Constellation Energy Group
NINE MILE POINT UNIT 2
OPERATOR JOB PERFORMANCE MEASURE

Title: Determine Personnel Overtime Availability IAW GAP-FFD-02 Revision: NRC 2008

Task Number: N/A

Approvals:

_____ / _____		N/A – Exam Security / _____	
General Supervisor Operations Training (Designee)	Date	General Supervisor Operations (Designee)	Date
N/A – Exam Security / _____			
Configuration Control	Date		

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: Perform

Evaluation Location: Classroom

Expected Completion Time: 20/30 minutes (RO/SRO) 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:

Evaluators Signature: _____ Date: _____

Recommended Start Location: Classroom

Simulator Set-up: None

Directions to the Instructor/Evaluator:

None

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 in grading areas as **Pass/Fail**.
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-FFD-02

Tools and Equipment:

1. Calculator

Task Standard: Determine Personnel Availability for Overtime IAW GAP-FFD-02.

Initial Conditions:

1. The plant is shutdown.
2. In order to support critical path work required for startup, personnel overtime will be required for the night shift on October 26 from 1830-0630.
3. All the overtime hours will be spent performing (ROs) or supervising (SROs) field activities.

Initiating Cues:

1. From the provided list of personnel working hours, determine who is eligible to work a complete 12 hours of overtime beginning at 1830 on October 26 without requiring an Overtime Deviation Request IAW GAP-FFD-02.

2. If an Overtime Deviation Request would be required for individual(s), state the work hour limit(s) which would be exceeded IAW GAP-FFD-02.

3. Complete the appropriate sections of an Overtime Deviation Request Form for all individuals who would need a deviation approved to cover the shift.

EXAMINER NOTE: – Provide Attachments A, B & C, and Blank Overtime Deviation Request Form.

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat
RECORD START TIME _____		
2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	GAP-FFD-02 obtained	Sat/Unsat
3. **FOR ROs** - Reviews work hours for Reactor	ROs - Determines the following:	**Pass/Fail**

	Operators 1 thru 3	RO #1 – Eligible RO #2 – Not Eligible – would exceed 72 hours in 7 day period RO #3 – Not Eligible – would exceed 24 hours in a 48 hour period	
	FOR SROs - Reviews work hours for Reactor Operators 1 thru 3 and Senior Reactor Operators 1 and 2	<u>SROs – Determines the above limitations plus the following:</u> SRO #1 – Eligible SRO #2 – Not Eligible – would exceed 16 hours in a 24 hour period	
4.	**FOR SROs** – Completes Overtime Deviation Request Form	Completes Columns 1 and 2 of Part 1 of GAP-FFD-02 Attachment 1, per attached key	**Pass/Fail**
		Completes Columns 3 and 4 of Part 1 of GAP-FFD-02 Attachment 1, per attached key	Sat/Unsat
		Completes Part 2 of GAP-FFD-02 Attachment 1, per attached key	Sat/Unsat

TERMINATING CUE: FOR ROs, JPM Attachment C completed. **FOR SROs**, JPM Attachment D and GAP-FFD-02 Attachment 1 completed

RECORD STOP TIME _____

ATTACHMENT A - ROs

RO #1							
10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26
1830-0642 (includes 12 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	OFF	1830-0730 (includes 60 minutes of turnover time)	1830-0542 (includes 12 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	1830-0706 (includes 36 minutes of turnover time)	OFF

RO #2							
10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26
OFF	1830-0642 (includes 12 minutes of turnover time)	1830-0630 (includes 0 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	1830-0654 (includes 24 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	OFF

RO #3							
10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26
1830-0642 (includes 12 minutes of turnover time)	1830-0630 (includes 0 minutes of turnover time)	1830-0648 (includes 18 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	OFF	1830-0742 (includes 12 minutes of turnover time)	OFF

ATTACHMENT B - SROs

SRO #1							
10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26
1830-0642 (includes 12 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	OFF	1830-0735 (includes 65 minutes of turnover time)	OFF	1830-0642 (includes 12 minutes of turnover time)	1830-0720 (includes 50 minutes of turnover time)	OFF

SRO #2							
10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26
1830-0642 (includes 12 minutes of turnover time)	1830-0630 (includes 0 minutes of turnover time)	1830-0648 (includes 18 minutes of turnover time)	1830-0642 (includes 12 minutes of turnover time)	OFF	0630-1830 (includes 0 minutes of turnover time)	OFF	0500-1200 (includes 0 minutes of turnover time)

ATTACHMENT C – SRO Answer Sheet

	Eligible to work without an Overtime Deviation Request? (Yes/No)	If No, what work hour limit(s) would be exceeded IAW GAP-FFD-02?
RO #1		
RO #2		
RO #3		
SRO #1		
SRO #2		

Initial Conditions:

1. The plant is shutdown.
2. In order to support critical path work required for startup, personnel overtime will be required for the night shift on October 26 from 1830-0630.
3. All the overtime hours will be spent performing (ROs) or supervising (SROs) field activities.

Initiating Cues:

1. From the provided list of personnel working hours, determine who is eligible to work a complete 12 hours of overtime beginning at 1830 on October 26 without requiring an Overtime Deviation Request IAW GAP-FFD-02.

2. If an Overtime Deviation Request would be required for individual(s), state the work hour limit(s) which would be exceeded IAW GAP-FFD-02.

3. Complete the appropriate sections of an Overtime Deviation Request Form for all individuals who would need a deviation approved to cover the shift.

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

Title: Assess Reportability Requirements Revision: NRC 2008

Task Number: NA

Approvals:

_____	NA EXAMINATION SECURITY
General Supervisor Operations Training (Designee) Date	General Supervisor Operations (Designee) Date

NA EXAMINATION SECURITY
Configuration Control Date

Performer:_____(SRO)

Trainer/Evaluator:_____

Evaluation Method: __X__ Perform _____ Simulate

Evaluation Location: _____ Plant _____X_____ Simulator or other location

Expected Completion Time: 25 min 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:
None

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.

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, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

4. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
5. During Evaluated JPM:
   - Self checking shall be demonstrated.
6. During Training JPM:
   - Self checking shall be demonstrated.
   - Peer checking shall be demonstrated.

References:

1. NIP-IRG-01
2. 10CFR50.72
3. NUREG 1022 Rev 2, Section 3.2.6
4. EAL Matrix

Tools and Equipment:
1. None

Task Standard:

Determine notification requirements.

Initial Conditions:

- The plant is operating at 100% power.
- Containment purge is in progress
- Maintenance is using an approved work order to perform a maintenance activity on containment purge isolation logic
- Work order identifies that the activity has the potential to cause containment purge isolation, due to the possibility of causing an electrical short.
- While the work order is being performed, the worker does create an electrical short and an automatic isolation of the containment purge system occurs. No other systems are affected.

- After conditions are stabilized, Drywell Floor Drain leakage rate rises to 10 gpm.
- Drywell pressure stabilizes below the scram setpoint but the leakage has remained at 10 gpm for the past 4 hours despite leakage reduction attempts.
- Actions to comply with Tech Specs as a result of the leakage are initiated and N2-OP-101C, Plant Shutdown is being implemented.
- Reactor power is now at 50%.
- Drywell Floor Drain leak rate is at 1gpm and Tech Spec LCO is exited.

- After conditions are stabilized, a spurious MSIV isolation occurs and the reactor automatically scrams
- All rods fully insert
- SRVs and RCIC are controlling reactor pressure
- Feedwater is controlling RPV level which is being maintained 160 to 200 inches.
- Plant conditions are stabilized and a normal cool down occurs.

Initiating cue:

)erator's name), identify the applicable verbal notification requirements, the reason that they apply and the associated time limitations for reporting under that category".

Performance Steps	*Standard*	*Grade*
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary*	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat
RECORD START TIME _____		
2 •Obtain a copy of the any of the reference documents related to regulatory notifications. These are likely to include the following: □ NIP-IRG-01 □ 10CFR50.72 and 73 □ NUREG1022 □ EAL Matrix	□ Reference materials obtained. **Note: Invalid isolation during maintenance is illustrated in NUREG 1022, Rev 2, section 3.2.6 System Actuation on page 52, example 7.**	

Performance Steps	*Standard*	*Grade*
3. Locate and identify applicability of 50.72 (b)(3)(iv)(B)(2). LER is not a verbal reporting requirement.	□ Determines actuation of isolation logic is not reportable under 50.72 (b)(3)(iv)(B)(2) because the actuation is not due to a valid signal. □ LER is required under 50.73 (b)(2)(iv). Identification of this requirement is not required.	**Pass/Fail** Sat/Unsat/NA
4. Locate and identify applicability of 50.72(a)(1)(i). Declaration of an Emergency Class.	□ Identifies leak rate above 10 gpm requires EAL 2.1.1 UNUSUAL EVENT must be declared. □ Identify reportability per 50.72(a)(1)(i) and (a)(3), within 15 minutes of declaration, immediately after notifying State and local agencies and not later than one hour after the time of declaration.	**Pass/Fail**
5. Locate and identify applicability of 50.72(b)(2)(i). Non-emergency four hour report. Initiation of a plant shutdown required by Tech Specs. (If not already reported with the 50.72(a)(1)(i).	□ Refer to Tech Spec **3.4.5.C.** and determines that with specification not being met, the required action to comply with Tech Spec is to be cold shutdown within 12 hours. The plant shutdown being performed is required by Tech Specs. □ Identify reportability per 50.72(b)(2)(i) within four hours, if not already reported.	Sat/Unsat **Pass/Fail**
6. Locate and identify applicability of 50.72(b)(2)(iv)(B) Non-emergency four hour report. Actuation of RPS when the reactor is critical.	□ Identify reportability per 50.72(b)(2)(iv)(B) within 4 hours, if not already reported.	**Pass/Fail**

End of JPM

TERMINATING CUE: Determine notification requirements.

RECORD STOP TIME_

_

Applicant Cue Sheet

Initial Conditions:

- The plant is operating at 100% power.
- Containment purge is in progress
- Maintenance is using an approved work order to perform a maintenance activity on containment purge isolation logic
- Work order identifies that the activity has the potential to cause containment purge isolation, due to the possibility of causing an electrical short.
- While the work order is being performed, the worker does create an electrical short and an automatic isolation of the containment purge system occurs. No other systems are affected.

- After conditions are stabilized, Drywell Floor Drain leakage rate rises to 10 gpm.
- Drywell pressure stabilizes below the scram setpoint but the leakage has remained at 10 gpm for the past 4 hours despite leakage reduction attempts.
- Actions to comply with Tech Specs as a result of the leakage are initiated and N2-OP-101C, Plant Shutdown is being implemented.
- Reactor power is now at 50%.
- Drywell Floor Drain leak rate is at 1gpm and Tech Spec LCO is exited.

- After conditions are stabilized, a spurious MSIV isolation occurs and the reactor automatically scrams
- All rods fully insert
- SRVs and RCIC are controlling reactor pressure
- Feedwater is controlling RPV level which is being maintained 160 to 200 inches.
- Plant conditions are stabilized and a normal cool down occurs.

Initiating cue:
"(Operator's name), identify the applicable verbal reportability requirements, the reason that they apply and the associated time limitations for reporting under that category".

JPM Scorecard KEY

pplicable verbal reportability requirements, the reason that they apply and the associated time limitations for reporting under that category		
Requirement		nt) Category Applies
B)(2). General containment isolation signals.	ABLE	rge Isolation during maintenance activity. Also, only affects one system.
d (a)(3). Declaration of an Emergency Class	es of declaration, immediately after notifying state and local agencies and not later than one hour after the time of declaration	E 2.1.1
itiation of a plant shutdown required by Tech Specs	f not previously reported.	nt shutdown required by Tech Specs 3.4.5.C Unidentified leakage is above 5 gpm for >4 hours.
). Actuation of RPS when the reactor is critical.	f not previously reported.	or trip when the reactor is critical.

JPM Scorecard For Applicant Use

)plicable verbal reportability requirements, the reason that they apply and the associated time limitations for reporting under that category		
Requirement		nt) Category Applies

Title: Offsite Dose Calculation Manual (ODCM) Assessment for Inoperable Equipment

Revision: NRC 2008

Task Number:

Approvals:

_____	NA EXAMINATION SECURITY
General Supervisor Operations Training (Designee) Date	General Supervisor Operations (Designee) Date

NA EXAMINATION SECURITY
Configuration Control Date

Performer:_____(SRO)

Trainer/Evaluator:_____

Evaluation Method: **PERFORM**

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

Expected Completion Time: 15 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 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:
5. N2-OP-42, Offgas System.
6. ODCM D.3.3.2, Radioactive Gaseous Effluent Monitoring Instrumentation.
7. 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. *Evaluator Acknowledge repeat back providing correction if necessary*	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.	❑ ODCM obtained. Section D.3.3.2 and Bases B 3.3.2 are referenced.	Sat/Unsat	
2. •Reference CONDITION B	❑ Determines that the inoperable OFG Radiation Monitors must be restored to OPERABLE status within 30 days. ❑ Refers to Table 3.3.2-1 ❑ Determines that CONDITION C is applicable	Sat/Unsat Sat/Unsat Sat/Unsat	

Performance Steps	*Standard*	*Grade*	*Comments*
3. •Reference CONDITION C 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.	❑ Determines that tripping both channels of OFG*RE13A and B would isolate OFG requiring a scram.	Sat/Unsat	
	❑ Determines that OFG grab samples must be taken within 12 hours and once per 12 hours thereafter.	**Pass/Fail**	
	❑ Determines that the samples must be analyzed within 24 hours of sample completion. ***Cue: Acknowledge the sample requirements for OFG.***	**Pass/Fail**	

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.	❑ Reviews ODCM Section 3.0, Applicability. ❑ Reviews Tech Spec Section 1.3, Completion Times.	Sat/Unsat Sat/Unsat	
2. •Determines that Example 1.3-1 applies to the first "12 Hours"	❑ First sample is due by 18:00 today	**Pass/Fail**	
3. •Determines that Example 1.3-6 applies to the next " <u>AND</u> once per 12 hours thereafter".	❑ Second sample is due by 06:00 tomorrow, with an allowable extension of 3 hours (as late as 09:00)	**Pass/Fail**	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."

Initial Conditions and Initiating Cue Information Sheet

nditions:

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 With PARs Rev: NRC 2008

Task Number: N/A

Approvals:

_____	NA EXAMINATION SECURITY
General Supervisor Operations Training (Designee) Date	General Supervisor Operations (Designee) Date

NA EXAMINATION SECURITY
Configuration Control Date

Performer:_____(SRO)

Trainer/Evaluator:_____

Evaluation Method: ___X___ Perform _____ Simulate

Evaluation Location: _____ Plant _____X_____ Simulator or other location

Expected Completion Time: 20 min 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:

Evaluators Signature:_____ Date:_____

Recommended Start Location: (Completion time based on the start location)
Any appropriate location with proper references.

Simulator Set-up (if required):
None

Directions to the Instructor/Evaluator:

Candidate is to be provided with blank SM/ED Emergency Plan packet (obtained from control room or simulator) that would be used by SM/ED during actual emergency plan implementation.

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.

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, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

7. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "●".
8. During Evaluated JPM:
   - Self checking shall be demonstrated.
9. During Training JPM:
   - Self checking shall be demonstrated.
   - Peer checking shall be demonstrated.

References:

2. EPIP-EPP-08, Offsite Dose Assessment And Protective Action Recommendations
3. EPIP-EPP-20, Emergency Notifications
4. EAL Matrix

Tools and Equipment:

1. EAL Matrix
2. SM/ED Emergency Plan Packet

Task Standard:

Given a set of plant conditions, classify the emergency (within 15 min.), and complete the Part 1 Notification Fact sheet including PARs (within 15 min.)

Initial Conditions:

1. The plant is under accident conditions.
2. A Site Area Emergency has been declared based on plant conditions.
3. An Exclusion Area Evacuation has been directed and is in progress.
4. The Chemistry Technician has reported the following release data:
   - Dose assessment for ground level release rate is 154 Curies per second (Ci/second)
   - Dose assessment for elevated level release rate is 842 Ci/second
   - Wind speed is 12 mph
   - Wind direction is from (65°)
   - Pascal Stability Class is D

Initiating Cues:

"(Operator's name), Take the required actions as the Emergency Director."

Performance Steps	Standard	Grade
Evaluator Note: Inform the Candidate that this is a Time-Critical task		
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat
RECORD TASK 1 CRITICAL START TIME _____		
2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	The candidate may reference any/all of the following: EAL Matrix obtained. Section 5.0 EPIP-EPP-08 Att. 1	Sat/Unsat
3. Using given plant data and EPIP0-EPP-08 Attachment 1 Table 1.1 and Table 1.2, determine that a General Emergency exists based upon calculated total release (ground release + elevated release).	General Emergency is declared, within 15 minutes of recorded start time for Task 1. From EPP-08 Attachment 154/357 = (.431) + 842/1388 = (.607) = 1.038 (General Emergency Exists if above 1.0)	**Pass/Fail**
RECORD TASK 1 CRITICAL STOP/ TASK 2 CRITICAL START TIME _____		
4. Review meteorological data and EPIP-EPP-08 and/or EPIP-EPP-20 to determine PAR's. **Cue: If asked, all evacuation routes are available for use.**	PAR's made and indicated on Part I Notification Fact Sheet Block 6.B to evacuate and implement the KI Plan for ERPA's 1, 2, 3,6,11, 26, and 27. Advise the remaining ERPA's listen to Emergency Alert System, within 15 minutes of recorded start time for Task 2.	**Pass/Fail**
RECORD TASK 2 CRITICAL STOP TIME _____		

Terminating Cue: The event is classified as a General Emergency and PAR's are made.

RECORD STOP TIME _____

Initial Conditions:

1. The plant is under accident conditions.
2. A Site Area Emergency has been declared based on plant conditions.
3. An Exclusion Area Evacuation has been directed and is in progress.
4. The Chemistry Technician has reported the following release data:

   - Dose assessment for ground level release rate is 154 Curies per second (Ci/second)
   - Dose assessment for elevated level release rate is 842 Ci/second
   - Wind speed is 12 mph
   - Wind direction is from (65°)
   - Pascal Stability Class is D

Initiating Cues:

"(Operator's name), Take the required actions as the Emergency Director."

Constellation Energy Group
OPERATOR JOB PERFORMANCE MEASURE

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

Revision: NRC 2008

Task Number: N/A

Approvals:

_____	NA EXAMINATION SECURITY
General Supervisor Operations Training (Designee) Date	General Supervisor Operations (Designee) Date

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:

8. GAP-RPP-01; 3.5.
9. GAP-RPP-02; 3.3.
10. GAP-RPP-08; 3.2.
11. GAP-RPP-07; 3.2.5
12. K/A 2.3.12 (3.7) Knowledge of radiological safety principles related to licensed operator duties.

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 1690 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*
2. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary*	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat	
RECORD START TIME _____	NOTE: A score card is attached to this JPM identifying the items for the performer to identify.		
3. •Obtain a copy of the reference procedure and review/utilize the correct section.	N2-PM-M008 obtained and referenced. *GAP-RPP-01; 3.5 referenced as required.* *GAP-RPP-02; 3.3 referenced* as required *GAP-RPP-08; 3.2 referenced* as required *GAP-RPP-07; 3.2.5 referenced as required*	Sat/Unsat	

Performance Steps	Standard	Grade	Comments
4. •Applicable radiological precautions shall be observed. Rad Protection shall be contacted for guidance as required.	*Reviews RWP / Survey Map:* - *Determine radiological controls:* *SCORECARD #1:* ***HIGH RADIATION AREA*** **Pass/Fail** *SCORECARD #2:* ***Area dose rates up to 190 mrem/hour.*** **Pass/Fail** - *Determine protective clothing:* *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.*** **Pass/Fail** - *Determine entry requirements dosimetry:* Sat/Unsat *SCORECARD #4:* ***Determine TLD and ED required to enter the area.*** - ***Per GAP-RPP-08, Step 3.2.2, determine delta exposure:*** **Pass/Fail** *SCORECARD #5:* ***Determine required delta exposure of 300 mrem. Additional approvals ARE NOT required prior to performing the inspection.***		

Performance Steps	Standard	Grade	Comments
	1690+10+15+5+300 = 2020 mrem (In excess of 2000 mrem requires RP and Dept Manager approval per GAP-RPP-07 3.2.5).		
5. •Check the Radiation/ Contamination survey Map Entry Record Sheet for the area which require inspection.	*SCORECARD #6:* ***Notes area with highest contamination levels.***	**Pass/Fail**	
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.	*PROMPT: If determines X-R key, inform the performer that RP is not authorized to issue X-R keys to operators.*		
c. •Obtain associated key(s) from radiation protection.	*SCORECARD #7:* ***Determine H2D-13 key is needed (indicated on survey map) and it is obtained from radiation protection.***	Sat/Unsat	RP would not issue an X-R key if requested so not critical.

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 1690 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"

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.

Answer the following when performing this task:	
SCORECARD #1: **PASS/FAIL**	
Classify the area (check one):	☐ Radiation Area ✓***High Radiation Area*** ☐ Locked High Radiation Area ☐ Very High Radiation Area
SCORECARD #2: **PASS/FAIL**	
Designate the highest dose rate in the area and the location: ***190 mrem/hr, Between Tip Machine D & E***	
SCORECARD #3: **PASS/FAIL**	
Designate whether or not protective clothing is required (check one): The area is a Contaminated Area	✓***Yes*** ☐ No
SCORECARD #4: **SAT/UNSAT**	
Designate required dosimetry to enter the area: ***TLD and ED (Electronic Dosimeter)***	
SCORECARD #5: **PASS/FAIL**	
Evaluate delta exposure (check one) and explain: Total is 1690+10+15+5+300 = 2020 mrem (In excess of 2000 mrem requires RP and Dept Manager approval per GAP-RPP-07 3.2.5).	☐ Acceptable ■ Additional approval(s) required
SCORECARD #6: **PASS/FAIL**	
Designate the highest contamination levels in the room and the location: ***20,000dpm/100cm2 at Tip Machine "C"***	
SCORECARD #7: **SAT/UNSAT**	
Designate the key to be obtained <u>AND</u> who controls the key: ***H2D-13 controlled by RP***	
:	