


Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Evaluate Shift Log Reading Data Per N2-OSP-LOG-D001

Revision: NRC 2005

Task Number: 3410320303

Approvals:

 \_\_\_\_\_  
General Supervisor Date 4/21/05  
Operations Training (Designee)

NA EXAMINATION SECURITY \_\_\_\_\_  
General Supervisor Date  
Operations (Designee)

NA EXAMINATION SECURITY \_\_\_\_\_  
Configuration Control Date

Performer: \_\_\_\_\_ (RO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR OR OTHER DESIGNATED AREA**

Expected Completion Time: 25 minutes Time Critical Task: NO Alternate Path Task: NO

Start Time: \_\_\_\_\_ Stop Time: \_\_\_\_\_ Completion Time: \_\_\_\_\_

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator:  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. N2-OSP-LOG-D001
2. K/A 2.1.18 Ability to make accurate / clear and concise logs / records / status boards / and reports (2.9).

Tools and Equipment:

1. Calculator.

Task Standard: Identify Jet pump number 13 differential pressure is outside of limits and informs CRS / SM

Initial Conditions:

1. The plant is operating at 100 % power
2. N2-OSP-LOG-D001 is in progress
3. Ask the operator for any questions.

Initiating cue:

“(Operator's name), given the data provided on JPM Attachment 1 and applicable section of N2-OSP-LOG-D001 enter the instrument readings and take appropriate actions based on those checks.

Performance Steps	Standard	Grade	Comments
<p>1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i></p> <p><b>EVALUATOR to provide JPM Attachment 1 Data Sheet and copy of N2-OSP-LOG-D001 Attachment 10 to candidate.</b></p>	<p>Proper communications used for repeat back (GAP-OPS-O1)</p>	<p>Sat/Unsat</p>	<div style="border: 1px solid black; height: 200px;"></div>
<p><b>RECORD START TIME _____</b></p>			
<p>2. •Obtain a copy of the reference procedure and review/utilize the correct section.</p>	<p><input type="checkbox"/> N2-OSP-LOG-D001 Attachment 10, Two loop jet pump operability verification</p>	<p>Sat/Unsat</p>	<div style="border: 1px solid black; height: 80px;"></div>
<p>3. •Use Data from Att.1 (Item 1 &amp; 2) transfer Recirculation pump FCV position data to Att.10 Step 2.1.1</p>	<p><input type="checkbox"/> Determines that Recirc loop B FCV is &lt; 85% and Recirc loop A FCV is &lt; 95%</p> <p><input type="checkbox"/> Records FCV positions in Table 10-1. FCV A = 68%</p> <p>2. FCV B = 76%</p>	<p>Sat/Unsat</p>	<div style="border: 1px solid black; height: 120px;"></div>

Performance Steps	Standard	Grade	Comments
4. • Use Data from Att.1 (Item 3 & 4) transfer B22-R611A and B22-611B Sum Jet Pmp Flo to Att 10 step 2.2.1	<input type="checkbox"/> Transfers data to Table 10-1 B22-R611A = 52% <input type="checkbox"/> Transfers data to Table 10-2. B22-R611B = 52%	Sat/Unsat	
5. •Using the Recirc FCV position for loop A recorded in table 10-1 obtain the Jet pump loop flow high and low limits for loop A from figure 10-1 and record them in table 10-1 step 2.3.2.a	For Recirc A FCV = 68%  <input type="checkbox"/> Uses figure 10-1 Records High and Low limits in table 10-1 <input type="checkbox"/> HIGH Limit ~ 56.5 (56-57) <input checked="" type="checkbox"/> Low Limit ~ 46	Sat/Unsat	
6. • Using the Recirc FCV position for loop B recorded in table 10-1 obtain the Jet pump loop flow high and low limits for loop B from figure 10-2 and record them in table 10-1step 2.3.2.b	For Recirc B FCV = 76%  <input type="checkbox"/> Uses figure 10-2 Records High and Low limits in table 10-1 <input type="checkbox"/> High limit = ~ 56 <input type="checkbox"/> Low limit = ~ 46	Sat/Unsat	
7. •Compare the actual Loop A and Loop B Jet pump flows to the respective Loop High and Low limits indicate in step 2.4 whether the actual values fall within the limits Step 2.4	<input type="checkbox"/> Reviews the data in table 10-1 and recognized the values are within the limits	Sat/Unsat	
8. Obtain Recirc Loop Drive Flows from Att 1 and records them in table 10-2 ( Item 5 &6) Step 3.2.1	<input type="checkbox"/> Transfers data to Table 10-2 <input type="checkbox"/> B35-R614 LOOP A = 42,000 <input type="checkbox"/> B35-R614 LOOP B = 41,000	Sat/Unsat	
9. Using the Recirc Loop A drive Flow recorded in Table 10-2 obtain the jet pump loop flow High and Low limits for Loop A from Figure 10-3 Step 3.3.1	Uses figure 10-3 to obtain High and Low limits and records values in Table 10-2 High limit = ~ 55.5 (55-56) Low limit = ~ 45.5 (45-46)	Sat/Unsat	

Performance Steps	Standard	Grade	Comments
10. Using the Recirc Loop B drive Flow recorded in Table 10-2 obtain the jet pump loop flow High and Low limits for Loop B from Figure 10-4 Step 3.3.2	Uses figure 10-4 to obtain High and Low limits and records values in Table 10-2 High limit = ~54.5 (54-55) Low limit = ~44.5 (44-45)	Sat/Unsat	
11. Compare the actual Loop A and Loop B Jet pump flows to the respective Loop High and Low limits as recorded in Table 10-2 and indicate whether the actual values fall within limits Step 3.4	Reviews data in Table 10-2 and recognizes that the actual values fall within the limits	<b>Pass/Fail</b>	
12. Use Data from Att.1 transfer value for each Jet pump ΔP in Loop A (Item 7) step 4.1	Transfers data to Table 10-3	Sat/Unsat	
13. Calculate Loop A Average Jet pump ΔP and record in table 10-3 Step 4.2	Calculates Loop A average ΔP and record in Table 10-3 Average = 41.5	Sat/Unsat	
14. Divide each Loop A jet pump ΔP by Loop A Average Jet pump ΔP and record resulting individual to average ΔP ratios in table 10-3 Step 4.3	Divides each jet pump ΔP by the average and record in table 10-3 Jet pump 1 = 1.036 Jet pump 2 = 0.867 Jet pump 3 = 0.964 Jet pump 4 = 0.964 Jet pump 5 = 1.108 Jet pump 6 = 1.157 Jet pump 7 = 0.964 Jet pump 8 = 0.964 Jet pump 9 = 0.964 Jet pump 10 = 1.012	Sat/Unsat	

<i>Performance Steps</i>	<i>Standard</i>	<i>Grade</i>	<i>Comments</i>
15. For all Jet pumps in Loop A compare each Jet pump's individual to average $\Delta P$ ratio to the Limits gives in Table 10-3 and indicate whether the actual values are within the limits Step 4.4	Compare results and recognizes that the actual limits are within the limits of Table 10-3	<b>Pass/Fail</b>	
16. Use Data from Att.1 transfer value for each Jet pump $\Delta P$ in Loop B (Item 7 ) Step 4.1	Transfers data to Table 10-3	Sat/Unsat	
17. Calculate Loop B Average Jet pump $\Delta P$ and record in table 10-3 Step 4.2	Calculates Loop B average $\Delta P$ and record in Table 10-3 Average = 39.1	Sat/Unsat	
18. Divide each Loop B jet pump $\Delta P$ by Loop B Average Jet pump $\Delta P$ and record resulting individual to average $\Delta P$ ratios in table 10-3 Step 4.3	Divides each jet pump $\Delta P$ by the average and record in table 10-3 Jet pump 11 = 1.023 Jet pump 12 = 0.972 Jet pump 13 = 0.767 Jet pump 14 = 0.972 Jet pump 15 = 1.125 Jet pump 16 = 1.176 Jet pump 17 = 1.023 Jet pump 18 = 0.946 Jet pump 19 = 1.023 Jet pump 20 = 0.972	Sat/Unsat	
19. For all Jet pumps in Loop B compare each Jet pump's individual to average $\Delta P$ ratio to the Limits gives in Table 10-3 and indicate whether the actual values are within the limits Step 4.4	Compare results and recognizes that the actual limit for Jet Pump 13 is not within the limits of Table 10-3	<b>Pass/Fail</b>	

Performance Steps	Standard	Grade	Comments
<p>20. Informs CRS / SM that Jet Pump 13 is not within the limits of Table 10-3</p> <p><b>Cue:</b> As CRS / SM inform candidate that appropriate actions will be taken for Jet pump 13</p> <p>End of JPM</p> <p><b>TERMINATING CUE:</b> Identify Jet pump number 13 differential pressure is outside of limits and informs CRS / SM.</p>	<p>CRS /SM informed to take actions for Jet pump 13</p>	<p><b>Pass/Fail</b></p>	

**RECORD STOP TIME** \_\_\_\_\_

**Initial Conditions:**

Initial Conditions:

1. The plant is operating at 100 % power
2. N2-OSP-LOG-D001 is in progress
3. Ask the operator for any questions.

**Initiating cue:**

“(Operator’s name), given the data provided on JPM Attachment 1 and applicable section of N2-OSP-LOG-D001 enter the instrument readings and take appropriate actions based on those checks.



**JPM Attachment 1**  
**N2-OSP-LOG-D001 Data Sheet**

Item #	Description	Value		
1	<b>2RCS-HC1603A</b> , RECIRC LOOP A FLOW CONTROL	68%		
2	<b>2RCS-HC1603B</b> , RECIRC LOOP B FLOW CONTROL	76%		
3	<b>B22-R611A</b> , RECIRC LOOP 1A SUM JET PMP FLO	52		
4	<b>B22-R611B</b> , RECIRC LOOP 1B SUM JET PMP FLO	52		
5	<b>B35-R614</b> RECIRC FLOW LOOP A	42,000		
6	<b>B35-R614</b> RECIRC FLOW LOOP B	41,000		
7	<b>Jet Pump Delta P Loop A</b>	<b>Jet Pump Delta P Loop B</b>		
	Jet pump 1	43	Jet pump 11	40
	Jet pump 2	36	Jet pump 12	38
	Jet pump 3	40	Jet pump 13	30
	Jet pump 4	40	Jet pump 14	38
	Jet pump 5	46	Jet pump 15	44
	Jet pump 6	48	Jet pump 16	46
	Jet pump 7	40	Jet pump 17	40
	Jet pump 8	40	Jet pump 18	37
	Jet pump 9	40	Jet pump 19	40
	Jet pump 10	42	Jet pump 20	38

**OK TO PROVIDE TO CANDIDATE**

<b>RECORD YOUR RESULTS BELOW</b>
Name:
Summary of Evaluation of data:
Summary Actions:

**DO NOT PROVIDE TO CANDIDATE**

<b>RECORD YOUR RESULTS BELOW</b>
Name:
Summary of Evaluation of data:  Actual Loop A and Loop B jet pump flows are within limits of Table 10-2  Loop A Jet Pumps are within limits of Table 10-3  Loop B Jet Pump 13 is NOT within specified limits of Table 10-3. All other jet pumps are within Table 10-3 limits.
Summary Actions:  Reported to CRS/SM

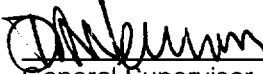
Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Perform Control Room System Verification Lineup

Revision: NRC 2005

Task Number:

Approvals:

 \_\_\_\_\_  
General Supervisor                      Date  
Operations Training (Designee)

4/21/05

NA EXAMINATION SECURITY  
General Supervisor                      Date  
Operations (Designee)

NA EXAMINATION SECURITY  
Configuration Control                      Date

Performer: \_\_\_\_\_ (RO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: PERFORM

Evaluation Location: SIMULATOR

Expected Completion Time: 20 minutes    Time Critical Task: NO    Alternate Path Task: NO

Start Time: \_\_\_\_\_                      Stop Time: \_\_\_\_\_                      Completion Time: \_\_\_\_\_

JPM Overall Rating:                      Pass                      Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)

Simulator

Simulator Set-up:

On P871, place both Div. 2 Service Water Pump Bay Unit Cooler Control Switches in Pull-to-Lock.  
On P871, place HVC\*FN2B in Pull-to-Lock and hang RED CLEARANCE TAG on control switch.

Directions to the Instructor/Evaluator:

Provide candidate with partially completed Attachment 3 of S-PM-D001. The 0630-1830 column of Attachment 3 should be completed up to Section 2.15, which is completed for items except Service Water Ventilation, Control Building Ventilation, Reactor Building Ventilation UC409s and Standby Gas Train. These are the items to be evaluated by the candidate.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. Operations Manual Section OM.2.2.
2. S-PM-D001.
3. N2-ARP-01 871308
4. N2-OP-58, Attachment 1
5. NUREG 1123, Rev. 2 K/A G 2.1.3 (3.0), Knowledge of Shift Turnover Practices

Tools and Equipment:

1. None

Task Standard: Identify abnormal configuration of Service Water Pump Bay Unit Coolers and informs CRS/SM. Determines SWP system is inoperable. Completes Attachment 3 section 2.15

Initial Conditions:

1. The plant is operating at 100% power.
2. You are the oncoming day shift CSO.
3. S-PM-D001, Control Room System Lineup Verification, Attachment 3 is in progress and Section 2.15 is partially completed.
4. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), complete Section 2.15 of S-PM-D001, Attachment 3.”

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary	<input type="checkbox"/> Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	
<b>RECORD START TIME _____</b>			
1. Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> S-PM-D001 obtained, and Attachment 3 reviewed	Sat/Unsat	
2. •Recognize annunciator 871308 DIVISION II SW PUMP BAY VENT SYSTEM INOPERABLE is alarming	<input type="checkbox"/> Recognize and report annunciator 871308 DIVISION II SW PUMP BAY VENT SYSTEM INOPERABLE is alarming	Sat/Unsat	
3. •Record Attachment 3 lineup verifications, starting with section 2.15 <i>Screenwell Bldg Vent Sys (Service Water Pump Bay B)</i> , and evaluates.	<input type="checkbox"/> Records lineup verifications. Checks NO for <i>Screenwell Bldg Vent Sys (Service Water Pump Bay B)</i>	<b>Pass/Fail</b>	
4. •Recognizes “A” Control Switch for Screenwell Building Vent System (Service Water Pump Bay A) is out of position.	<input type="checkbox"/> Recognizes control switch for “A” Service Water Pump Bay Unit Cooler is out of position (Switch is in Pull-to-Lock).	<b>Pass/Fail</b>	
5. •For abnormal switch and/or indications detected which are	<input type="checkbox"/> Immediately reports out of position switch to CRS.	Sat/Unsat	

Performance Steps	Standard	Grade	Comments
<p>not expected, the Control Room Supervisor shall be immediately informed. No attempt shall be made to correct the condition prior to obtaining permission from the Control Room Supervisor, and the expected response of such actions is completely understood.</p>	<p><input type="checkbox"/> Does not attempt to correct the condition prior to obtaining permission from the Control Room Supervisor.</p>	<p><b>Pass/Fail</b></p>	
<p>Note: If candidate only reports the abnormal condition to the CRS/SM, then ask the candidate to identify the impact of the observed condition.</p>			
<p>6. •Assesses impact of control switch being out of position.</p>	<p><input type="checkbox"/> References N2-OP-58 or ARP 871308 to determine impact on system</p> <p><input type="checkbox"/> Determines that, with both Unit Coolers in Pull-to-Lock, Div II Service Water is inoperable</p>	<p>Sat/Unsat</p> <p><b>Pass/Fail</b></p>	
<p>7. •Record Attachment 3 lineup verifications, for section 2.15 <i>Control Building HVAC in Service</i> and evaluates.</p>	<p><input type="checkbox"/> Identifies HVC*FN2B is in PTL and not in standby.</p> <p><input type="checkbox"/> Records lineup verifications. Checks NO for <i>Control Building HVAC in Service</i></p> <p><input type="checkbox"/> Notes condition in REMARKS section because a RED CLEARANCE is attached.</p>	<p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p>Sat/Unsat</p>	
<p>8. •Record Attachment 3 lineup verifications, for section 2.15 <i>Rx Bldg. Vent System in Service with the standby 2HVR*UC409 in PTL</i> and evaluates.</p>	<p><input type="checkbox"/> Identifies one of two HVR*UC409s in AUTO and the other in Pull-to-Lock.</p> <p><input type="checkbox"/> Records lineup verifications. Checks YES for <i>Rx Bldg. Vent System in Service</i>)</p>	<p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p>	

Performance Steps	Standard	Grade	Comments
9. •Record Attachment 3 lineup verifications, for section 2.15 <i>Standby Gas Treatment System</i> and evaluates.	<ul style="list-style-type: none"> <li>❑ May refer to N2-OP-61B, Standby Gas Treatment System section F.1.3 to determine required system configuration.</li> <li>❑ IF 2GTS*FLT1B is in standby, verify the following:</li> <li>❑ At 2CEC*PNL871 verify:               <ul style="list-style-type: none"> <li>❑ GTS*MOV1B, INLET FROM RX BLDG VENTILATION closed.</li> <li>❑ GTS*AOV2B, TRAIN B INLET VALVE closed.</li> <li>❑ GTS*AOV3B, FAN 1B DISCH ISOL VLV closed.</li> <li>❑ GTS*AOV28B, DECAY HEAT X-TIE VLV open.</li> <li>❑ GTS*FN1B, SBGTS FAN stopped.</li> <li>❑ GTS*MOV4A, DECAY HEAT FILTER 1A closed.</li> <li>❑ TRAIN B INITIATION control switch in AUTO AFTER STOP.</li> <li>❑ 2GTS*PDIK5B, REACTOR BLDG INLET/OUTLET DIFF PRESS controller, AUTO light lit.</li> <li>❑ 2GTS*PDIK5B set at -0.6 in WG.</li> </ul> </li> </ul>	Sat/Unsat/NA	<div style="border: 1px solid black; height: 747px; width: 100%;"></div>



Performance Steps	Standard	Grade	Comments
	<input type="checkbox"/> Records lineup verifications. Checks YES for <i>Standby Gas Treatment System</i>	<b>Pass/Fail</b>	
10. Reports completion of section 2.15	<input type="checkbox"/> Reports completion of section 2.15	Sat/Unsat	

End of JPM

**TERMINATING CUE:** Identify abnormal configuration of Service Water Pump Bay Unit Coolers and informs CRS/SM. Determines SWP system is inoperable. Completes Attachment 3 section 2.15

**RECORD STOP TIME\_**

Initial Conditions:

1. The plant is operating at 100% power.
2. You are the oncoming day shift CSO.
3. S-PM-D001, Control Room System Lineup Verification, Attachment 3 is in progress and Section 2.15 is partially completed.
4. Ask the operator for any questions.

Initiating cue:

“(Operator's name), complete Section 2.15 of S-PM-D001, Attachment 3.”

Attachment 2: Evaluation and Recommendation(s) (If performed in classroom)

<b>RECORD YOUR RESULTS BELOW</b>
Name:
Evaluation:
System Impact:

**DO NOT PROVIDE TO THE CANDIDATE**

**Attachment 3, EXAMINER GRADING SHEET (If performed in classroom)**

<b>RECORD YOUR RESULTS BELOW</b>
Name:
Evaluation:  <b>Control Switch for Div. II SWP Pump Bay Unit Cooler 2HVY*UC2B is out of position</b>  <b>Control Switches for both Division II Service Water Pump Bay Unit Coolers are in Pull-to-Lock</b> <b>HVC*FN2B is out of normal lineup, and RED CLEARANCE is applied. (OK, but noted in REMARKS)</b>  <b>HVR*UC409s are in the correct lineup.</b>  <b>Standby Gas Train B is in the correct lineup.</b>
System Impact:  <b>Both Control Switches in Pull-to-Lock renders both Unit coolers inoperable.</b>  <b>Division II Service water is inoperable based upon both unit coolers in an area being inoperable (N2-OP-58, Attachment 1)</b>

**DO NOT PROVIDE TO THE CANDIDATE**

**JUSTIFICATION FOR EVALUATION AND IMPACT ASSESSMENT**

Attachment 1 of N2-OP-58, shown below, describes the impact of Service Water Pump Bay Unit Coolers on overall system operability.

With both unit coolers in Pull-to-Lock, the Unit Coolers are now unable to perform their design function. As such, they are declared inoperable. As seen below, in Action 1.c, with both unit coolers in an area inoperable, that division of Service Water must be declares inoperable

ATTACHMENT 1: SERVICE WATER PUMP BAY UNIT COOLERS

(U)  
(S)

UNIT COOLER	AREA	ACTION	LOO	NOTES
2HVY*UC2A/C	Division I SWP Pump Bay	1	{ITS 3.7.1, TRM 3.7.1}	Unit Coolers are 100% redundant (Note 1,2,3)
2HVY*UC2B/D	Division II SWP Pump Bay	1	{ITS 3.7.1, TRM 3.7.1}	Unit Coolers are 100% redundant (Note 1,2,3)
<p><b>ACTION 1</b></p> <p>a. With <u>ONE</u> of the unit coolers in an area inoperable AND Service Water temperature exceeds limits in NOTE 1 below AND three SWP pumps are in operation in that Division EITHER shutdown one SWP pump in that Division OR declare all three SWP pumps in that Division inoperable.</p> <p>b. With <u>ONE</u> of the unit coolers in an area inoperable AND Service Water temperature exceeds limits in NOTE 1 below, THEN notify Engineering to re-evaluate temperature limits based on 2HVY*UC2A/B/C/D performance test data.</p> <p>c. With <u>BOTH</u> of the unit coolers in an area inoperable, declare that division of Service Water <u>inoperable</u> AND take actions required by the applicable LOO.</p>				

- NOTES**
- Unit coolers are 100% redundant only when service water temperature is less than 75°F as indicated by 2SWP\*TI31A/B, OR less than 76°F as indicated by SWP\*AG1.02. 2 unit cooler operation is required WHEN Service Water temperature is above these limits AND 3 Service Water pumps are in operation in that division.
  - Compensatory action may be required if 2HVY\*UC2A or 2B are removed from service (made inoperable). Refer to N2-OP-73 Attachment 11 for required actions.
  - The standby unit cooler in a Service Water Pump Bay is considered operable with Service Water Valved out and its control switch in PULL-TO-LOCK provided no other impediments exist in order to place the unit cooler in service.

Also N2-ARP-01 annunciator 871308 provides the following:

**CAUTION**

Service Water Pump Bay Unit Coolers are 100% redundant. Loss of either unit cooler does not affect Service Water Pump operability. Loss of both unit coolers would result in the inoperability of Service Water Pumps in that division.

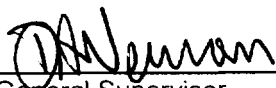
Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Defeat RCIC/Main Turbine Trip Per EOP-6, Electrical Print Reading

Revision: NRC 2005

Task Number: NA

Approvals:

 4/21/05  
General Supervisor Date  
Operations Training (Designee)

NA Exam Security  
General Supervisor Date  
Operations (Designee)

NA Exam Security  
Configuration Control Date

Performer: \_\_\_\_\_(RO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: Simulate

Evaluation Location: Simulator or other designated location

Expected Completion Time: 20 minutes Time Critical Task: NO

Alternate Path Task: NO

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

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

Completion Time: \_\_\_\_\_

JPM Overall Rating:

Pass

Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated area.

Simulator Set-up:

NONE

Directions to the Instructor/Evaluator:

This print reading evaluation may be performed in a sequence other than that outlined in the JPM. It is possible for a candidate to go in the reverse direction from the sequence outlined. The steps are not sequence critical.

Highlighter may be used to identify relays and contacts on drawings.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

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Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. N2-EOP-C5 and
2. N2-EOP-6 Attachment 2.
3. GE DWG 807E173TY Sheet 2 and 9
4. ESK-8SPU02
5. ESK-11ICS05.
6. 2.1.24 (2.8) Ability to obtain and interpret station electrical and mechanical drawings.

Tools and Equipment:

1. None

Task Standard:

**TERMINATING CUE:** Relays and contacts used to defeat RCIC/Main Turbine Trip identified on station electrical drawings and operation is explained.

Initial Conditions:

1. The plant is experiencing a Failure To Scram
2. N2-EOP-C5 has been entered.
3. Defeating the Main Turbine trip from RCIC initiation is directed
4. Ask the operator for any questions.

Initiating cue:

"(Operator's name), Using station procedures and drawings, identify station electrical components that are used to defeat the Main Turbine trip from RCIC initiation AND explain how defeating this function is accomplished."

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary	Proper communications used for repeat back (GAP-OPS-01)	Sat/Unsat	
<b>RECORD START TIME _____</b>			
1. •Refer to N2-EOP-C5 to determine correct EOP-6 Attachment.	<input type="checkbox"/> Refer to EOP-C5 Step 2.	Sat/Unsat	
	<input type="checkbox"/> Determines EOP-6 Attachment 2 is used to defeat RCIC/Main Turbine trip	Sat/Unsat	
2. •Refer to N2-EOP-6 Attachment 2.	<input type="checkbox"/> Refer to EOP-6 Attachment 2	Sat/Unsat	
	<input type="checkbox"/> Determines relay E51A-K102 in 2CEC*PNL613 is to be removed and delivered to SSS.	<b>Pass/Fail</b>	
3. •Using station electrical drawings locate correct sheet containing E51A-K102.	<input type="checkbox"/> Obtains drawing index and determines GE drawings 807E173TY use is necessary.	Sat/Unsat	
	<input type="checkbox"/> Refer to 807E173TY Sheet 2 (coordinates B-2) Relay Table and determines relay E51A-K102 is on Sheet 9.	Sat/Unsat	



Performance Steps	Standard	Grade	Comments
4. •Using station electrical drawings, identify relay E51A-K102	<input type="checkbox"/> Refer to 807E173TY Sheet 9 and locates relay E51A-K102 at coordinates K-12. <input type="checkbox"/> Determines K102 contact M1-T1 will be used on ESK-8SPU02	<b>Pass/Fail</b>  Sat/Unsat	
5. • Using station electrical drawings, identify relay E51A-K102 contact M1-T1 in Turbine Trip circuit	<input type="checkbox"/> Refer to ESK 8SPU02 and locates E51A-K102 contact M1-T1 at coordinates B-2. <input type="checkbox"/> Identifies contact M1-T1 cannot close to actuate Turbine Trip circuitry when relay E51A-K102 is removed, preventing actuation of the turbine trip in P843 EHC Cabinet.	<b>Pass/Fail</b>  <b>Pass/Fail</b>	
<p>Evaluator Note:</p> <p>It is not required for the candidate to refer to EHC drawings identified as EHC Cabinet (0007.330—002-017).</p> <p>Explanation of operation:</p> <p>When relay is pulled its contact M1-T1, which would normally close on RCIC initiation and injection MOV open after 4 minute time delay cannot close. EHC cabinet relays ESK 8SPU02 cannot actuate to cause the Main Turbine to trip.</p>			

End of JPM

**TERMINATING CUE:** Relays and contacts used to defeat RCIC/Main Turbine Trip identified on station electrical drawings and operation is explained.

**RECORD STOP TIME** \_\_\_\_\_

Initial Conditions:

1. The plant is experiencing a Failure To Scram
2. N2-EOP-C5 has been entered.
3. Defeating the Main Turbine trip from RCIC initiation is directed
4. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), Using station procedures and drawings, identify station electrical components that are used to defeat the Main Turbine trip from RCIC initiation AND explain how defeating this function is accomplished.”


Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Radiological Requirements Related to Operator Inspection  
Of High Radiation Areas

Revision: NRC 2005

Task Number: N/A

Approvals:

 \_\_\_\_\_  
General Supervisor Date  
Operations Training (Designee)

4/21/05

NA EXAMINATION SECURITY \_\_\_\_\_  
General Supervisor Date  
Operations (Designee)

NA EXAMINATION SECURITY \_\_\_\_\_  
Configuration Control Date

Performer: \_\_\_\_\_ (RO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR OR OTHER DESIGNATED LOCATION**

Expected Completion Time: 20 minutes Time Critical Task: NO Alternate Path Task: NO

Start Time: \_\_\_\_\_ Stop Time: \_\_\_\_\_ Completion Time: \_\_\_\_\_

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated location.

Simulator Set-up:

N/A

Directions to the Instructor/Evaluator:

**RWP and survey map to be provided with this JPM.**

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. GAP-RPP-01; 3.5.
2. GAP-RPP-02; 3.3.
3. GAP-RPP-08; 3.2.
4. GAP-RPP-07; 3.2.5
5. K/A 2.3.10 (2.9) Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.

Tools and Equipment:

1. None.

Task Standard: Radiological requirements related to the performance of high radiation area inspection are met prior to and during the performance of the inspection.

Initial Conditions:

1. The plant is operating at 100% power.
2. N2-PM-M008, Monthly Checklist is scheduled for this shift.
3. You will be conducting an inspection of the Outer Tip Room, Reactor Bldg 250.
4. An RWP and survey map are provided.
5. Your exposure is 800 mrem TEDE at the beginning of the shift. You have inspected 3 areas already and your ED indicated 10 mrem, 15 mrem, and 5 mrem, respectively for the 3 areas already inspected.
6. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), you will be performing N2-PM-M008, Monthly Checklist, for the Outer Tip, Reactor Building 250. An RWP and a survey map are provided. Address the radiological aspects of performing this inspection. Document your findings on the SCORECARD provided”

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	<div style="border: 1px solid black; height: 60px;"></div>
<b>RECORD START TIME _____</b>	NOTE: A score card is attached to this JPM identifying the items for the performer to identify.		
2. •Obtain a copy of the reference procedure and review/utilize the correct section.	N2-PM-M008 obtained and referenced.  <i>GAP-RPP-01; 3.5 referenced as required.</i> <i>GAP-RPP-02; 3.3 referenced as required</i> <i>GAP-RPP-08; 3.2 referenced as required</i> <i>GAP-RPP-07; 3.2.5 referenced as required</i>	Sat/Unsat	<div style="border: 1px solid black; height: 60px;"></div>

Performance Steps	Standard	Grade	Comments
3. •Applicable radiological precautions shall be observed. Rad Protection shall be contacted for guidance as required.	<p>Reviews RWP / Survey Map:</p> <ul style="list-style-type: none"> <li>- Determine radiological controls:               <ul style="list-style-type: none"> <li><u>SCORECARD #1: HIGH RADIATION AREA</u> <b>Pass/Fail</b></li> <li><u>SCORECARD #2: Area dose rates up to 150 mrem/hour.</u> <b>Pass/Fail</b></li> </ul> </li> <li>- Determine protective clothing:               <ul style="list-style-type: none"> <li><u>SCORECARD #3: Although no PC requirements are outlined on the RWP, determines PROTECTIVE CLOTHING IS REQUIRED because the area is a contaminated area and determines that RP must be consulted for guidance.</u> <b>Pass/Fail</b></li> </ul> </li> <li>- Determine entry requirements dosimetry:               <ul style="list-style-type: none"> <li><u>SCORECARD #4: Determine TLD and ED required to enter the area.</u> <b>Sat/Unsat</b></li> </ul> </li> <li>- Per GAP-RPP-08, Step 3.2.2, determine delta exposure:               <ul style="list-style-type: none"> <li><u>SCORECARD #5: Determine required delta exposure of 300 mrem. Additional approvals ARE NOT required prior to performing the inspection.</u> <b>Pass/Fail</b></li> <li>800+10+15+5+300 = 1130 mrem (Administrative limit is 2000 mrem).</li> </ul> </li> </ul>		

Performance Steps	Standard	Grade	Comments
4. •Check the Radiation/ Contamination survey Map Entry Record Sheet for the area which require inspection.	<b><u>SCORECARD #6: Notes area with highest contamination levels.</u></b>	<b>Pass/Fail</b>	<div style="border: 1px solid black; height: 60px;"></div>
<p><i>NOTE: X-R key is for LOCKED HIGH RAD AREAS and is controlled solely by RP. X-R keys are different than keys for HIGH RAD AREAS, which we keep locked. Needs H2D-13 key (indicated on survey map) which can be issued.</i></p>	<p><i>PROMPT: If determines X-R key, inform the performer that RP is not authorized to issue X-R keys to operators.</i></p>		
c. •Obtain associated key(s) from radiation protection.	<b><u>SCORECARD #7: Determine H2D-13 key is needed (indicated on survey map) and it is obtained from radiation protection.</u></b>	<b>Sat/Unsat</b>	<div style="border: 1px solid black; padding: 5px;">           RP would not issue an X-R key if requested so not critical.         </div>

End of JPM

**TERMINATING CUE:** Radiological requirements related to the performance of high radiation area inspection are met prior to and during the performance of the inspection.

**RECORD STOP TIME** \_\_\_\_\_

Initial Conditions:

1. The plant is operating at 100% power.
2. N2-PM-M008, Monthly Checklist is scheduled for this shift.
3. You will be conducting an inspection of the Outer Tip Room, Reactor Bldg 250.
4. A RWP and survey map are provided.
5. Your exposure is 800 mrem TEDE at the beginning of the shift. You have inspected 3 areas already and your ED indicated 10 mrem, 15 mrem, and 5 mrem, respectively for the 3 areas already inspected.
6. Ask the operator for any questions.

Initiating cue:

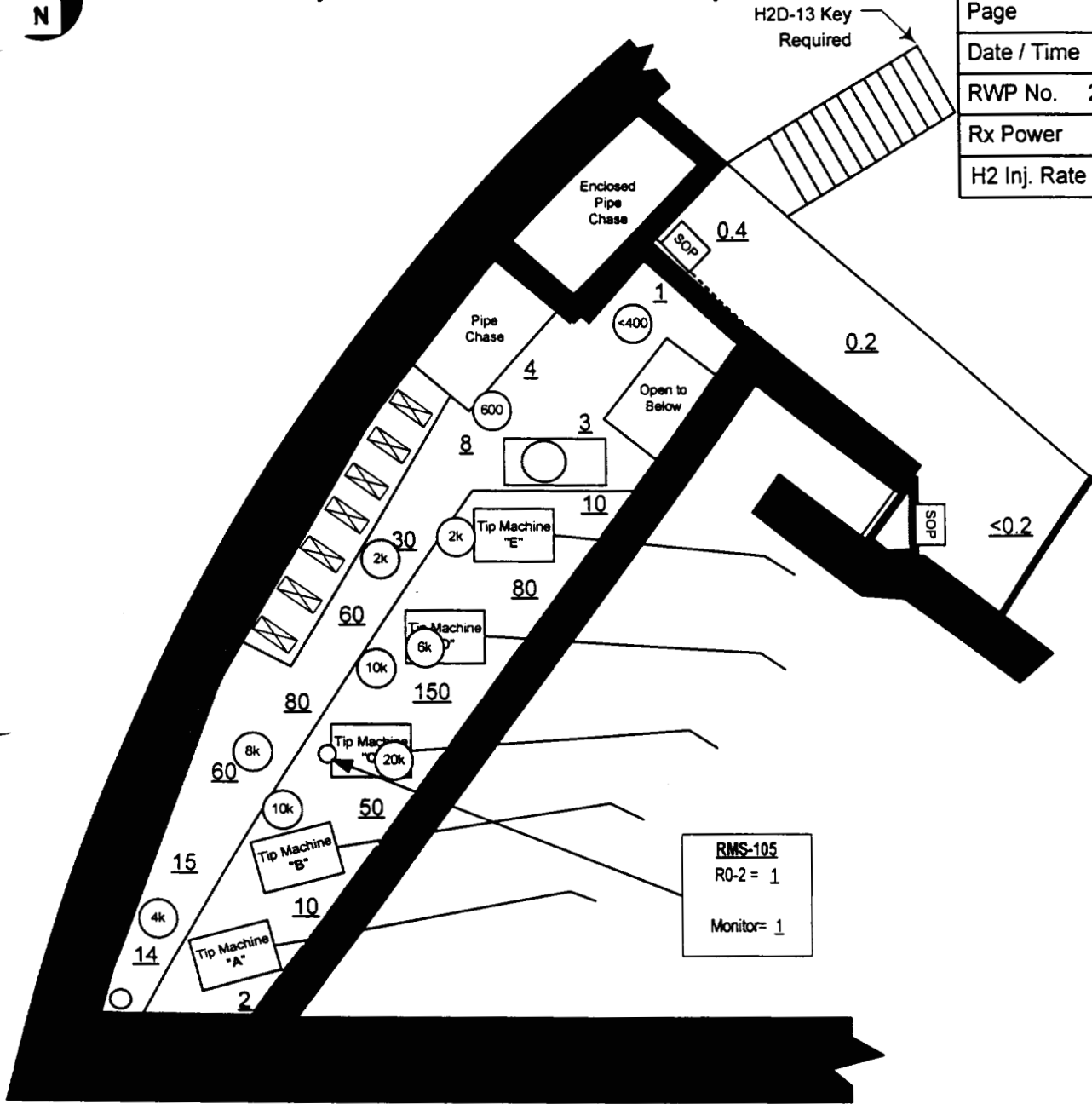
“(Operator’s name), you will be performing N2-PM-M008, Monthly Checklist, for the Outer Tip, Reactor Building 250. An RWP and a survey map are provided. Address the radiological aspects of performing this inspection. Document your findings on the SCORECARD provided”





Quarterly Radiation/Contamination Survey

Survey No.	2RB-25430
Page	— of —
Date / Time	3/9/05 @ 1242
RWP No.	2041001
Rx Power	100 %
H2 Inj. Rate	15 scfm



- 1. — = Rope/Area Boundary
- 2. ( # ) = Smear Location
- 3. # = General Area Unless Noted
- 4.  $\frac{*#}{\#} = \frac{\gamma}{\beta}$  Contact 30 cm
- 5. ( # ) = Neutron (mRem/hr)
- 6. A/S = Air Sample
- 7. ( # ) = Large Area Wipe
- 8. A = Area Rad Monitor
- 9. V # = VAMP Number
- $\gamma$  = Readings in mRem/hr.  $\beta$  = Readings in mRad/hr.

Number of Smears	9	RO-2	5769	06/02/05
Remarks: No beta detected		BC-4	438	06/10/05
		BC-4	230	07/03/05
		SAC-4	1033	04/05/05
		RM-14	3009	08/01/05

**Radiation Work Permit: 205022**  
A Shift OPS HRA Standing RWP

**Survey Data:**

Radiation Turbine Building HRAs <1 to 450mRem/hr / Reactor Building HRAs <1 to 400mRem/hr

Levels: Rad Waste Buiding HRAs <1 to 400mRem/hr / Off Gas Building HRAs <1 to 120mRem/hr

Contamination Levels: <400 - 45,000dpm/100cm / Airborne Levels: <0.3 DAC

Specific areas as per RP briefing and / or survey maps.

\*\*\*\*\* **Low Risk Activity** \*\*\*\*\*

<b>Dose Alarm</b>	<b>50 mRem</b>	<b>Dose Rate Alarm</b>	<b>500 mRem/Hr</b>	
<b>Backoff Dose</b>	<b>40 mRem</b>	<b>Elapsed Time Alarm</b>	<b>780 minutes</b>	1433

Task: 1	High Radiation Area	BAR CODE
<b>Clearances</b>		

Task: 2	High Radiation Area	BAR CODE
<b>Cond.Demin Activities</b>		

Task: 3	High Radiation Area	BAR CODE
<b>Other Ops Activities</b>		

Task: 4	High Radiation Area	BAR CODE
<b>Training Activities</b>		

Task: 5	High Radiation Area	BAR CODE
<b>Turbine Building Rounds</b>		

Task: 6	High Radiation Area	BAR CODE
<b>Reactor Building Rounds</b>		

Task: 7	High Radiation Area	BAR CODE
<b>Surveillance's/PMs</b>		

**Protective Clothing Requirements (common to all tasks):**

Standing RWP PCs

TL, Electronic Dosimeter

**Radiation Work Permit: 205022**

A Shift OPS HRA Standing RWP

**Survey Data:**

Radiation Turbine Building HRAs <1 to 450mRem/hr / Reactor Building HRAs <1 to 400mRem/hr

---

Levels: Rad Waste Buiding HRAs <1 to 400mRem/hr / Off Gas Building HRAs <1 to 120mRem/hr

Contamination Levels: <400 - 45,000dpm/100cm / Airborne Levels: <0.3 DAC

Specific areas as per RP briefing and / or survey maps.

**\*\*\*\*\* Low Risk Activity \*\*\*\*\***

<b>Dose Alarm</b>	<b>50 mRem</b>	<b>Dose Rate Alarm</b>	<b>500 mRem/Hr</b>
<b>Backoff Dose</b>	<b>40 mRem</b>	<b>Elapsed Time Alarm</b>	<b>780 minutes</b>

1433

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PC Requirements based on areas entered

If entry to a Contaminated Area is required on this RWP, Contact Radiation Protection

for Protective Clothing Requirements.

**Instructions (common to all tasks):**

- 1) Notify RP prior to venting/draining evolutions or other system breach.
  
- 2) No entry above arms reach unless specifically approved by RP.

**ALARA Review Number:**

OK TO PROVIDE TO CANDIDATE

*Answer the following when performing this task:*

**SCORECARD #1:**

Classify the area (check one):

- Radiation Area
- High Radiation Area
- Locked High Radiation Area
- Very High Radiation Area

**SCORECARD #2:**

Designate the highest dose rate in the area and the location:

**SCORECARD #3:**

Designate whether or not protective clothing is required (check one):

- Yes
- No

**SCORECARD #4:**

Designate required dosimetry to enter the area:

**SCORECARD #5:**

Evaluate delta exposure (check one) and explain:

- Acceptable
- Additional approval(s) required

**SCORECARD #6:**

Designate the highest contamination levels in the room and the location:

**SCORECARD #7:**

Designate the key to be obtained AND who controls the key:

**NOTE: THIS IS THE EXAMINER SCORECARD.  
DO NOT PROVIDE TO THE CANDIDATE.**

<b>Answer the following when performing this task:</b>	
<b>SCORECARD #1: PASS/FAIL</b>	
Classify the area (check one):	<input type="checkbox"/> Radiation Area <input checked="" type="checkbox"/> <b>High Radiation Area</b> <input type="checkbox"/> Locked High Radiation Area <input type="checkbox"/> Very High Radiation Area
<b>SCORECARD #2: PASS/FAIL</b>	
Designate the highest dose rate in the area and the location: <b>150 mrem/hr, Between Tip Machine D &amp; C</b>	
<b>SCORECARD #3: PASS/FAIL</b>	
Designate whether or not protective clothing is required (check one):	<input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No
The area is a Contaminated Area	
<b>SCORECARD #4: SAT/UNSAT</b>	
Designate required dosimetry to enter the area: <b>TLD and ED (Electronic Dosimeter)</b>	
<b>SCORECARD #5: PASS/FAIL</b>	
Evaluate delta exposure (check one) and explain: Total is 800+10+15+5+300 = 1130 mrem (Administrative limit is 2000 mrem).	<input checked="" type="checkbox"/> <b>Acceptable</b> <input type="checkbox"/> Additional approval(s) required
<b>SCORECARD #6: PASS/FAIL</b>	
Designate the highest contamination levels in the room and the location: <b>20,000dpm/100cm2 at Tip Machine "C"</b>	
<b>SCORECARD #7: SAT/UNSAT</b>	
Designate the key to be obtained <u>AND</u> who controls the key: <b>H2D-13 controlled by RP</b>	

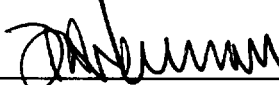
Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Determine Required Actions for RCIC Room Unit Coolers  
Out of Service During Plant Startup

Revision: NRC 2005

Task Number: 3410320303

Approvals:

 \_\_\_\_\_  
General Supervisor Date 4/21/05  
Operations Training (Designee)

NA EXAMINATION SECURITY  
\_\_\_\_\_  
General Supervisor Date  
Operations (Designee)

NA EXAMINATION SECURITY  
\_\_\_\_\_  
Configuration Control Date

Performer: \_\_\_\_\_(SRO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR OR OTHER DESIGNATED AREA**

Expected Completion Time: 10 minutes Time Critical Task: NO Alternate Path Task: NO

Start Time: \_\_\_\_\_ Stop Time: \_\_\_\_\_ Completion Time: \_\_\_\_\_

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator:  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. N2-OP-35, Reactor Core Isolation Cooling.
2. N2-OP-52, Reactor Building Ventilation.
3. N2-OP-78, Remote Shutdown System.
4. Tech Spec 3.0.4 and bases
5. Tech Spec 3.5.3 and bases
6. Tech Spec 3.6.4.3 and bases
7. K/A 2.1.23 Ability to perform specific system and integrated plant procedures during different modes of plant operation (4.0).

Tools and Equipment:

1. None.

Task Standard: Stops plant heatup prior to exceeding 150 psig Reactor Steam Dome pressure per Tech Spec 3.0.4.

Initial Conditions:

1. Startup and Heatup is in progress following Refueling Outage.
2. The reactor is critical with RPV pressure at 130 psig.
3. Investigation into a rising RCIC Room temperature determined that isolation valves SWP\*V162A and B in the Service Water lines to the RCIC Pump Room Unit Coolers were installed improperly restricting flow.
4. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), determine the impact on Reactor Startup and Heatup. Document on the form provided.”

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	
<b>RECORD START TIME _____</b>			
2. •Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> N2-OP-52 obtained. Attachment 6, Table (Modes 1, 2, 3) on pages 68 & 69 referenced	Sat/Unsat	
3. •Attachment 6, Secondary Containment Unit Coolers for HVR*UC412A/B.	<input type="checkbox"/> Determines that both HVR*UC412A and HVR*UC412B are inoperable	Sat/Unsat	
	<input type="checkbox"/> Determines Note 3 and <sup>1</sup> are applicable.	Sat/Unsat	
4. •Attachment 6, Note 3.a. and 3.b. for both RCIC Pump Room Unit Coolers inoperable.	<input type="checkbox"/> Declares RCIC inoperable.	<b>Pass/Fail</b>	
	<input type="checkbox"/> Declares one GTS train inoperable.	<b>Pass/Fail</b>	
5. •N2-OP-78 Attachment 11 for HVR*UC412A.	<b>NOTE: Actual ESL entry is not required to be performed for this JPM</b>		



<i>Performance Steps</i>	<i>Standard</i>	<i>Grade</i>	<i>Comments</i>
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Determines an ESL entry is required for HVR*UC412A.</li> </ul>	Sat/Unsat	
6. •Tech Spec 3.6.4.3.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Determines that Tech Spec 3.6.4.3 ACTION A. is applicable</li> <li><input type="checkbox"/> Determines that the inoperable GTS must be restored to OPERABLE status with 7 days</li> <li><input type="checkbox"/> Determines startup may continue with a Risk Assessment performed per Tech Spec 3.0.4</li> </ul>	Sat/Unsat  Sat/Unsat  Sat/Unsat	
7. •Tech Spec 3.5.3.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Reviews the APPLICABILITY and determines that RCIC is not required until Reactor Steam Dome pressure exceeds 150 psig</li> </ul>	Sat/Unsat	
Cue: High Pressure Core Spray is OPERABLE.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Determines High Pressure Core Spray is OPERABLE.</li> <li><input type="checkbox"/> Determines that LCO 3.0.4.b is not applicable.</li> </ul>	Sat/Unsat  Sat/Unsat	
8. Applies Tech Spec LCO 3.0.4.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Determines that heatup must be stopped. LCO 3.0.4 does not permit exceeding 150 psig Reactor Steam Dome pressure with RCIC inoperable.</li> </ul>	<b>Pass/Fail</b>	Exceeding 150 psig constitutes entry into an "other specified condition"

End of JPM

**TERMINATING CUE:** Stops plant heatup prior to exceeding 150 psig Reactor Steam Dome pressure per Tech Spec 3.0.4.

**RECORD STOP TIME** \_\_\_\_\_

**KEY DO NOT PROVIDE TO CANDIDATE**

**RECORD YOUR RESULTS BELOW**

Name:

Reference used to identify impact on plant operation:

N2-OP-52  
N2-OP-78  
LCO 3.6.4.3  
LCO 3.5.3  
LCO 3.0.4

Impact on Plant Operation:

JPM Step 4: Per N2-OP-52 Attachment 6, Note 3.a. and 3.b. for both RCIC Pump Room Unit Coolers inoperable. Declares RCIC is inoperable because both RCIC pump room unit coolers are inoperable (Pass/Fail)

JPM Step 4: Per N2-OP-52 Attachment 6, Note 3.a. and 3.b. for both RCIC Pump Room Unit Coolers inoperable. Declares one train of GTS inoperable. (Pass/Fail)

JPM Step 8: Applies Tech Spec LCO 3.0.4. Determines that heatup must be stopped. LCO 3.0.4 does not permit exceeding 150 psig Reactor Steam Dome pressure with RCIC inoperable. (Pass/Fail)

**OK to provide to candidate**

**Initial Conditions:**

1. Startup and Heatup is in progress following Refueling Outage.
2. The reactor is critical with RPV pressure at 130 psig.
3. Investigation into a rising RCIC Room temperature determined that isolation valves SWP\*V162A and B in the Service Water lines to the RCIC Pump Room Unit Coolers were installed improperly restricting flow.
4. Ask the operator for any questions.

**Initiating cue:**

“(Operator’s name), determine the impact on Reactor Startup and Heatup. Document on the form provided.”

OK to provide to candidate

**RECORD YOUR RESULTS BELOW**

Name:

Reference used to identify impact on plant operation:

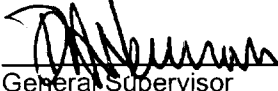
Impact on Plant Operation:

Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Determination of Reactivity Event Severity Level and Supporting Actions Revision: NRC 2005

Task Number: 3449340503

Approvals:

 4/21/05  
General Supervisor Date  
Operations Training (Designee)

NA EXAMINATION SECURITY  
General Supervisor Date  
Operations (Designee)

NA EXAMINATION SECURITY  
Configuration Control Date

Performer: \_\_\_\_\_ (SRO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR OR OTHER DESIGNATED AREA**

Expected Completion Time: 20 minutes Time Critical Task: NO Alternate Path Task: NO

Start Time: \_\_\_\_\_ Stop Time: \_\_\_\_\_ Completion Time: \_\_\_\_\_

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated area.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator:  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. GAP-OPS-05; 3.13
2. Facility License; 2.C(1) and 2.F
3. K/A 2.1.7 (4.4), Ability to evaluate plant performance and make operational judgements based on operating characteristics, reactor behavior, and instrument interpretation.

Tools and Equipment:

1. None

Task Standard: Determine Severity Level 2 Reactivity Event occurred, because License thermal power limit was exceeded. A power reduction is required, and the event is reportable per 10CFR50.72 (24 hour) and 10CFR50.73 (30 day).

Initial Conductions:

1. The plant was returned to 100% reactor power at 06:00 this morning.
2. Power restoration occurred following the return of the RWCU system to service following on-line maintenance.
3. At 18:30, you obtain a Core Thermal Power Calculation and determine the RWCU input to the heat balance is zero (0).
4. At 19:00, the Reactor Engineer determines the reactor has been at 3474 MWth since returning reactor power to 100% as indicated on the APRMs.
5. Ask the operator for any questions.

Initiating cue:

"(Operator's name), determine the required administrative actions. Record the results on the grading sheet provided."

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-01)	Sat/Unsat	

**RECORD START TIME \_\_\_\_\_**

2. •Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> GAP-OPS-05 obtained. Section 3.13 referenced for event severity classification.	Sat/Unsat	
	<input type="checkbox"/> Facility License/Tech Specs obtained and referenced for license thermal power level.	Sat/Unsat	
	<input type="checkbox"/> NIP-IRG-01 obtained and referenced.	Sat/Unsat	
3. •Determine the Reactivity Event Severity per GAP-OP-05.	<input type="checkbox"/> Classifies event severity as <b>LEVEL 2</b> : Improper heat balance that results in operation outside the analysis basis.	<b>Pass/Fail</b>	
4. •Notifies SM, General Supervisor of Operations, Operations Manager, and Reactor Engineer, per Operations Manual, OM 2.5.4.	<input type="checkbox"/> Following personnel notified: - Shift Manager - General Supervisor of Operations - Operations Manager	Sat/Unsat	

Performance Steps	Standard	Grade	Comments
5. •Determines DER is required.	<input type="checkbox"/> Determines DER is required.	Sat/Unsat	
6. •Evaluate Facility License/Tech Spec compliance.	<input type="checkbox"/> Determines license thermal power limit was exceeded. This is a license condition, not in the actual TS appendix.	<b>Pass/Fail</b>	
Note: N2-OP-101D Step F.2.0 requires power to be restored below 3467 MWth.	<input type="checkbox"/> Direct a reactor power reduction to less than or equal to 3467 Mwth. May direct a lower power to provide margin below 3467 Mwth until heat balance is verified accurate.	<b>Pass/Fail</b>	
7. •Evaluate notification per License Condition 2.F & NIP-IRG-01	<input type="checkbox"/> Initial report to NRC Operations Center via the ENS within 24 hours.	<b>Pass/Fail</b>	Note: 30 day LER is not critical because this is a licensing Department function. SRO should recognize LER is required but should not be required to (in this case) determine 30 day LER.
	<input type="checkbox"/> Written followup report within 30 days per 10CFR50.73(b), (c) and (e).	Sat/Unsat	
8. •Notifies SM, General Supervisor of Operations, Operations Manager, and Plant Manager per Operations Manual Section OM.2.5.4.	<input type="checkbox"/> Following personnel notified: - General Supervisor of Operations - Operations Manager - Plant General Manager	Sat/Unsat	

End of JPM

**TERMINATING CUE:** Determine Severity Level 2 Reactivity Event occurred, because License thermal power limit was exceeded. A power reduction is required, and the event is reportable per 10CFR50.72 (24 hour) and 10CFR50.73 (30 day).

**RECORD STOP TIME** \_\_\_\_\_



Initial Conditions:

1. The plant was returned to 100% reactor power at 06:00 this morning.
2. Power restoration occurred following the return of the RWCU system to service following on-line maintenance.
3. At 18:30, you obtain a Core Thermal Power Calculation and determine the RWCU input to the heat balance is zero (0).
4. At 19:00, the Reactor Engineer determines the reactor has been at 3474 MWth since returning reactor power to 100% as indicated on the APRMs.
5. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), determine the required administrative actions. Record the results on the grading sheet provided.”

**RECORD YOUR RESULTS BELOW**

Name:

Administrative Actions:

Impact on Plant Operation:

Reporting Requirements:

**DO NOT PROVIDE TO THE CANDIDATE**

JUSTIFICATION FOR CORRECT ANSWER REGARDING REPORTING REQUIREMENTS:

Per License Conditions section 2.C(1)

- (1) Maximum Power Level

Nine Mile Point Nuclear Station, LLC is authorized to operate the facility at reactor core power levels not in excess of 3467 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

Per License Conditions section 2.F

- F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, Nine Mile Point Nuclear Station, LLC shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System, with written followup within 30 days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).

**RECORD YOUR RESULTS BELOW**

Name:

Administrative Actions:

Step 3: (**Pass/Fail**) Reactivity event severity at **LEVEL 2**. (Improper heat balance results in operation outside the analysis basis).

Step 4: (Sat/Unsat) Notify Shift Manager, General Supervisor of Operations & Operations Manager

Step 5: (Sat/Unsat) Determine DER is required.

Step 8: (Sat/Unsat) Notify Operations and Plant Management of Initial report to the NRC.  
**This may also be listed as a reporting requirement below**

Facility License/Tech Spec actions:

Step 6: (**Pass/Fail**) License thermal power limit exceeded.

Step 6: (**Pass/Fail**) Direct a reactor power reduction to less than or equal to 3467 MWth.

Reporting Requirements:

Step 7: (**Pass/Fail**) Initial report to the NRC Operations Center via the ENS within 24 hours.

Step 7: (Sat/Unsat) Written followup report within 30 days per 10CFR50.73(b), (c) and (e).

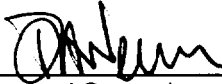
Step 8: **See Administrative Actions above.**

Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Review Operations Surveillance Procedure (OSP) Following Performance, Revision: NRC 2005  
Identify and Determine Response To Abnormal Parameters

Task Number:

Approvals:

 4/21/05  
General Supervisor Date  
Operations Training (Designee)

NA EXAMINATION SECURITY  
General Supervisor Date  
Operations (Designee)

NA EXAMINATION SECURITY  
Configuration Control Date

Performer: \_\_\_\_\_ (SRO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR OR OTHER DESIGNATED AREA**

Expected Completion Time: 25 minutes Time Critical Task: NO Alternate Path Task: NO

Start Time: \_\_\_\_\_ Stop Time: \_\_\_\_\_ Completion Time: \_\_\_\_\_

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator:  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. K/A 2.2.12 Knowledge of Surveillance Procedures (3.4).
2. K/A 2.2.24 Ability to analyze the affect of maintenance activities on LCO status (3.8).
3. K/A 2.2.22 Knowledge of limiting conditions for operations and safety limits (4.1)
4. N2-OSP-ICS-Q@002, RCIC Pump and Valve Operability Test and System Integrity Test and ASME XI Functional Test.

Tools and Equipment:

1. Marked up copy of N2-OSP-ICS-Q@002 to be provided to the candidate for evaluation. See Attachment 1 for faults introduced into the marked up OSP that are to be identified and evaluated by the candidate during performance of the JPM.
2. Copy of ASME SECTION XI should be available as usable reference for candidate.

Task Standard: Identify N2-OSP-ICS-Q@002 steps that have out of specification parameters and determine appropriate action(s) in response to the out of specification parameters.

Initial Conditions:

1. The plant is at 100% power.
2. N2-OSP-ICS-Q@002, RCIC Pump and Valve Operability Test and System Integrity Test and ASME XI Functional Test was just completed. The System Integrity Test and ASME XI Functional Test were not required.
3. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), evaluate performance data per Section 10.1, Acceptance Criteria of the provided procedure, N2-OSP-ICS-Q@002, RCIC Pump and Valve Operability Test,”

<i>Performance Steps</i>	<i>Standard</i>	<i>Grade</i>	<i>Comments</i>
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	

**RECORD START TIME \_\_\_\_\_**

2. •Step 10.1.1: Evaluate step 8.3.32 performance data.	<input type="checkbox"/> Determines data is accurate	Sat/Unsat	
	<input type="checkbox"/> Check (✓) SATISFACTORY.	<b>Pass/Fail</b>	
3. •Step 10.1.2.a: Evaluate step 8.3.32 and step 8.3.33 performance data.	<input type="checkbox"/> Determines a calculation error is present in the step 8.3.33 calculation.	Sat/Unsat	Note: Identification of calculation error is not Pass/Fail since the error does not cause the evaluation to be INOP. It’s a competency measurement to determine if calculation is checked for accuracy or assumed to be correct
	<input type="checkbox"/> Determines data is within tolerance	Sat/Unsat	
	<input type="checkbox"/> Check (✓) Accept for step 10.1.2.a.	<b>Pass/Fail</b>	

Performance Steps	Standard	Grade	Comments	
4. •Step 10.1.2.b: Evaluate Attachment 2 ASME performance data.	<ul style="list-style-type: none"> <li><input type="checkbox"/> On Attach 2, check the following: <ul style="list-style-type: none"> <li>- PT 1H, 1V, 1A, 2H – <b>AC</b></li> <li>- PT 2V – <b>AL</b></li> </ul> </li> <li><input type="checkbox"/> Check (✓) Alert for step 10.1.2.b.</li> <li><input type="checkbox"/> Notifies IST to initiate corrective actions.</li> <li><input type="checkbox"/> Determines RCIC pump still operable. (Inferred from NOTES 1 &amp; 2 of step 10.1.2.b)</li> <li><input type="checkbox"/> Determines test frequency is to be doubled until evaluation is performed.</li> </ul>	<p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p>	<div style="border: 1px solid black; height: 335px; width: 100%;"></div>	
<p><b>Cue: As IST acknowledge the report of the AL vibration for the PUMP ASME test.</b></p>				
5. •Step 10.1.3: Evaluate Attachment 2 MVMP (non-ASME) performance data.	<ul style="list-style-type: none"> <li><input type="checkbox"/> On Attach 2, check the following: <ul style="list-style-type: none"> <li>- PT 3H, 4H, 4V, 4A – <b>AC</b></li> <li>- PT 3V – <b>CO</b></li> </ul> </li> <li><input type="checkbox"/> Check (✓) Concern for step 10.1.3.</li> <li><input type="checkbox"/> Notifies IST to initiate corrective actions.</li> <li><input type="checkbox"/> Determines RCIC pump still operable.</li> <li><input type="checkbox"/> Determines increased monitoring required.</li> </ul>	<p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p> <p><b>Pass/Fail</b></p>		<div style="border: 1px solid black; height: 315px; width: 100%;"></div>
<p><b>Cue: As IST acknowledge the</b></p>				

Performance Steps	Standard	Grade	Comments
<b>report of the CO vibration for the PUMP MVMP test.</b>			
6. •Step 10.1.4: Evaluate valve test results.	<input type="checkbox"/> Check (✓) NOT REQUIRED.	Sat/Unsat	
7. •Step 10.1.5: Evaluate valve test results.	<input type="checkbox"/> Evaluate section 8.2 steps.	Sat/Unsat	
	<input type="checkbox"/> Evaluate steps 8.3.7, 8.3.9, 8.3.11, 8.3.16.b, 8.3.18, 8.3.22, 8.3.32, 8.3.35, 8.3.55, 8.3.57 for properly recorded data.	Sat/Unsat	
	<input type="checkbox"/> Check (✓) SATISFACTORY.	Sat/Unsat	
8. •Step 10.1.6: Evaluate valve test results.	<input type="checkbox"/> Check (✓) NOT REQUIRED.	Sat/Unsat	
9. •Step 10.1.7: Record results of evaluation.	<input type="checkbox"/> Check (✓) SATISFACTORY, corrective action required.	<b>Pass/Fail</b>	
	<input type="checkbox"/> Document deficiencies in remarks section:	<b>Pass/Fail</b>	
	<input type="checkbox"/> Note ASME vibration point PT 2V in ALERT requiring doubling test frequency until an evaluation is performed.	Sat/Unsat	
	<input type="checkbox"/> Note MVMP vibration PT 3V in CONCERN requiring increased monitoring.	Sat/Unsat	
<input type="checkbox"/> Sign and date	Sat/Unsat		

End of JPM



<i>Performance Steps</i>	<i>Standard</i>	<i>Grade</i>	<i>Comments</i>
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**TERMINATING CUE:** Identify N2-OSP-ICS-Q@002 steps that have out of specification parameters and determine appropriate action(s) in response to the out of specification parameters.

**RECORD STOP TIME** \_\_\_\_\_

Initial Conditions:

1. The plant is at 100% power.
2. N2-OSP-ICS-Q@002, RCIC Pump and Valve Operability Test and System Integrity Test and ASME XI Functional Test was just completed. The System Integrity Test and ASME XI Functional Test were not required.
3. Ask the operator for any questions.

Initiating cue:

"(Operator's name), evaluate performance data per Section 10.1, Acceptance Criteria of the provided procedure, N2-OSP-ICS-Q@002, RCIC Pump and Valve Operability Test,"

Attachment 1

**DO NOT PROVIDE TO THE CANDIDATE**

Following are the faults introduced into the marked up N2-OSP-ICS-Q@002, RCIC Pump and Valve Operability Test, that are to be identified and evaluated by the candidate during performance of the JPM.

For step 8.3.33:

Provide an error in the calculation that maintains the PSID within the Acceptance Range of 1175 to 1312.7 psid.

For Attachment 2:

Enter a value that places ASME PT 2V in the ALERT range (.3230)

Enter a value that places MVMP (non-ASME) PT 3V in CONCERN range (.2133)

For the remainder of the surveillance, enter actual values obtained from an archived copy of the surveillance.



Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator

**To be performed as an administrative JPM with two parts (Part A and Part B)**

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. N2-OP-42, Offgas System.
2. ODCM D.3.3.2, Radioactive Gaseous Effluent Monitoring Instrumentation.
3. K/A 2.3.11, Ability to control radiation releases (3.2).

Tools and Equipment:

1. None

Task Standard: Determines that periodic OFG effluent grab samples and analyses are required per the ODCM and the time limits for the first and second grab samples.

Initial Conditions:

1. Reactor power is 45% with power ascension in progress.
2. Both OFG\*RE13A and OFG\*RE13B were previously OPERABLE and in-service
3. Both OFG\*13A and OFG\*13B indications have just failed downscale.
4. Troubleshooting has not yet commenced.
5. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), Determine required actions.”

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	

**RECORD START TIME** \_\_\_\_\_

**PART A**

1. •Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> ODCM obtained. Section D.3.3.2 and Bases B 3.3.2 are referenced.	Sat/Unsat	
2. •Reference CONDITION B	<input type="checkbox"/> Determines that the inoperable OFG Radiation Monitors must be restored to OPERABLE status within 30 days.	Sat/Unsat	
	<input type="checkbox"/> Refers to Table 3.3.2-1	Sat/Unsat	
	<input type="checkbox"/> Determines that CONDITION C is applicable	Sat/Unsat	

Performance Steps	Standard	Grade	Comments
<p>3. •Reference CONDITION C</p> <p>NOTE: Candidate is NOT expected to implement REQUIRED ACTION C.1, however if implemented, must determine that OFG will isolate and a manual scram is required.</p>	<ul style="list-style-type: none"> <li data-bbox="632 241 1167 348">❑ Determines that tripping both channels of OFG*RE13A and B would isolate OFG requiring a scram.</li> <li data-bbox="632 522 1167 621">❑ Determines that OFG grab samples must be taken within 12 hours and once per 12 hours thereafter.</li> <li data-bbox="632 654 1167 753">❑ Determines that the samples must be analyzed within 24 hours of sample completion.</li> </ul> <p data-bbox="632 794 1056 860"><b>Cue: Acknowledge the sample requirements for OFG.</b></p>	<p data-bbox="1188 241 1331 274">Sat/Unsat</p> <p data-bbox="1188 522 1331 555">Pass/Fail</p> <p data-bbox="1188 662 1331 695">Pass/Fail</p>	

**Part B**

NOTE: If candidate implements REQUIRED ACTION C.1 instead of C.2, the JPM PART B is not applicable.

**EVALUATOR:** When the candidate determines the ODCM sample requirements, provide the candidate with the attached PART B Initial Conditions and Initiating Cues Information Sheet.

***Cue: Asked the candidate to determine when the first and second samples are due based upon a 06:00 time for the OFG\*RE13A/B inoperabilities.***

Performance Steps	Standard	Grade	Comments
1. •Obtain a copy of the applicable reference documents and review/ utilize the correct sections.	<input type="checkbox"/> Reviews ODCM Section 3.0, Applicability.	Sat/Unsat	
	<input type="checkbox"/> Reviews Tech Spec Section 1.3, Completion Times.	Sat/Unsat	
2. •Determines that Example 1.3-1 applies to the first "12 Hours"	<input type="checkbox"/> First sample is due by 18:00 today	<b>Pass/Fail</b>	
3. •Determines that Example 1.3-6 applies to the next " <u>AND</u> once per 12 hours thereafter".	<input type="checkbox"/> Second sample is due by 06:00 tomorrow, with an allowable extension of 3 hours (as late as 09:00)	<b>Pass/Fail</b>	12 hours + a 25% extension of 3 hours = 15 hours

End of JPM

**TERMINATING CUE:**

Determines that periodic OFG effluent grab samples and analyses are required per the ODCM and the time limits for the first and second grab samples.

**RECORD STOP TIME** \_\_\_\_\_



## PART A

Initial Conditions:

1. Reactor power is 45% with power ascension in progress.
2. Both OFG\*RE13A and OFG\*RE13B indications have failed downscale.
3. Troubleshooting has not yet commenced.
4. Ask the operator for any questions.

Initiating cue:

“(Operator's name), Determine required actions.”

## **PART B Initial Conditions and Initiating Cue Information Sheet**

### Initial Conditions:

1. OFG\*RE13A/B were declared inoperable at 06:00 today
2. Ask the operator for any questions.

### Initiating cue:

“(Operator’s name), determine the latest time that the first sample is due. Then based upon this time, determine the latest time the next sample can be taken.”

Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Emergency Classification for Scenario 1

Revision: NRC 2005

Task Number: 3440190303

Approvals:

RC [Signature]                      4/21/05  
General Supervisor                      Date  
Operations Training (Designee)

NA EXAMINATION SECURITY  
General Supervisor                      Date  
Operations (Designee)

NA EXAMINATION SECURITY  
Configuration Control                      Date

Performer: \_\_\_\_\_ (SRO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR FOLLOWING SCENARIO AS SRO**

Expected Completion Time: 15 minutes    Time Critical Task: YES                      Alternate Path Task: NO

Start Time: \_\_\_\_\_                      Stop Time: \_\_\_\_\_                      Completion Time: \_\_\_\_\_

JPM Overall Rating:                      Pass                      Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. EPIP-EPP-02, Classification of Emergency Conditions at Unit 2.
2. EPMP-EPP-0102, Unit 2 Emergency Classification Bases.
3. EPIP-EPP-18, Activation and Direction of the Emergency Plan.
4. NUREG K/A 2.4.40 Knowledge of the SROs responsibilities in emergency plan implementation (4.0).

Tools and Equipment:

1. None.

Task Standard: Scenario properly diagnosed and classified as a Site Area Emergency

Initial Conditions:

1. High Turbine vibration led to a reactor SCRAM and turbine trip
2. Control rods inserted, but all rods did not fully insert
3. RPV injection was terminated and prevented per EOP-C5 to lower power
4. Ask the operator for any questions

Initiating Cue:

“(Operator’s name), assume the role of the SM/ED and determine the emergency classification of this event.”

Performance Steps	Standard	Grade	Comments
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-01)	Sat/Unsat	
<b>RECORD START TIME</b> _____			Start time is logged to determine total classification time.
2. •Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> EPIP-EPP-02 obtained. Attachment 1, Section 2.2.2 is referenced.	Sat/Unsat	
3. RPS setpoint has been exceeded <u>AND</u> Automatic & Manual scrams have failed to assure the reactor is shutdown under all conditions <u>AND</u> either Reactor power was >4% <u>OR</u> Suppression Pool temperature was >110F.	<input type="checkbox"/> Site Area Emergency is declared per EAL 2.2.2.	<b>Pass/Fail</b>	The time elapsed between START TIME and determination MUST BE <15minutes to pass the JPM.

End of JPM

**TERMINATING CUE:** Scenario properly diagnosed and classified as a Site Area Emergency.

**RECORD STOP TIME** \_\_\_\_\_

Initial Conditions:

1. High Turbine vibration led to a reactor SCRAM and turbine trip
2. Control rods inserted, but all rods did not fully insert
3. RPV injection was terminated and prevented per EOP-C5 to lower power
4. Ask the operator for any questions

Initiating Cue:

“(Operator’s name), assume the role of the SM/ED and determine the emergency classification of this event.”

Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Emergency Classification for Scenario 2

Revision: NRC 2005

Task Number: 3440190303

Approvals:

RC Wolf                      4/21/05  
General Supervisor              Date  
Operations Training (Designee)

NA EXAMINATION SECURITY  
General Supervisor              Date  
Operations (Designee)

NA EXAMINATION SECURITY  
Configuration Control              Date

Performer: \_\_\_\_\_ (RO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR FOLLOWING SCENARIO AS SRO**

Expected Completion Time: 15 minutes    Time Critical Task: YES              Alternate Path Task: NO

Start Time: \_\_\_\_\_              Stop Time: \_\_\_\_\_              Completion Time: \_\_\_\_\_

JPM Overall Rating:              Pass              Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. EPIP-EPP-02, Classification of Emergency Conditions at Unit 2.
2. EPMP-EPP-0102, Unit 2 Emergency Classification Bases.
3. EPIP-EPP-18, Activation and Direction of the Emergency Plan.
4. NUREG K/A 2.4.40 Knowledge of the SROs responsibilities in emergency plan implementation (4.0).

Tools and Equipment:

1. None.

Task Standard: Scenario properly diagnosed and classified as an Alert



Initial Conditions:

1. A LOCA has occurred causing a SCRAM on high DW pressure
2. N2-EOP-C2 was performed to allow low pressure injection to recover RPV water level.
3. The lowest actual RPV water level during this event was -50 inches
4. Ask the operator for any questions

Initiating Cue:

“(Operator’s name), assume the role of the SM/ED and determine the emergency classification of this event.”

<i>Performance Steps</i>	<i>Standard</i>	<i>Grade</i>	<i>Comments</i>
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	
<b>RECORD START TIME _____</b>			Start time is logged to determine total classification time.
2. •Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> EPIP-EPP-02 obtained. Attachment 1, Section 3.1.1 is referenced.	Sat/Unsat	
3. Primary Containment pressure has exceeded 1.68 psig.	<input type="checkbox"/> Alert is declared per EAL 3.1.1.	<b>Pass/Fail</b>	The time elapsed between START TIME and determination MUST BE <15minutes to pass the JPM.

End of JPM

**TERMINATING CUE:** Scenario properly diagnosed and classified as a Alert.

**RECORD STOP TIME \_\_\_\_\_**

Initial Conditions:

1. A LOCA has occurred causing a SCRAM on high DW pressure
2. N2-EOP-C2 was performed to allow low pressure injection to recover RPV water level.
3. The lowest actual RPV water level during this event was –50 inches
4. Ask the operator for any questions

Initiating Cue:

“(Operator’s name), assume the role of the SM/ED and determine the emergency classification of this event.”


Constellation Energy Group  
OPERATOR JOB PERFORMANCE MEASURE

Title: Emergency Classification for Scenario 3

Revision: NRC 2005

Task Number: 3440190303

Approvals:

  
\_\_\_\_\_  
General Supervisor                      Date  
Operations Training (Designee)

NA EXAMINATION SECURITY  
\_\_\_\_\_  
General Supervisor                      Date  
Operations (Designee)

NA EXAMINATION SECURITY  
\_\_\_\_\_  
Configuration Control                      Date

Performer: \_\_\_\_\_(RO)

Trainer/Evaluator: \_\_\_\_\_

Evaluation Method: **PERFORM**

Evaluation Location: **SIMULATOR FOLLOWING SCENARIO AS SRO**

Expected Completion Time: 15 minutes    Time Critical Task: YES                      Alternate Path Task: NO

Start Time: \_\_\_\_\_                      Stop Time: \_\_\_\_\_                      Completion Time: \_\_\_\_\_

JPM Overall Rating:                      Pass                      Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Recommended Start Location: (Completion time based on the start location)  
Simulator or other designated location.

Simulator Set-up:  
N/A

Directions to the Instructor/Evaluator  
**To be performed as an administrative JPM.**

Directions to Operators:  
Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
  - Self-verification shall be demonstrated.
3. During Training JPM:
  - Self-verification shall be demonstrated.
  - No other verification shall be demonstrated.

References:

1. EPIP-EPP-02, Classification of Emergency Conditions at Unit 2.
2. EPMP-EPP-0102, Unit 2 Emergency Classification Bases.
3. EPIP-EPP-18, Activation and Direction of the Emergency Plan.
4. NUREG K/A 2.4.40 Knowledge of the SROs responsibilities in emergency plan implementation (4.0).

Tools and Equipment:

1. None.

Task Standard: Scenario properly diagnosed and classified as a Site Area Emergency

Initial Conditions:

1. Reactor building temperatures rise to an isolation setpoint.
2. RCIC has failed to isolate.
3. Reactor building temperatures and radiation levels continue to rise.
4. N2-EOP-SC does not yet require RPV Blowdown.
5. Ask the operator for any questions.

Initiating Cue:

“(Operator’s name), assume the role of the SM/ED and determine the emergency classification of this event.”

<i>Performance Steps</i>	<i>Standard</i>	<i>Grade</i>	<i>Comments</i>
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	
<b>RECORD START TIME _____</b>			Start time is logged to determine total classification time.
2. •Obtain a copy of the reference procedure and review/utilize the correct section.	<input type="checkbox"/> EPIP-EPP-02 obtained. Attachment 1, Section 3.4.1 is referenced.	Sat/Unsat	
3. RCIC Steam Line isolation failure <u>AND</u> a release pathway outside normal system flowpaths from an unisolable system, exists outside primary containment.	<input type="checkbox"/> Site Area Emergency is declared per EAL 3.4.1.	<b>Pass/Fail</b>	The time elapsed between START TIME and determination MUST BE <15minutes to pass the JPM.

End of JPM

**TERMINATING CUE:** Scenario properly diagnosed and classified as a Site Area Emergency.

**RECORD STOP TIME \_\_\_\_\_**

Initial Conditions:

1. Reactor building temperatures rise to an isolation setpoint.
2. RCIC has failed to isolate.
3. Reactor building temperatures and radiation levels continue to rise.
4. N2-EOP-SC does not yet require RPV Blowdown.
5. Ask the operator for any questions.

Initiating Cue:

"(Operator's name), assume the role of the SM/ED and determine the emergency classification of this event."