PI-1-2A</td> <td>psig</td> <td>865</td> </tr> <tr> <td>Operable</td> <td>#1 PI-1-2B</td> <td>psig</td> <td>860</td> </tr> <tr> <td>Operable</td> <td>#1 PI-1-5</td> <td>psig</td> <td>860</td> </tr> <tr> <td>Operable</td> <td>#2 PI-1-9A</td> <td>psig</td> <td>860</td> </tr> <tr> <td>Operable</td> <td>#2 PI-1-9B</td> <td>psig</td> <td>860</td> </tr> <tr> <td>Operable</td> <td>#2 PI-1-12</td> <td>psig</td> <td>870</td> </tr> <tr> <td>Operable</td> <td>#3 PI-1-20A</td> <td>psig</td> <td>870</td> </tr> <tr> <td>Operable</td> <td>#3 PI-1-20B</td> <td>psig</td> <td>860</td> </tr> <tr> <td>Operable</td> <td>#3 PI-1-23</td> <td>psig</td> <td>870</td> </tr> <tr> <td>Operable</td> <td>#4 PI-1-27A</td> <td>psig</td> <td>870</td> </tr> <tr> <td>Operable</td> <td>#4 PI-1-27B</td> <td>psig</td> <td>850</td> </tr> <tr> <td>Operable</td> <td>#4 PI-1-30</td> <td>psig</td> <td>860</td> </tr> </table> | Steam Line Pressure    | Operable    | #1 PI-1-2A | psig | 865 | Operable | #1 PI-1-2B | psig | 860 | Operable | #1 PI-1-5 | psig | 860 | Operable | #2 PI-1-9A | psig | 860 | Operable | #2 PI-1-9B | psig | 860 | Operable | #2 PI-1-12 | psig | 870 | Operable | #3 PI-1-20A | psig | 870 | Operable | #3 PI-1-20B | psig | 860 | Operable | #3 PI-1-23 | psig | 870 | Operable | #4 PI-1-27A | psig | 870 | Operable | #4 PI-1-27B | psig | 850 | Operable | #4 PI-1-30 | psig | 860 |  |
| Steam Line Pressure | Operable  |                        | #1 PI-1-2A  | psig       | 865  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #1 PI-1-2B  | psig       | 860  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #1 PI-1-5   | psig       | 860  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #2 PI-1-9A  | psig       | 860  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #2 PI-1-9B  | psig       | 860  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #2 PI-1-12  | psig       | 870  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #3 PI-1-20A | psig       | 870  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #3 PI-1-20B | psig       | 860  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #3 PI-1-23  | psig       | 870  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #4 PI-1-27A | psig       | 870  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  |                        | #4 PI-1-27B | psig       | 850  |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
|                     | Operable  | #4 PI-1-30             | psig        | 860        |      |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |
| <u>Comment</u>      |   |                        |             |            |      |     |          |            |      |     |          |           |      |     |          |            |      |     |          |            |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |          |             |      |     |          |             |      |     |          |            |      |     |  |

|                  |   |                |           |           |       |                        |     |
|------------------|---|----------------|-----------|-----------|-------|------------------------|-----|
| <b>STEP 5 :</b>  | Reviews data in Shutdown Banks data table, check Operable and Rod Position Indication agree within $\leq 12$ steps                          |                |           |           |       | ____ SAT<br>____ UNSAT |     |
| <u>Standard:</u> | Applicant reviews readings for Shutdown Banks on the data sheet, determines that the RPIs are operable and RPIs are within $\leq 12$ steps. |                |           |           |       |                        |     |
|                  | Shutdown Banks  | A              | COLR      | Gr 1 Step | steps |                        | 228 |
|                  |   |                | **        | Gr 1 RPIs | steps |                        | 230 |
|                  |   | COLR           | Gr 2 Step | steps     | 228   |                        |     |
|                  |   | **             | Gr 2 RPIs | steps     | 225   |                        |     |
|                  |   | B              | COLR      | Gr 1 Step | steps |                        | 228 |
|                  |   |                | **        | Gr 1 RPIs | steps |                        | 224 |
|                  |   |                | COLR      | Gr 2 Step | steps |                        | 228 |
|                  |   |                | **        | Gr 2 RPIs | steps |                        | 224 |
|                  |   | C              | COLR      | Gr Step   | steps |                        | 228 |
|                  |   |                | **        | Gr RPIs   | steps |                        | 224 |
|                  |   | D              | COLR      | Gr Step   | steps |                        | 228 |
|                  |   |                | **        | Gr RPIs   | steps |                        | 226 |
|                  |   | <u>Comment</u> |           |           |       |                        |     |

|                  |  |   |               |           |       |     |                        |
|------------------|--|---|---------------|-----------|-------|-----|------------------------|
| STEP 6 :         | Reviews data in Control Banks A & B data table (page 6), check Operable, and Rod Position Indication agree within $\leq 12$ steps                |   |               |           |       |     | ____ SAT<br>____ UNSAT |
| <u>Standard:</u> | Applicant reviews readings for Control Banks A & B on the data sheet, determines that the RPIs are operable and RPIs are within $\leq 12$ steps. |   |               |           |       |     |                        |
|                  | Control Rod Banks  | A | COLR figure 1 | Gr 1 Step | steps | 228 |                        |
|                  |  |   | **            | Gr 1 RPIs | steps | 225 |                        |
|                  |  |   | COLR figure 1 | Gr 2 Step | steps | 228 |                        |
|                  |  |   | **            | Gr 2 RPIs | steps | 225 |                        |
|                  |  | B | COLR figure 1 | Gr 1 Step | steps | 228 |                        |
|                  |  |   | **            | Gr 1 RPIs | steps | 226 |                        |
|                  |  |   | COLR figure 1 | Gr 2 Step | steps | 228 |                        |
| **               |  |   | Gr 2 RPIs     | steps     | 225   |     |                        |
| <u>Comment</u>   |  |   |               |           |       |     |                        |

|                  |  |               |               |           |       |  |
|------------------|--|---------------|---------------|-----------|-------|--|
| STEP 7 :         | Reviews data in Control Banks C & D data table (page 7), check Operable, and Rod Position Indication agree within $\leq 12$ steps                |               |               |           |       | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u> | Applicant reviews readings for Control Banks C & D on the data sheet, determines that the RPIs are operable and RPIs are within $\leq 12$ steps. |               |               |           |       |  |
|                  | Control Rod Banks  | C             | COLR figure 1 | Gr 1 Step | steps | 228  |
|                  |  |               | **            | Gr 1 RPIs | steps | 225  |
|                  |  | COLR figure 1 | Gr 2 Step     | steps     | 228   |  |
|                  |  | **            | Gr 2 RPIs     | steps     | 225   |  |
|                  |  | COLR figure 1 | Gr 1 Step     | steps     | 220   |  |
|                  |  | **            | Gr 1 RPIs     | steps     | 222   |  |
|                  |  | COLR figure 1 | Gr 2 Step     | steps     | 220   |  |
|                  |  | **            | Gr 2 RPIs     | steps     | 225   |  |
|                  | D  | COLR figure 1 | Gr 1 Step     | steps     | 220   |  |
| **               |  | Gr 1 RPIs     | steps         | 222       |       |  |
| COLR figure 1    |  | Gr 2 Step     | steps         | 220       |       |  |
| **               |  | Gr 2 RPIs     | steps         | 225       |       |  |
| <u>Comment</u>   |  |               |               |           |       |  |

|                        |   |                        |            |            |   |   |  |            |             |   |   |  |
|------------------------|---|------------------------|------------|------------|---|---|--|------------|-------------|---|---|--|
| <b>STEP 8</b> :        | Reviews data in ECCS Subsystem (page 13), checks TS limit "Valve Open".   | ____ SAT<br>____ UNSAT |            |            |   |   |  |            |             |   |   |  |
| <u>Standard:</u>       | <p>Applicant reviews data for ECCS subsystem on the data sheet, determines that the indicating lights for 1-HS-63-1A and 1-HS-63-22A indicate that the valves are OPEN (check mark in box), Red lights On/Green lights Off.</p> <table border="1" data-bbox="345 558 1273 674"> <tr> <td data-bbox="345 558 574 617">ECCS Subsystem</td> <td data-bbox="574 558 803 617">Valve Open</td> <td data-bbox="803 558 984 617">1-HS-63-1A</td> <td data-bbox="984 558 1102 617">√</td> <td data-bbox="1102 558 1273 617">√</td> </tr> <tr> <td data-bbox="345 617 574 674"></td> <td data-bbox="574 617 803 674">Valve Open</td> <td data-bbox="803 617 984 674">1-HS-63-22A</td> <td data-bbox="984 617 1102 674">√</td> <td data-bbox="1102 617 1273 674">√</td> </tr> </table> | ECCS Subsystem         | Valve Open | 1-HS-63-1A | √ | √ |  | Valve Open | 1-HS-63-22A | √ | √ |  |
| ECCS Subsystem         | Valve Open  | 1-HS-63-1A             | √          | √          |   |   |  |            |             |   |   |  |
|                        | Valve Open  | 1-HS-63-22A            | √          | √          |   |   |  |            |             |   |   |  |
| <b>Evaluators Note</b> | <b>If asked by applicant for the current indications for 1-HS-63-1A and/or 1-HS-63-22A on 1-M-6, respond that the Red lights are lit.</b>   |                        |            |            |   |   |  |            |             |   |   |  |
| <u>Comment</u>         |   |                        |            |            |   |   |  |            |             |   |   |  |

|   |  |   |                  |          |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|---|--|---|------------------|----------|------------|------------|----|------------|---|----|------------|---|----|------------|---|----|--|-----------------------|----------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|---|
| STEP 9 :  | Reviews data in RWST Level and CNTMT Level for Auto Swapover Cold Leg during SI (page 13) data block, checks Operable, Channel Check, and MCD ≤ 5% for RWST level and MCD ≤ 6% for CNTMT sump level.   | ____ SAT<br>____ UNSAT  |                  |          |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
| <u>Standard:</u>  | <p>Applicant reviews data for RWST Level and CNTMT Level on the data sheet, determines that the MCD of &lt; 5% for RWST level has been exceeded due to 1-LI-63-52 at 91 The candidate will identify the associated Tech Spec LCO Action and write them on the Chronological Test Log. Applicant also determines that indicated level on 1-LI-63-178 does not exceed MCD and is acceptable even if no level is present (Note 40).</p> <p>Tech Spec:<br/> 3.3.2.1 Action 18</p> <table border="1" data-bbox="342 747 1151 1194"> <tr> <td rowspan="4">RWST Level and CNTMT Level for Auto Swapover Cold Leg during SI</td> <td rowspan="4">R<br/>W<br/>S<br/>T</td> <td rowspan="4">Operable</td> <td>1-LI-63-50</td> <td>%</td> <td>99</td> </tr> <tr> <td>1-LI-63-51</td> <td>%</td> <td>98</td> </tr> <tr> <td>1-LI-63-52</td> <td>%</td> <td>91</td> </tr> <tr> <td>1-LI-63-53</td> <td>%</td> <td>97</td> </tr> <tr> <td rowspan="4"></td> <td rowspan="4">C<br/>T<br/>N<br/>M<br/>T</td> <td rowspan="4">Operable</td> <td>1-LI-63-176</td> <td>%</td> <td>0</td> </tr> <tr> <td>1-LI-63-177</td> <td>%</td> <td>0</td> </tr> <tr> <td>1-LI-63-178</td> <td>%</td> <td>2</td> </tr> <tr> <td>1-LI-63-179</td> <td>%</td> <td>0</td> </tr> </table> | RWST Level and CNTMT Level for Auto Swapover Cold Leg during SI | R<br>W<br>S<br>T | Operable | 1-LI-63-50 | %          | 99 | 1-LI-63-51 | % | 98 | 1-LI-63-52 | % | 91 | 1-LI-63-53 | % | 97 |  | C<br>T<br>N<br>M<br>T | Operable | 1-LI-63-176 | % | 0 | 1-LI-63-177 | % | 0 | 1-LI-63-178 | % | 2 | 1-LI-63-179 | % | 0 | <b>Critical Step</b><br><b>(Shaded portions critical)</b> |
| RWST Level and CNTMT Level for Auto Swapover Cold Leg during SI | R<br>W<br>S<br>T   |   |                  |          | Operable   | 1-LI-63-50 | %  | 99         |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   |  |   |                  |          |            | 1-LI-63-51 | %  | 98         |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   |  |   |                  |          |            | 1-LI-63-52 | %  | 91         |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   |  | 1-LI-63-53  | %                | 97       |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   | C<br>T<br>N<br>M<br>T  | Operable  | 1-LI-63-176      | %        | 0          |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   |  |   | 1-LI-63-177      | %        | 0          |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   |  |   | 1-LI-63-178      | %        | 2          |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
|   |  |   | 1-LI-63-179      | %        | 0          |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
| Evaluators Note   | If asked by applicant for the current indications for RWST level, respond that the indications are as listed in the table.   |   |                  |          |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
| Evaluators Note   | If asked by applicant for the current indications for Containment Sump level, respond that the indications are as listed in the table.   |   |                  |          |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
| EXAMINER NOTE:  | If asked the color of the placard for 1-LI-63-52 (to deduce if it is a PAMS instrument), respond that it is a white placard.   |   |                  |          |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |
| <u>Comment</u>  |  |   |                  |          |            |            |    |            |   |    |            |   |    |            |   |    |  |                       |          |             |   |   |             |   |   |             |   |   |             |   |   |   |

|                         |  |             |
|-------------------------|--|-------------|
| <b>Terminating Cue:</b> | <b>When the examinee determines acceptance criteria is NOT met, provide the following cue, "Another Operator will complete the remaining steps of this procedure."</b> | <b>STOP</b> |
|-------------------------|--|-------------|

**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 has been operating at 100% rated thermal power and has been stable for the last 30 days. No LCO entries at this time.
2. Portions of the field data have been entered by ROs and AUOs.
3. Data takers are present.
4. You are the Unit Supervisor and the Shift Manager has assigned you to review only the data that is currently logged on 1-SI-OPS-000-002.0, "Shift Log, Appendix A" for the 0630-1830 shift for discrepancies and take appropriate action(s) if any, once the review is complete.

### **INITIATING CUES:**

1. The Shift Manager directs you to review the data logged on the sections of Appendix A. (Another SRO will review the rest of the SI-2 data)
2. When you have finished reviewing the assigned pages of Appendix A, Identify and address any deviations on the Chronological Test Log.
3. Notify the Shift Manager when you have completed your task.

**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**

## **SRO ADMIN A.2**

### **Evaluate Arc Clothing Requirements and Tag Flash Verification Requirements**

**SRO**  
**JOB PERFORMANCE MEASURE**

**Task:** Evaluate Arc Clothing Requirements and Tag Verification Requirements

**Task #:** 3420320302

**Task Standard:** The examinee determines the minimum protective clothing requirements for manipulating electrical breakers of a Flash Hood (ATPV 100 or 100 cal) and Flash Suit (ATPV 100 or 100 cal) during breaker manipulation and that independent verification is required when placing tags.

**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:**  15 min  **Total Time:** \_\_\_\_\_

**Performance Time:** **Start Time:** \_\_\_\_\_ **Finish Time:** \_\_\_\_\_

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**COMMENTS**

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**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. NPG SPP-10.2, Clearance Procedure to Safely Control Energy
2. NPG-SPP-10.3, Verification Program
3. TI-300, Electrical Arc Flash Personal Protective Equipment & Protection Boundary Matrices
4. Copy of clearance 2- 82-1807

**References:**

|    | Reference    | Title   | Rev No. |
|----|--------------|---|---------|
| 1. | NPG SPP-10.2 | Clearance Procedure to Safely Control Energy                                      | 1       |
| 2. | NPG-SPP-10.3 | Verification Program  | 0       |
| 3. | TI-300       | Electrical Arc Flash Personal Protective Equipment & Protection Boundary Matrices | 19      |
| 4. | 0-GO-10      | ELECTRICAL APPARATUS OPERATION  | 45      |

=====

***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 Mode 1
2. Clearance 2- 82-1807 is being developed on Diesel 2A2 Starting Air Compressor.
3. The clearance will require opening Diesel 2A2 Starting Air Compressor breaker located on Diesel Aux Board 2A1-A.

**INITIATING CUES:**

1. You are the WCC SRO and will complete developing clearance 2- 82-1807
2. You will identify:
  - a. The protective clothing requirements for the individual performing the breaker manipulation
  - b. The verification requirements for the actual placement of the clearance cards.
3. Inform the evaluator when you are complete.

Start Time \_\_\_\_\_

|                  |  |                      |
|------------------|--|----------------------|
| STEP 1 :         | Obtain a copy of clearance 2- 82-1807.   | ___ SAT<br>___ UNSAT |
| <u>Standard:</u> | Copy of clearance 2- 82-1807 is obtained |                      |
| <u>Cue</u>       | Provide a copy of clearance 2- 82-1807.  |                      |
| <u>Comment</u>   |  |                      |

|                  |   |                      |
|------------------|---|----------------------|
| STEP 2 :         | Obtain a copy of TI-300, Electrical Arc Flash Personal Protective Equipment & Protection Boundary Matrices                  | ___ SAT<br>___ UNSAT |
| <u>Standard:</u> | Copy of TI-300, Electrical Arc Flash Personal Protective Equipment & Protection Boundary Matrices is obtained               |                      |
| <u>Cue</u>       | When directed, provide a copy of TI-300, Electrical Arc Flash Personal Protective Equipment & Protection Boundary Matrices. |                      |
| <u>Comment</u>   |   |                      |

| <p><b>STEP 3 :</b></p>                 | <p>Determine the MINIMUM Arc Flash protective clothing requirements above normal PPE for the individual opening Diesel 2A2 Starting Air Compressor breaker.</p>  | <p>___ SAT<br/>___ UNSAT<br/><b>Critical Step</b></p> |                           |  |                           |  |                           |                                   |                                    |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
|--|--|---|---------------------------|--|---------------------------|--|---------------------------|-----------------------------------|------------------------------------|--|--|----------------------------------|----------------------|----------------------|-----------------------|-----------------------------------|------------------------------------|--|------|------|-----|--|--|--|---|--|---|--|
| <p><u>Standard:</u></p>                | <p>Examinee determines the MINIMUM Arc Flash protective clothing requirements above normal PPE for the individual opening Diesel 2A2 Starting Air Compressor breaker is a Flash Hood (ATPV 100 or 100 cal) and a Flash Suit (ATPV 100 or 100 cal).</p>   |   |                           |  |                           |  |                           |                                   |                                    |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
| <p><u>Comment</u></p>                  |  |   |                           |  |                           |  |                           |                                   |                                    |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
| <p><u>Examiner Note:</u></p>           | <p>The reference for the MINIMUM Arc Flash protective clothing requirements is contained in TI-300, Electrical Arc Flash Personal Protective Equipment &amp; Protection Boundary Matrices Appendix A (Page 7 of 24)</p>  |   |                           |  |                           |  |                           |                                   |                                    |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
| <p><u>Examiner Note:</u></p>           | <p style="text-align: center;"><b>Appendix A<br/>(Page 7 of 24)</b></p> <p style="text-align: center;"><b>ARC FLASH PERSONAL PROTECTIVE EQUIPMENT (PPE)/PROTECTIVE BOUNDARY MATRICES</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Location</th> <th rowspan="2">Working Distance (inches)</th> <th rowspan="2">Incident Energy (Cal/cm<sup>2</sup>)</th> <th rowspan="2">Arc Flash Boundary (feet)</th> <th colspan="6">Required PPE</th> </tr> <tr> <th>Daily Wear<sup>1</sup> (ATPV 8)</th> <th>Face Shield (ATPV 8)</th> <th>Flash Hood (ATPV 31)</th> <th>Flash Hood (ATPV 100)</th> <th>Flash Suit<sup>2</sup> (ATPV 31)</th> <th>Flash Suit<sup>2</sup> (ATPV 100)</th> </tr> </thead> <tbody> <tr> <td>480V DSL AUX BD 2A1A<br/>2-BDC-201-FQ-A</td> <td>18.0</td> <td>32.6</td> <td>9.9</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> </tr> </tbody> </table> | Location  | Working Distance (inches) | Incident Energy (Cal/cm <sup>2</sup> ) | Arc Flash Boundary (feet) | Required PPE                           |                           |                                   |                                    |  |  | Daily Wear <sup>1</sup> (ATPV 8) | Face Shield (ATPV 8) | Flash Hood (ATPV 31) | Flash Hood (ATPV 100) | Flash Suit <sup>2</sup> (ATPV 31) | Flash Suit <sup>2</sup> (ATPV 100) | 480V DSL AUX BD 2A1A<br>2-BDC-201-FQ-A | 18.0 | 32.6 | 9.9 |  |  |  | X |  | X |  |
| Location                               | Working Distance (inches)  |   |                           |  |                           | Incident Energy (Cal/cm <sup>2</sup> ) | Arc Flash Boundary (feet) | Required PPE                      |                                    |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
|  |  | Daily Wear <sup>1</sup> (ATPV 8)                      | Face Shield (ATPV 8)      | Flash Hood (ATPV 31)                   | Flash Hood (ATPV 100)     |  |                           | Flash Suit <sup>2</sup> (ATPV 31) | Flash Suit <sup>2</sup> (ATPV 100) |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
| 480V DSL AUX BD 2A1A<br>2-BDC-201-FQ-A | 18.0   | 32.6  | 9.9                       |  |                           |  | X                         |                                   | X                                  |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |
| <p><u>Examiner Note:</u></p>           | <p>This step is critical because it identifies the minimum PPE required to complete the breaker manipulation.</p>  |   |                           |  |                           |  |                           |                                   |                                    |  |  |                                  |                      |                      |                       |                                   |                                    |  |      |      |     |  |  |  |   |  |   |  |

|                  |  |                      |
|------------------|--|----------------------|
| <u>STEP 4</u> :  | Obtain a copy of NPG-SPP-10.3, Verification Program                  | ___ SAT<br>___ UNSAT |
| <u>Standard:</u> | Copy of NPG-SPP-10.3, Verification Program is obtained.              |                      |
| <u>Cue</u>       | When directed, provide a copy of NPG-SPP-10.3, Verification Program. |                      |
| <u>Comment</u>   |  |                      |

|                         |  |  |
|-------------------------|--|--|
| <u>STEP 5</u> :         | Determine the MINIMUM verification requirements for the actual placement of the clearance cards  | ___ SAT<br>___ UNSAT<br><b>Critical Step</b> |
| <u>Standard:</u>        | Examinee determines the MINIMUM verification requirements for the actual placement of the clearance cards is independent verification  |  |
| <u>Comment</u>          |  |  |
| <u>Examiner Note:</u>   | <p><b>3.4.4 Independent Verification Requirements</b></p> <p>IV is used to confirm that an activity or condition has been implemented in conformance with specified requirements. The individual performing the IV shall physically check the condition without relying on observation or verbal confirmation by the initial performer. However, the independent verifier may be involved in unrelated portions of the same activity. IV is required for the following (except for components which meet the criteria in Section 3.4.5 for concurrent verification):</p> <p>E. Placement and release of hold order tags.</p> |  |
| <u>Examiner Note:</u>   | The reference for the MINIMUM is NPG-SPP-10.3, Verification Program step 3.4.4.E   |  |
| <u>Examiner Note:</u>   | This step is critical because it identifies the minimum verification requirement for clearance placement.  |  |
| <b>Terminating Cue:</b> | <b>The task is complete when the Examinee returns the cue sheet to the examiner.</b>   | <b>STOP</b>                                  |

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 Mode 1
2. Clearance 2- 82-1807 is being developed on Diesel 2A2 Starting Air Compressor.
3. The clearance will require opening Diesel 2A2 Starting Air Compressor breaker located on Diesel Aux Board 2A1-A.

### **INITIATING CUES:**

1. You are the WCC SRO and will complete developing clearance 2- 82-1807
2. You will identify:
  - a. The protective clothing requirements for the individual performing the breaker manipulation
  - b. The verification requirements for the actual placement of the clearance cards.
3. Inform the evaluator when you are 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**

## **SRO ADMIN A.3**

### **Pre Job Analysis for Emergent Work in the RCA**

**SRO  
JOB PERFORMANCE MEASURE**

**Task:** Pre Job Analysis for Emergent Work in the RCA

**Task #:** 3430290302

**Task Standard:** Examinee calculates a total dose of 160 mrem and based on that calculation, applies the result to On Line Work Management Appendix A to conclude the evolution is a category "High Risk."

**Time Critical Task:** YES: \_\_\_\_\_ NO:  X

**K/A Reference/Ratings:** 2.3.13 (3.8)

**Method of Testing:**

**Simulated Performance:** \_\_\_\_\_ **Actual Performance:**  X

**Evaluation Method:**

**Simulator** \_\_\_\_\_ **In-Plant** \_\_\_\_\_ **Classroom**  X

**Main Control Room** \_\_\_\_\_ **Mock-up** \_\_\_\_\_

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**Performer:** \_\_\_\_\_  
Trainee Name

**Evaluator:** \_\_\_\_\_ / \_\_\_\_\_  
Name / Signature DATE

**Performance Rating:** SAT: \_\_\_\_\_ UNSAT: \_\_\_\_\_

**Validation Time:**  14 min  **Total Time:** \_\_\_\_\_

**Performance Time:** **Start Time:** \_\_\_\_\_ **Finish Time:** \_\_\_\_\_

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**COMMENTS**

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**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. NPG-SPP-07.1, On Line Work Management
2. Calculator
3. Survey map A216 U-1 Pipe Chase
4. Survey map A217 U-2 Pipe Chase
5. Survey map 408 U-1 Mixed Bed Valve Gallery
6. Survey map 417 U-2 Mixed Bed Valve Gallery

**References:**

|    | Reference    | Title                   | Rev No. |
|----|--------------|-------------------------|---------|
| 1. | NPG-SPP-07.1 | On Line Work Management | 3       |
| 2. | RCI-3        | PERSONNEL MONITORING    | 48      |

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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 MODE 1
2. You are the WCC SRO and are performing a review of a work package to be merged into the schedule in two weeks.
3. The work is 2.5 feet from valve 2-63-750 Test Conn on RHR Suction from RWST located in the Auxiliary Bldg 653 elevation pipe chase.
4. The total time to perform the job is 12 min

**INITIATING CUES:**

1. Calculate the total dose that the worker will accumulate performing the job
2. Using the total dose, perform an Impact Assessment of the level of risk while performing the task using NPG-SPP-07.1 On Line Work Management, Appendix A On Line Work Management Work Management Process Description.
3. Inform the evaluator when you are complete.

Start Time \_\_\_\_\_

|                             |  |   |
|-----------------------------|--|---|
| <p>STEP 1 :</p>             | <p>Obtain the correct copy of a Survey map.</p>  | <p>___ SAT<br/> ___ UNSAT<br/> <b>Critical step</b></p> |
| <p><u>Standard:</u></p>     | <p>Examinee discriminates and chooses Survey map A217 U-2 Pipe Chase of the four given.</p>  |   |
| <p><u>Cue</u></p>           | <p>Provide a copy of the following survey maps:</p> <ul style="list-style-type: none"> <li>• Survey map A216 U-1 Pipe Chase</li> <li>• Survey map A217 U-2 Pipe Chase</li> <li>• Survey map 408 U-1 Mixed Bed Valve Gallery</li> <li>• Survey map 417 U-2 Mixed Bed Valve Gallery</li> </ul> |   |
| <p><u>Comment</u></p>       |  |   |
| <p><u>Examiner Note</u></p> | <p>Both the Unit 1 and Unit 2 Pipe Chase and Mixed Bed Valve Gallery survey maps are provided.</p>   |   |
| <p><u>Examiner Note</u></p> | <p>This step is critical because the examinee needs to differentiate between the survey maps to get the correct results.</p>   |   |

|                      |   |  |
|----------------------|---|--|
| STEP 2 :             | Calculate the dose  | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT<br><b>Critical step</b> |
| <u>Standard:</u>     | Examinee calculates a total dose of 160 mrem will be accumulated performing the task.   |  |
| <u>Comment</u>       |   |  |
| <u>Examiner Note</u> | This step is critical because the examinee needs to calculate the correct dose to get the correct result from the Impact Assessment.  |  |
| <u>Examiner Note</u> | <p>The work will be performed near valve 2-63-750 Test Conn on RHR Suction from RWST. General area dose rate from survey map A217 from a hot spot in the area is 800 mr/hr. The job as indicated from the initiating cue will take 12 minutes.</p> <p>800 mrem/hr X 60 min/1 hr ÷ 12 min = 160 mrem</p> |  |

|                  |  |  |
|------------------|--|--|
| STEP 3 :         | Obtain a copy of NPG-SPP-07.1 On Line Work Management Appendix A On Line Work Management Work Management Process Description.    | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u> | Copy of NPG-SPP-07.1 On Line Work Management Appendix A On Line Work Management Work Management Process Description is obtained. |  |
| <u>Cue</u>       | Provide a copy of NPG-SPP-07.1 On Line Work Management Appendix A On Line Work Management Work Management Process Description.   |  |
| <u>Comment</u>   |  |  |

| STEP 4 :                | Matrix 1 (Impact Assessment)  |            |            |           | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT<br><b>Critical Step</b> |
|-------------------------|---|------------|------------|-----------|--|
|                         | Category  | High       | Medium     | Low       |  |
|                         | Radiation Dose (5)  | ≥ 150 mrem | ≥ 100 mrem | ≥ 50 mrem | < 50 mrem  |
| <u>Standard:</u>        | The examinee performs an impact assessment and determines the risk level to be HIGH due to the projected dose of ≥ 150 mrem for the job.  |            |            |           |  |
| <u>Comment</u>          |   |            |            |           |  |
| <u>Examiner Note</u>    | The first matrix (Matrix 1) is used to determine a level of risk in performance of the task. The horizontal axis represents the level of risk, decreasing from left to right. The vertical axis is a list of items for consideration and includes the traditional risk considerations from risk assessment colors and LCO restraints to less traditional risk considerations such as task frequency, worker experience, and task complexity.  |            |            |           |  |
| <u>Examiner Note</u>    | (5) <b>Radiation Dose:</b> Setting site-specific thresholds to trigger the need for enhanced preparation and oversight for planned activities is critical in managing overall risk, not only from the standpoint of personnel protection but also for out-of-service time. Higher dose activities can increase the amount of time needed for implementation. Required activities such as ALARA briefings, radiation surveys after components are isolated and drained, and contamination checks for equipment breaches can impact out-of-service time. In addition, worker stay times may be limited by area dose rates or required personnel protective equipment. |            |            |           |  |
| <u>Examiner Note</u>    | This step is critical because the examinee needs to make the determination of high risk in order to achieve the terminal standard.  |            |            |           |  |
| <b>Terminating Cue:</b> | <b>The task is complete when the Examinee returns the cue sheet to the examiner.</b>  |            |            |           | <b>STOP</b>  |

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 MODE 1
2. You are the WCC SRO and are performing a review of a work package to be merged into the schedule in two weeks.
3. The work is 2.5 feet from valve 2-63-750 Test Conn on RHR Suction from RWST located in the Auxiliary Bldg 653 elevation pipe chase.
4. The total time to perform the job is 12 min

### **INITIATING CUES:**

1. Calculate the total dose that the worker will accumulate performing the job
2. Using the total dose, perform an Impact Assessment of the level of risk while performing the task using NPG-SPP-07.1 On Line Work Management, Appendix A On Line Work Management Work Management Process Description.
3. Inform the evaluator when you are 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**

## **SRO ADMIN A.4**

### **Evaluate Conditions For Emergency Classification**

**SRO  
JOB PERFORMANCE MEASURE**

**Task:** Evaluate Conditions For Emergency Classification

**Task #:** 3440030302

**Task Standard:** Classification of Site Area Emergency, EAL Number 1.1.1 P and 1.2.2 P is declared within 15 minutes of starting the task.  
The TVA Initial Notification for Site Area Emergency is initiated within 14 minutes of event declaration.

**Time Critical Task:** YES:  NO:

**K/A Reference/Ratings:** 2.4.41 (4.6)

**Method of Testing:**

**Simulated Performance:**  **Actual Performance:**

**Evaluation Method:**

**Simulator**  **In-Plant**  **Classroom**

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

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**Performer:** \_\_\_\_\_  
Trainee Name

**Evaluator:** \_\_\_\_\_ / \_\_\_\_\_  
Name / Signature DATE

**Performance Rating:** SAT:  UNSAT:

**Validation Time:** 21 min **Total Time:** \_\_\_\_\_

**Performance Time:** **Start Time:** \_\_\_\_\_ **Finish Time:** \_\_\_\_\_

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**COMMENTS**

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**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. EPIP- 1, EMERGENCY PLAN CLASSIFICATION MATRIX
2. EPIP-2 NOTIFICATION OF UNUSUAL EVENT
3. EPIP-4, SITE AREA EMERGENCY
4. 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 | 45      |
| 2. | EPIP-2    | NOTIFICATION OF UNUSUAL EVENT        | 30      |
| 3. | EPIP-4    | SITE AREA EMERGENCY                  | 32      |

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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 currently in a NOUE based upon system degradation, 2.1 due to loss of both channels of control room annunciators as well as the annunciator printer and CRT.
2. EPIP-2, NOTIFICATION OF UNUSUAL EVENT is in progress at step 3.2.3
3. Subsequently a Reactor trip occurred
4. Safety Injection actuated and E-1, Loss of Reactor or Secondary Coolant, was entered.
5. FR-C.2, Response to Degraded Core Cooling, is being performed due to an Orange condition on the CSF Status Trees.
6. ICS is available.
7. The ODS is NOT available.
8. The TSC is NOT operational.
9. Emergency Paging System (EPS) is not available in MCR.
10. There are no indications of an Onsite Security Event.

**INITIATING CUES:**

1. You are the Site Emergency Director in the Control Room until the TSC is staffed.
2. Given the initial conditions take all required actions as the Site Emergency Director.
3. Notify the examiner when all required actions are complete.
4. There is an element of this task that is Time Critical.

Start Time \_\_\_\_\_

|                  |   |  |
|------------------|---|--|
| STEP 1 :         | Obtain a copy of EPIP-2 NOTIFICATION OF UNUSUAL EVENT                               | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u> | Examinee obtains a copy of EPIP-2 NOTIFICATION OF UNUSUAL EVENT.                    |  |
| <u>Cue</u>       | Provide a copy of EPIP-2 NOTIFICATION OF UNUSUAL EVENT marked up through step 3.2.3 |  |
| <u>Comment</u>   |   |  |

|                      |   |  |
|----------------------|---|--|
| STEP 2 :             | Obtain a copy of EPIP-1, EMERGENCY PLAN CLASSIFICATION MATRIX.                              | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u>     | Examinee obtains a copy of EPIP-1, EMERGENCY PLAN CLASSIFICATION MATRIX.                    |  |
| <u>Cue</u>           | Provide a copy of EPIP-1, EMERGENCY PLAN CLASSIFICATION MATRIX.                             |  |
| <u>Comment</u>       |   |  |
| <u>Examiner Note</u> | Annotate start time when the examinee acknowledges the task is understood. Start time _____ |  |

|                       |   |                                 |
|-----------------------|---|---------------------------------|
| <u>Procedure Note</u> | <p><b><u>INSTRUCTIONS</u></b></p> <div style="border: 1px solid black; padding: 5px;"> <p><b>Note:</b> A condition is considered to be <b>MET</b> if, in the judgment of the SED, the condition will be <b>MET IMMEDIATELY</b> (i.e.: with two hours). The classification shall be made as soon as this determination is made.</p> </div> |                                 |
| <u>STEP 3</u> :       | <ol style="list-style-type: none"> <li>1. In the matrix to the left, REVIEW the initiating conditions in all three barrier columns and circle the conditions that are MET.</li> <li>2. In each of the three barrier columns, IDENTIFY if any Loss or Potential Loss <b>INITIATING CONDITIONS</b> have been MET.</li> </ol>                | <p>___ SAT</p> <p>___ UNSAT</p> |
| <u>Standard:</u>      | Examinee reviews the EMERGENCY PLAN CLASSIFICATION MATRIX and identifies initiating conditions provided in the initial conditions.  |                                 |
| <u>Comment</u>        |   |                                 |

|                              |   |   |
|------------------------------|---|---|
| <p>STEP 4 :</p>              | <p>3. COMPARE the number of barrier Losses and Potential losses to the criteria below and make the appropriate declaration.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p><b>Emergency Class Criteria</b></p> <hr/> <p><b><u>Site Area Emergency</u></b></p> <p><b>LOSS or Potential LOSS of any two barriers</b></p> </div>  | <p>___ SAT<br/> ___ UNSAT<br/> <b>Critical Step</b></p> |
| <p><u>Standard:</u></p>      | <p>The examinee compares barrier losses and classifies the event as a Site Area Emergency within 15 minutes of starting the task.</p> <p>Potential LOSS of the Fuel Clad Barrier 1.1.1 due to Core Cooling Orange (FR-C.2) entry<br/> <b>and</b><br/> Potential LOSS of the RCS Barrier 1.2.2. Non Isolatable RCS leak exceeding the capacity of one charging pump in the normal charging alignment <b>OR RCS</b> leakage results in entry into E-1</p> |   |
| <p><u>Comment</u></p>        |   |   |
| <p><u>EXAMINER NOTE:</u></p> | <p>This is a critical step because of the requirement to arrive at the correct classification within 15 minutes.</p>  |   |
| <p><u>EXAMINER NOTE:</u></p> | <p>Annotate the stop time for the event classification here. _____</p>  |   |
| <p><u>EXAMINER NOTE:</u></p> | <p>Examinee continues with the task to complete the State Notification Form using EPIP-4, SITE AREA EMERGENCY. The critical time element continues.</p>   |   |
| <p><u>EXAMINER NOTE:</u></p> | <p>Annotate the start time for the State Notification here. _____</p>   |   |
| <p><u>EXAMINER NOTE:</u></p> | <p>The start data is provided to the examinee on the JPM briefing sheet.</p>  |   |
| <p><u>EXAMINER NOTE:</u></p> | <p>Examinee transitions to EPIP-4 SITE AREA EMERGENCY</p>   |   |

|                  |   |  |
|------------------|---|--|
| STEP 5 :         | Obtain a copy of EPIP-4, SITE AREA EMERGENCY            | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u> | Examinee obtains a copy of EPIP-4, SITE AREA EMERGENCY. |  |
| <u>Cue</u>       | Provide a copy of EPIP-4, SITE AREA EMERGENCY           |  |
| <u>Comment</u>   |   |  |

|                       |   |  |
|-----------------------|---|--|
| <u>Procedure Note</u> | <div data-bbox="347 802 1263 873" style="border: 1px solid black; padding: 2px;"> <p><b>NOTE:</b> IF there are personnel injuries, <b>THEN IMPLEMENT</b> EPIP-10, "Medical Emergency Response."</p> </div> <div data-bbox="347 894 1263 987" style="border: 1px solid black; padding: 2px;"> <p><b>NOTE:</b> IF there are immediate hazards to plant personnel, <b>THEN</b> consider immediately implementing EPIP-8 "Personnel Accountability and Evacuation" in parallel with this procedure</p> </div> |  |
| STEP 6 :              | <p><b>3.1 SITE AREA EMERGENCY DECLARATION BY THE MAIN CONTROL ROOM</b></p> <p>Upon classifying events as a <u>SITE AREA EMERGENCY</u> the SM/SED shall:</p> <p><b>[1] IF TSC is OPERATIONAL, (SED transferred to TSC), THEN GO TO Section 3.2 (Page 7).</b></p> <p><b>[2] RECORD time of Declaration.</b></p> <p><b>[3] ACTIVATE Emergency Paging System (EPS) as follows:</b></p>  | <input type="checkbox"/> SAT<br><input type="checkbox"/> UNSAT |
| <u>Standard:</u>      | The examinee addresses steps 3.1.1 through 3.1.3  |  |
| <u>Comment</u>        |   |  |

|                              |  |                               |
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| <p>STEP 7 :</p>              | <p><b>3.1 SITE AREA EMERGENCY DECLARATION BY THE MAIN CONTROL ROOM</b><br/> Upon classifying events as a <u>SITE AREA EMERGENCY</u> the SM/SED shall:<br/> <b>[4] COMPLETE</b> Appendix B, TVA Initial Notification for Site Area Emergency.</p> | <p>___ SAT<br/> ___ UNSAT</p> |
| <p><u>Standard:</u></p>      | <p>The examinee completes an Appendix B, TVA Initial Notification for Site Area Emergency with no errors on items noted with an * on the answer key within 14 minutes of event declaration.</p>  | <p><b>Critical Step</b></p>   |
| <p><u>EXAMINER NOTE:</u></p> | <p>This is a critical step because of the requirement to provide notification of an event to the state within 15 minutes.</p>  |                               |
| <p><u>Comment</u></p>        |  |                               |

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| <p>STEP 8 :</p>         | <p><b>3.1 SITE AREA EMERGENCY DECLARATION BY THE MAIN CONTROL ROOM</b><br/> Upon classifying events as a <u>SITE AREA EMERGENCY</u> the SM/SED shall:<br/> <b>[5] FAX</b> completed Appendix B to ODS.<br/> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;">5-751-8620 (Fax)</div> <b>[6] CALL and READ</b> ODS completed Appendix B.<br/> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;">ODS: Ringdown Line or<br/> 5-751-1700 or 5-751-2495 or 9-785-1700</div> </p> | <p>___ SAT<br/> ___ UNSAT</p> |
| <p><u>Standard:</u></p> | <p>The examinee recognizes steps 5 and 6 are N/A based on the initial conditions.</p>   |                               |
| <p><u>Comment</u></p>   |   |                               |

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| <b>STEP 8 :</b><br><br> | <b>3.1 SITE AREA EMERGENCY DECLARATION BY THE MAIN CONTROL ROOM</b><br>Upon classifying events as a <u>SITE AREA EMERGENCY</u> the SM/SED shall:<br><b>[7] IF ODS CANNOT</b> be contacted within <u>10 minutes</u> of the declaration, <b>THEN</b><br><br><b>[a] CONTACT</b> Tennessee Emergency Management Agency (TEMA) <b>AND READ</b> Completed Appendix B. <div style="text-align: right; margin-top: 10px;"> Initial _____ Time _____ </div> | ____ SAT<br>____ UNSAT<br><b>Critical Step</b> |
| <u>Standard:</u>        | The examinee simulates initiating the process of notifying TEMA (state of Tennessee).within 14 minutes of event declaration.   |  |
| <u>Examiner Note:</u>   | This is a critical step because of the requirement to provide notification of an event to the state within 15 minutes.   |  |
| <u>Examiner Note:</u>   | Annotate the stop time for the initiation of state notification._____  |  |
| <u>Comment</u>          |  |  |

|                         |   |             |
|-------------------------|---|-------------|
| <b>Terminating Cue:</b> | <b>The task is complete when the Examinee initiates the process of notifying TEMA (state of Tennessee).</b> | <b>STOP</b> |
|-------------------------|---|-------------|

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 currently in a NOUE based upon system degradation, 2.1 due to loss of both channels of control room annunciators as well as the annunciator printer and CRT.
2. EPIP-2, NOTIFICATION OF UNUSUAL EVENT is in progress at step 3.2.3
3. Subsequently a Reactor trip occurred.
4. Safety Injection actuated and E-1, Loss of Reactor or Secondary Coolant, was entered.
5. FR-C.2, Response to Degraded Core Cooling, is being performed due to an Orange condition on the CSF Status Trees.
6. ICS is available.
7. The ODS is NOT available.
8. The TSC is NOT operational.
9. Emergency Paging System (EPS) is not available in MCR.
10. There are no indications of an Onsite Security Event.

### **INITIATING CUES:**

1. You are the Site Emergency Director in the Control Room until the TSC is staffed.
2. Given the initial conditions take all required actions as the Site Emergency Director.
3. Notify the examiner when all required actions are complete.
4. There is an element of this task that is Time Critical.

**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.**