

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

Title: Determination of Technical Specification Actions when in Single Loop Operation and MCPR is exceeded.

Revision: NRC 2008

Task Number: 341-032-03-03-2: Evaluate Plant System's performance and coordinate appropriate actions per Technical Specifications, as required.

Approvals:

_____/_____
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: 15 min.
Task: No

Time Critical Task: No Alternate Path

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:

Evaluators Signature: _____

Date: _____

Recommended Start Location: (Completion time based on the start location)
Any appropriate location with the required Reference Material.

Simulator Set-up:
None

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 Reactor Engineer, Work Control or other on shift personnel. 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.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

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 independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas 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. Plant Technical Specifications
2. N2-SOP-29
3. N2-OP-29
4. NUREG K/A General Knowledges and Abilities 2.1.12(4.0)

Tools and Equipment:

1. 3D Monicore Periodic Log indicating MCPR is above 1.0

Task Standard:

Given current plant status and Thermal Limit information, determine the actions required by Technical Specifications.

Initial Conditions:

1. The Reactor was operating at 100% power when **ONE** Reactor Recirc Pump tripped due to high motor vibration.
2. N2-SOP-29 has been completed through step 5.7.

Initiating Cues:

“(Operator’s name), determine the actions required by Technical Specifications for single loop operation and verify Unit 2 is in compliance.”

| 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/Operations Manual) | Sat/Unsat | <div style="border: 1px solid black; height: 100px;"></div> |
| RECORD START TIME _____ | | | |
| 2. Obtain a copy of the Technical Specifications and review/utilize the correct section. | Obtains a copy of Technical Specifications. Refers to Reactor Coolant System (RCS) Section. | Sat/Unsat | <div style="border: 1px solid black; height: 100px;"></div> |

| Performance Steps | Standard | Grade | Comments |
|---|---|---|----------|
| <p>3. Enters T.S. - 3.4.1, Recirculation Loops Operating.</p> <p>CUE: Tell the candidate the Steps listed as c. and d. were accomplished by I&C.</p> | <p>Enters T.S. – 3.4.1 and determines “Single Loop” operation is allowable as long as the specified LCO’s are met.</p> <ul style="list-style-type: none"> a. LCO 3.2.1, Average Planar Linear Heat Generation Rate. b. LCO 3.2.2, Minimum Critical Power Ratio. c. LCO 3.3.1.1, Reactor Protection System (RPS) Instrumentation. <ul style="list-style-type: none"> o Reset APRM Biased Thermal Power-Upscale for Single Loop. d. LCO 3.3.2.1, Control Rod Block Instrumentation. <ul style="list-style-type: none"> o Reset RBM – Upscale for Single Loop. | <p>Pass/Fail</p> | |
| <p>CUE: As the Reactor Engineer, provide the candidate with a copy of 3D Monicore Periodic Log.</p> | <p>Review 3D Monicore Periodic Log and determine MFLCPR is greater than 1.0.</p> <p>Determines MFLCPR limit is NOT met.</p> | <p>Pass/Fail</p> <p>Pass/Fail</p> | |
| <p>4. Determines Technical Specification LCO requirements.</p> | <p>Refers to T.S. LCO 3.2.2 and determines:</p> <ul style="list-style-type: none"> • A - The MCPR(s) must be restored to within limits within two (2) hours. • B - IF Required Action A.1 is not met, power must be below 25% RTP in four (4) hours. | <p>Pass/Fail</p> | |

| <i>Performance Steps</i> | <i>Standard</i> | <i>Grade</i> | <i>Comments</i> |
|--------------------------|-----------------|--------------|-----------------|
|--------------------------|-----------------|--------------|-----------------|

CUE: If asked as the Reactor Engineer, tell the Candidate that you are investigating Rod patterns that will lower the affected MCPR.

End of JPM

TERMINATING CUE: Appropriate Technical Specifications have been entered and LCO's identified.

RECORD STOP TIME _____

OK TO PROVIDE AS APPLICANT HANDOUT

Initial Conditions:

1. The Reactor was operating at 100% power when **ONE** Reactor Recirc Pump tripped due to high motor vibration.
2. N2-SOP-29 has been completed through step 5.7.

Initiating Cues:

“(Operator’s name), determine the actions required by Technical Specifications for single loop operation and verify Unit 2 is in compliance.”

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

Title: Review Daily Checks Log IAW N2-OSP-LOG-D001

Revision: NRC 2008

Task Number: NA

Approvals:

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 LOCATION**

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)
Any appropriate location with the required Reference Material.

Simulator Set-up:
None

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 Rev 12, Daily Checks Log
2. K/A 2.1.18(3.0) Ability to make accurate, clear and concise logs, records, status boards, and reports.

Tools and Equipment:

1. Calculator

Task Standard:

N2-OSP-LOG-D001, Attachment 2 review completed and designated errors documented in the Remarks Section of N2-OSP-LOG-D001.

Initial Conditions:

1. The plant is operating at 100% power.
2. N2-OSP-LOG-D001 for the daily checks log has been completed and submitted for CRS/SM review.
3. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), Perform a review of N2-OSP-LOG-D001, Attachment 2 and document any unsatisfactory results in the Remarks Section on page 11 of N2-OSP-LOG-D001.”

| 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>EVALUATOR to provide copy of N2-OSP-LOG-D001 to candidate for review.</p> <p>RECORD START TIME _____</p> | <p>Proper communications used for repeat back (GAP-OPS-O1)</p> | <p>Sat/Unsat</p> | <div style="border: 1px solid black; height: 186px;"></div> |
| <p>2. •Obtain a copy of the reference procedure and review/utilize the correct section.</p> | <p>N2-OSP-LOG-D001 obtained. - Attachment 2 referenced.</p> | <p>Sat/Unsat</p> | <div style="border: 1px solid black; height: 125px;"></div> |

| Performance Steps | Standard | Grade | Comments |
|--|--|-------------------------|--|
| <p>3. •Reviews Daily Checks Log and determines the following are outside of their limits.</p> <p>CUE: If asked what Suppression Pool level indication was used, state CMSLA02 and that that this level was confirmed on other indications.</p> <p>CUE: If asked if the Reactor Building Differential Pressure was confirmed on other instrument, state “YES”.</p> <p>CUE: If asked if the Reactor Building is in “Summer Reversal,” state “NO”.</p> | <ul style="list-style-type: none"> • (Item #2) Sheet 1 of 20 - sodium pentaborate solution is below TS limit. • (Item #13) Sheet 5 of 20 - Supp Pool Lvl is below TS limit and not initialed. • (Item #15) Sheet 6 of 20 - RX BLDG Diff Press is below its TS limit. • (Item #32) Sheet 11 of 20 - CST Lvl is below its USAR limit. • (Items #41 & #37) Sheet 13 of 20 - Max difference between APRM averages exceeds 2% (may also identify APRM #1 as being more than 2% out of TS limit. • (Item #57) Sheet 16 of 20 - Computer Point SWPLA06 is below the TS limit. • (Item #73 and 77) Sheet 19 of 20 – ECCS room temperature average calculation is incorrect (75.91°F is correct value). Independent verification is not signed off | <p>Pass/Fail</p> | <div style="border: 1px solid black; height: 647px; width: 100%;"></div> |

| <i>Performance Steps</i> | <i>Standard</i> | <i>Grade</i> | <i>Comments</i> |
|--|--|--------------|-----------------|
| 4. Documents any unsatisfactory results in the Remarks Section of N2-OSP-LOG-D001. | Results documented in Remarks Section on Page 11 of procedure. | Sat/Unsat | |

End of JPM

TERMINATING CUE: N2-OSP-LOG-D001 review completed and results documented in Remarks Section.

RECORD STOP TIME___

OK TO PROVIDE AS APPLICANT HANDOUT

Initial Conditions:

1. The plant is operating at 100% power.
2. N2-OSP-LOG-DOO1 for the daily checks log has been completed and submitted for CRS/SM review.
3. Ask the operator for any questions.

Initiating Cue:

“(Operator’s name), Perform a review of N2-OSP-LOG-D001, Attachment 2 and document any unsatisfactory results in the Remarks Section on page 11 of N2-OSP-LOG-D001.”

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

Title: Clearance Section Review

Revision: NRC 2008

Task Number:

Approvals:

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: 30 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)
Any appropriate location with the required Reference Material.

Simulator Set-up:
None

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. GAP-OPS-02, Control Of Hazardous Energy, Clearance, and Tagging
2. Drawings: EE-1Q, EE-1AU, P&ID's 31C, 31F and 32A
3. General Knowledges and Ability 2.2.13(3.8) 2.2.15(2.9)

Tools and Equipment:

1. None

Task Standard:

Clearance section review is completed and designated errors are identified and documented.

Initial Conditions:

1. The plant is operating at 100% power.
2. Maintenance has requested a clearance section to replace the pump seals for 2RHS*P1A.
3. A manual clearance section has been generated and is ready for review.
4. Ask the operator for any questions.

Initiating cue:

“(Operator’s name), Perform a review of the clearance section for 2RHS*P1A and document on the clearance request any changes required.”

| <i>Performance Steps</i> | <i>Standard</i> | <i>Grade</i> | <i>Comments</i> |
|--|---|--------------|---|
| 4. 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: 165px;"></div> |
| CUE: If asked how to document state they should | | | |
| RECORD START TIME _____ | | | |
| •Obtain a copy of clearance section for review. <i>Evaluator to provide Candidate a copy of clearance section and referenced drawings.</i> | <i>Clearance section is obtained and referenced.</i> | Sat/Unsat | <div style="border: 1px solid black; height: 100px;"></div> |

| Performance Steps | Standard | Grade | Comments |
|---|--|------------------|---|
| 5. Review the clearance request. EXAMINER NOTE: Tag #7 may be a Danger or Reference Tag | Reviews clearance request and identifies the following errors: <ul style="list-style-type: none"> ▪ Tags #4 and 5 are out of order (should be last) ▪ Tag #5 is on the wrong pump (2RHS*P1B) ▪ Tag #13 is in wrong position (correct position is closed) ▪ Clearance does not include tags on normal suction path to pump (2RHS*MOV1A - valve and power supply) ▪ Keep fill is NOT isolated and tagged (RHS*V265) | Pass/Fail | <div style="border: 1px solid black; height: 290px;"></div> |
| 3. Errors identified and noted on the clearance section. | All identified errors documented on the clearance section. | Sat/Unsat | <div style="border: 1px solid black; height: 38px;"></div> |

End of JPM

TERMINATING CUE: The clearance section has been reviewed and designated errors identified and documented.

RECORD STOP TIME___

OK TO PROVIDE AS APPLICANT HANDOUT

Initial Conditions:

1. The plant is operating at 100% power.
2. Maintenance has requested a clearance section to replace the pump seals for 2RHS*P1A.
3. A manual clearance section has been generated and is ready for review.
4. Ask the operator for any questions.

Initiating Cue:

(operator's name), Perform a review of the clearance section for 2RHS*P1A and document on the clearance request any changes required.”

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

Title: Event Classification, Notifications and Reclassification

Revision: NRC 2008

Task Number:

Approvals:

| | | | |
|--------------------------------|------|--------------------------------|------|
| _____ | | <u>NA EXAMINATION SECURITY</u> | |
| General Supervisor | Date | General Supervisor | Date |
| Operations Training (Designee) | | 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: 45 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)

Classroom or Simulator. Ensure sufficient copies of SM/ED Checklist Package are available

Simulator Set-up:

None

Directions to the Instructor/Evaluator:

To be performed as an administrative JPM. Ideally this JPM should be performed in the Control Room or Simulator to provide adequate procedural resources. If this JPM cannot be performed in one of these locations, then the complete SM/ED Checklist Package must be provided to the Candidate.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the Unit 1 SM, Security Supervisor, Communication Aid, and other personnel as necessary. 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:

4. EPIP-EPP-02, Classification Of Emergency Conditions at Unit 2
5. EPIP-EPP-18, Attachment 1 SM/ED Checklist
6. EPIP-EPP-20, Emergency Notifications
7. K/A 2.4.29(4.0), Knowledge of the Emergency Plan.

Tools and Equipment:

- 1.0 EPIP-EPP-02, ATTACHMENT 2, UNIT 2 EAL FLOWCHART
- 2.0 SM/ED Checklist Package

Task Standard:

Classify the event within 15 minutes of the time that indications are available in the Control Room that an EAL has been exceeded and make all appropriate notifications within 15 minutes of the time the event is classified.

Initial Conditions:

5. You are the Shift Manager at NMP II. The STA is unavailable.
6. Unit 2 had been operating at 100% power.
7. The following conditions exist:
 - A Tornado hit the site causing a Station Blackout fifteen minutes ago and has moved out of the area.
 - The Division 1, 2 and 3 Emergency Diesels tripped immediately after starting and can NOT be restarted.
 - The Systems Operating Center (Load Dispatcher) expects power restoration within 3 hours.
 - Drywell Pressure is 1.1 psig and slowly rising.
 - RCIC is operating and maintaining Reactor Water Level in the normal band.
 - Reactor Building pressure is positive.
8. Unit 1 tripped 15 minutes ago and has not declared an emergency.
9. Ask the operator for any questions.

Initiating Cue:

“(Operator’s name), Based on the above conditions determine the event classifications per EPIP-EPP-02 and complete steps 1 through 7.b of EPIP-EPP-18, Attachment 1, SM/ED Checklist”.

al.

After this event is classified and the notifications identified, the plant conditions will change as stated below and a reclassification will be required.

Initial Conditions #2:

1. The Division 3 Diesel Generator has been restored and has been started but NOT connected to any bus.
2. Reactor Level is normal.
3. Drywell Pressure is 1.1 psig and stable.
4. The Security Supervisor notified the Control Room that four armed intruders have taken control of the Division 1, 2, and 3 Switchgear Rooms.

Initiating Cue:

“(Operator’s name), Based upon the above changes in the conditions, determine how would this effect your previous EPIP-EPP-02 classification.

This is time critical.

| Performance Steps | Standard | Grade | Comments |
|--|--|------------------|---|
| 6. 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 _____ | | | |
| 7. •Obtain a copy of EPIP-EPP-02 and review/utilize the correct section. | <i>EPIP-EPP-02 is obtained.</i> | Sat/Unsat | |
| 8. •Reviews the given conditions and determines that a Site Area Emergency declaration is required. | Declares a Site Area Emergency within fifteen minutes of the JPM in accordance with EAL 6.1.4. | Pass/Fail | <p>EXAMINER NOTE:</p> <p>Time of Declaration: _____.</p> |
| CUE: If asked, cue that Unit 1 is not in any EAL. | | | |
| 9. •Enters EPIP-EPP-18, Attachment 1, SM/ED Checklist and completes Steps 1 through 7.b. Completes applicable portions of EPIP-EPP-20, Attachments 1A and 4. | Completes Attachment 1A and Attachment 4 correctly. | Pass/Fail | <p>EXAMINER NOTE:</p> <p>Time Attachment 4 is completed through step 4: _____.</p> |
| CUE: When asked for meteorological data state: Wind Speed @ 30' = 4 mph Wind Speed @ 200' = 6 mph Wind Dir @ 30' = 45° | | | |

| Performance Steps | Standard | Grade | Comments |
|---|----------|-------|----------|
| <p>Wind Dir @ 200' = 45° Stability Class D</p> <p>EXAMINER NOTE:</p> <p>Once Attachment 1, CAN Notification Form is completed and prior to it being faxed, provide the Candidate with Initial Conditions #2.</p> <p>CUE: If contacted as Security or state police for road access state that road access is normal.</p> <p>NOTE: This is also Time Critical.</p> | | | |

5. •Reviews the given conditions and determine that a General Emergency declaration is required per EAL 8.1.10.

Declares General Emergency within 15 minutes per EAL 8.1.10.

Pass/Fail

| |
|--|
| <p>EXAMINER NOTE:</p> <p>Time of notification of status change: _____.</p> <p>Time of Declaration: _____.</p> |
|--|

End of JPM

TERMINATING CUE: The event has been classified and re-classified and all appropriate notifications initiated.

RECORD STOP TIME___

Initial Conditions:

1. You are the Shift Manager at NMP II. The STA is unavailable.
2. Unit 2 had been operating at 100% power.
3. The following conditions exist:
 - A Tornado hit the site causing a Station Blackout fifteen minutes ago and has moved out of the area.
 - The Division 1, 2 and 3 Emergency Diesels tripped immediately after starting and can NOT be restarted.
 - The Systems Operating Center (Load Dispatcher) expects power restoration within 3 hours.
 - Drywell Pressure is 1.1 psig and slowly rising.
 - RCIC is operating and maintaining Reactor Water Level in the normal band.
 - Reactor Building pressure is positive.
4. Unit 1 tripped 15 minutes ago and has not declared an emergency.
5. Ask the operator for any questions.

Initiating Cue:

“(Operator’s name), Based on the above conditions determine the event classifications per EPIP-EPP-02, and complete steps 1 through 7.b of EPIP-EPP-18, Attachment 1, SM/ED Checklist”.

This is time critical.

Initial Conditions #2

1. The Division 3 Diesel Generator has been restored and has been started but NOT connected to any bus.
2. Reactor Level is normal.
3. Drywell Pressure is 1.1 psig and stable.
4. The Security Supervisor notified the Control Room that four armed intruders have taken control of the Division 1, 2, and 3 Switchgear Rooms.

Initiating Cue:

“(Operator’s name), Based upon the above changes in the conditions, determine how would this effect your previous EPIP-EPP-02 classification.

This is time critical.

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

Title: Generate and Approve an Emergency Exposure Authorization
NRC 2008

Revision:

Task Number: 3439100303

Approvals:

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)
Any appropriate location with the required Reference Material.

Simulator Set-up:
None

Directions to the Instructor/Evaluator:

To be performed as an administrative JPM. A calculator should be available or be provided.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the Radiation Protection, the SM, CRO, 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:

3. EPIP-EPP-15
4. K/A 2.3.4 (3.1), Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.

Tools and Equipment:

2. Calculator

Task Standard:

Generate and approve an Emergency Exposure Authorization Form and estimate exposure.

Initial Conditions:

1. You have assumed the responsibilities of the Shift Manager/Emergency Director.
2. Entry to the reactor building is required to manually close ICS*MOV121
3. Time to complete the task for an experienced operator will be approximately 12 minutes.
4. Time to complete the task for a new operator will be approximately 15 minutes
5. A RCIC steam leak into the Reactor Building can not be isolated without manually shutting ICS*MOV121.
6. Radiation levels at the valve are as high as 15 R/hr.
7. Three (3) individuals are available to perform the task.
 - Worker A is a volunteer who is an experienced Licensed Reactor Operator that has previously received a planned special exposure at another facility (TLD #1, Employee # - 00001, SSN: 111-11-1111).
 - Worker B is a volunteer who is an experienced Licensed Reactor Operator and is a declared pregnant worker and has received a dose of 15 mR this year (TLD #2, Employee # - 00002, SSN: 222-22-2222).
 - Worker C is a volunteer who is an experienced Licensed Reactor Operator that has received a dose of 1200 mR this year (TLD #3, Employee # 00003, SSN: 333-33-3333).
 - Worker D is a volunteer who is a new Licensed Reactor Operator that has received a dose of 250 mR this year (TLD #4, Employee # 00004, SSN: 444-44-4444).
8. Ask the operator for any questions.

Initiating Cue:

“(Operator’s name), choose an individual to close ICS*MOV121, estimate the expected radiation exposure and document your authorization for an Emergency Exposure and state the reason why that worker was chosen.”

EXAMINER NOTE: If asked, inform the candidate that RP recommends limiting the exposure to 24 minutes.

| Performance Steps | Standard | Grade | Comments |
|---|--|-----------|----------|
| 10. 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 | |

| Performance Steps | Standard | Grade | Comments |
|-------------------|----------|-------|----------|
|-------------------|----------|-------|----------|

RECORD START TIME _____

11. •Obtain a copy of the reference procedure and review/utilize the correct section.

EPIP-EPP-15 is obtained and Attachments 1 and 1-1 are referenced.

Sat/Unsat

12. •Determines the expected exposure for the task

For an experienced worker -
Calculates that a 12 minute exposure in a 15 R/hr field will cause a dose of 3 R.

For a new worker - Calculates that a 15 minute exposure in a 15 R/hr field will cause a dose of 3.75 R.

- Since the action is required to limit dose to the public, 25 R is the limit.
- 3 R is well within the 25 R limit.
- The experienced worker will receive the lowest dose.

Pass/Fail

13. •Selects the best worker to perform the task.

Determines the best worker for the task:

- Worker A has previously received a planned special exposure
- Worker B is a declared pregnant worker

Pass/Fail

| Performance Steps | Standard | Grade | Comments |
|--|--|-----------|----------|
| | <ul style="list-style-type: none"> • Worker C is an experienced Licensed Reactor Operator • Worker D is a new Licensed Reactor Operator | | |
| <p>14. •Determines worker's exposure limit.</p> <p>EXAMINER NOTE: The authorized Exposure limit may be 25 R or less based on whether the candidate limits the volunteer's exposure to the anticipated stay time (12 min) or a recommendation from RP.</p> <p>CUE: If asked, inform the candidate that RP recommends limiting the exposure to 24 minutes.</p> | <p><i>The absolute exposure limit for the job is 25 R. If the recommendation of RP is used the limit is 6 R. If the limit is based on a stay time of 12 minutes the exposure limit is 3 R.</i></p> <p>Worker C is assigned to the task. Choosing this individual will result in the lowest total dose for the job if completed in 12 minutes (3R). This will result in an accumulated individual dose of 4.2R (Station AIARA total dose goal consideration)</p> <p>Worker D is assigned to the task. Choosing this individual will result in a total dose of 3.75 if completed in 15 minutes and an accumulated individual dose of 4.0R (Lowest Individual dose goal consideration).</p> | Sat/Unsat | |
| <p>CUE: The Candidate may choose to brief the worker on</p> | <p>CUE: Role play as Worker 'C' and acknowledge the briefing.</p> | | |

| Performance Steps | Standard | Grade | Comments |
|--|--|------------------|----------|
| Radiological conditions, potential for steam leakage in the area, planned task, applicable ALARA measures, and contingency measures, | | | |
| CUE: The Candidate may ask for an RWP to be generated. | CUE: Role play as RP and state that an RWP has been generated. | | |
| 15. •Generates an Emergency Exposure Authorization form. | <ul style="list-style-type: none"> • Candidate obtains a copy of EPIP- EPP-15 Attachment 1-1. • Candidate completes Section A. | Pass/Fail | |

End of JPM

TERMINATING CUE: When the Candidate completes the Emergency Exposure Authorization Form.

RECORD STOP TIME ___

OK TO PROVIDE AS APPLICANT HANDOUT

Initial Conditions:

1. You have assumed the responsibilities of the Shift Manager/Emergency Director.
2. Entry to the reactor building is required to manually close ICS*MOV121
3. Time to complete the task for an experienced operator will be approximately 12 minutes.
4. Time to complete the task for a new operator will be approximately 15 minutes
5. A RCIC steam leak into the Reactor Building can not be isolated without manually shutting ICS*MOV121.
6. Radiation levels at the valve are as high as 15 R/hr.
7. Three (3) individuals are available to perform the task.
 - Worker A is a volunteer who is an experienced Licensed Reactor Operator that has previously received a planned special exposure at another facility (TLD #1, Employee # - 00001, SSN: 111-11-1111).
 - Worker B is a volunteer who is an experienced Licensed Reactor Operator and is a declared pregnant worker and has received a dose of 15 mR this year (TLD #2, Employee # - 00002, SSN: 222-22-2222).
 - Worker C is a volunteer who is an experienced Licensed Reactor Operator that has received a dose of 1200 mR this year (TLD #3, Employee # 00003, SSN: 333-33-3333).
 - Worker D is a volunteer who is a new Licensed Reactor Operator that has received a dose of 250 mR this year (TLD #4, Employee # 00004, SSN: 444-44-4444).
8. Ask the operator for any questions.

Initiating Cue:

“(Operator’s name), choose an individual to close ICS*MOV121, estimate the expected radiation exposure and document your authorization for an Emergency Exposure.”

SECTION A - Emergency Pre-Exposure Information

| | | |
|--------------------|---------------------------|---|
| Name | Employer/NMPC Dept | SSN |
| TLD Badge No. | Authorized Exposure Limit | Date of Authorization |
| | | AUTHORIZATION FOR EMERGENCY EXPOSURE SSS/ED or ED/RM Signature/Date |
| RAM Signature/Date | | |

SECTION B (for anticipated exposure > 25 rem TEDE)

| | |
|---|------|
| I have volunteered to perform the task(s) during which I will receive emergency exposure and I have been briefed on the potential biological consequences of the proposed emergency exposure. | |
| Individual to Receive Exposure (Print/Initial): | Date |

SECTION C - (Attach Exposure Evaluation Records)

| | |
|--|------|
| TLD/Direct-Reading Dosimeter Results: | |
| Bioassay or Whole Body Counting Results: | |
| Medical Evaluation/Action: | |
| Dose Equivalent Assigned to Individual: | |
| RAM Signature: | Date |

SECTION D

| | |
|---|------|
| Disposition (Allow additional exposure, restrict access, etc.): | |
| RAM Signature: | Date |