

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: 2150300101 / PILT-ADMIN 000 K/A: 215005A1.04
RO: 4.1 SRO: 4.1

TASK DESCRIPTION: Perform APRM Scram Margin Check

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. This JPM requires performance using either the Simulator NUMAC drawers or the actual Control Room APRM NUMAC drawers. Due to the electronic displays, this JPM should not be "simulated". Normally, this "Control Room" JPM will be performed in the simulator however this JPM may be performed in the actual Control Room on a real APRM NUMAC drawer with no impact on plant operation under the supervision of the shift.
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

6. This JPM should be performed in the Simulator but may be performed in the actual Control Room with no impact on plant operation. Obtain Control Room Supervisor and Unit RO permission prior to performing this JPM and prior to entering the controls area.
7. The procedure normally requires the operator to perform the scram check on all operable APRMs. For this JPM, only APRM #4 is directed since this task is repetitive. The evaluator may also select a different APRM if desired (e.g., if APRM #4 NUMAC drawer is out of service).

B. TOOLS AND EQUIPMENT

None

C. REFERENCES

1. Procedure SO 60A.7.C-2 Rev. 11 "APRM Scram Margin Check"

D. TASK STANDARD

1. Satisfactory task completion is indicated when the student determines the correct scram margin as recorded on SO 60A.7.C-2 Data Sheet 1
2. Estimated time to complete: 10 minutes Non-Time Critical

DIRECTIONS TO EXAMINEE

When given the initiating cue, perform necessary steps to perform an APRM scram margin check for APRM #4 using appropriate procedures. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. Unit 2 startup and power ascension is in progress at approximately 60% power.
2. All APRM Channels are Operable and in service.

G. INITIATING CUE

The Control Room Supervisor directs you to determine the scram margin for APRM #4 in accordance with SO 60A.7.C-2 "APRM Scram Margin Check".

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
1	Obtain a copy of procedure SO 60A.7.C-2.	P	A copy of procedure SO 60A.7.C-2 is obtained.
*2	Student determines that Step 4.1 is applicable for Mode 1 operation.	P	Student selects Step 4.1 to perform.
****NOTE****			
Step 4.1 directs the operator to determine Scram setpoints for all operable APRMs. For this JPM, APRM #4 is the selected. A different APRM may be selected by the evaluator if desired (e.g., APRM #4 NUMAC is out of service). If this JPM is being performed in the Control Room			
4	At selected APRM NUMAC display (APRM #4), depress the "ETC" softkey to obtain the "SHOW PARAMETERS" softkey.	P	At APRM #4 NUMAC display, depress the "ETC" softkey to obtain the "SHOW PARAMETERS" softkey.
5	Depress "SHOW PARAMETERS" softkey.	P	Depress "SHOW PARAMETERS" softkey.
*6	Under the "APRM RUN MODE SETPOINTS" section, record the value of "STP UPSCALE TRIP (FLOW BIASED)" on Data Sheet 1 under "APRM SCRAM SETPOINT".	P	Record the value of "STP UPSCALE TRIP (FLOW BIASED)" on Data Sheet 1 under "APRM SCRAM SETPOINT".
7	Depress "EXIT" softkey.	P	Depress "EXIT" softkey.
8	Record "STP (%)" value on Data Sheet 1 under "APRM CURRENT".	P	Record "STP (%)" value on Data Sheet 1 under "APRM CURRENT".
	Note: Step 4.2 is not applicable for the reactor mode condition.		
*10	Determine SCRAM margin by performing the following calculation AND recording the value on Data Sheet 1 under "SCRAM MARGIN": SCRAM MARGIN = APRM SCRAM SETPOINT - APRM CURRENT = SP -C	P	Correctly calculates APRM #4 Scram Margin on Data Sheet 1: SCRAM MARGIN = APRM SCRAM SETPOINT - APRM CURRENT = SP -C

STEP NO	STEP	ACT	STANDARD
13	Inform Control Room Supervisor of task completion. (Cue: Control Room Supervisor acknowledges report.)	P	Task completion reported.

Under "ACT" P - must perform
S - must simulate

I. TERMINATING CUE

When SGBT system is running to support HPCI operation, the Control Room Supervisor should be informed. The evaluator will then terminate the exercise.

TASK CONDITIONS/PREREQUISITES

Unit 2 Startup and power ascension is in progress at approximately 60% power.

All APRM Channels are Operable and in service.

INITIATING CUE

The Control Room Supervisor directs you determine the scram margin for APRM #4 in accordance with SO 60A.7.C-2 "APRM Scram Margin Check".

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: X

K/A: Generic 2.2.11

URO: 2.5 SRO: 3.4

TASK DESCRIPTION: Knowledge of the process for controlling Temporary Changes

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. None

C. REFERENCES

1. AD-PB-101-1003 Rev.1, Temporary Changes to Procedures.
2. SO 52A.1.B Rev. 24, Section 4.1, Diesel Generator Operations, Slow Start.

D. TASK STANDARD

1. Satisfactory task completion is indicated when Temporary Change has been submitted to the SRO with Attachment 3, Part "A" completed, in accordance with the approved procedure.
2. Estimated time to complete: 20 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform necessary steps to initiate a "single use" temporary change to SO 52A.1.B, "Diesel Generator Operations, Slow Start", step 4.1.1.4, using AD-PB-101-1003, "Temporary Changes to Procedures". I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. The Plant is operating at full power.
2. A "slow start" of the E-1 Diesel Generator, per ST-O-052-201-2 "E1 Diesel Generator Slow Start and Full Load Test" and SO 52A.1.B "Diesel Generator Operations, Slow Start", is required for operability requirements.
3. The E-1 Diesel Generator Coolant Expansion Tank level indicating sightglass has a crack in it. The sightglass is isolated with an Equipment Status Tag (EST), but the tank is still available for use.
4. Maintenance reports that the sightglass will be repaired prior to the next scheduled run of the E-1 Diesel Generator.
5. The Control Room Supervisor has directed that the System Manager will determine and verify Coolant Expansion Tank level, then report it to the Control Room as part of the pre-start check of the E-1 Diesel Generator.

G. INITIATING CUE

The Control Room Supervisor directs you to initiate a "single use" temporary change to SO 52A.1.B, "Diesel Generator Operations, Slow Start", step 4.1.1.4, using AD-PB-101-1003, "Temporary Changes to Procedures".

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
1	Obtain a copy of AD-PB-101-1003, "Temporary Changes to Procedures" and review/utilize the correct section of the procedure.	P	A copy of AD-PB-101-1003, "Temporary Changes to Procedures" is obtained. Initiator responsibility is reviewed.
2	Determine if a Temporary Change is valid for the conditions. CUE: Once the Student has determined that the temporary change criteria are met, provide him/her Attachment 2 of this JPM "SO 52A.1.B, "Diesel Generator Operations, Slow Start".	P	Uses Attachment 1 of AD-PB-101-1003, "Temporary Changes to Procedures" to determine that temporary change criteria are met.
Note The Student may not classify the temporary change because "single use" was given to him/her in the initiating cue.			
3	Determine the temporary change classification.	P	Uses the information provided and determines that this temporary change is a SINGLE USE change.
*4	Complete the required mark-up of SO 52A.1.B, "Diesel Generator Operations, Slow Start". NOTE: The exact wording by the Student may vary from that of this JPM step. As long as the intent is clear the exact wording is not important.	P	Completes the mark-up of SO 52A.1.B, "Diesel Generator Operations, Slow Start" by performing the following with BLACK ink: <ul style="list-style-type: none"> • Draws a single line through each sentence of step 4.1.1.4 of SO 52A.1.B, "Diesel Generator Operations, Slow Start". • Inserts the following text as close to the affected step as possible; <ul style="list-style-type: none"> ○ "The System Manager will verify and report Coolant Expansion tank level to the Control Room and will have coolant added as necessary."

STEP NO	STEP	ACT	STANDARD
	<p>NOTE: The Student may insert an area for SQR/SRO review. Normally this is performed by the SQR/SRO.</p>		<ul style="list-style-type: none"> • Insert the following in the left margin of the affected step(s); <ul style="list-style-type: none"> ○ Initial/Date of SQR, AND ○ Initial/Date of SRO.
*5	<p>Complete Temporary Change Form, Attachment 3, Part A.</p> <p>NOTE: This Diesel Generator procedure is common to both Units.</p> <p>NOTE: This was determined in step #2 of this JPM from the given information.</p> <p>CUE: Inform Student that <u>NO</u> other Temporary Changes are in affect on this page of SO-54A.1.B.</p> <p>NOTE: The exact wording by the Student may vary from that of this JPM step. As long as the intent is clear the exact wording is not important.</p>	P	<p>Completes the Temporary Change Form, Attachment 3, Part A, as follows:</p> <ul style="list-style-type: none"> • Places a check mark next to "Common" in step #1, "Unit Applicability". • Places a check mark next to "Single Use (S)" in step #2, "TC Classification". • Inserts SO-54A.1.B and current revision number in step #3, "Procedure Number". • Inserts Diesel Generator Operation in step #4, "Procedure Title". • Inserts 3 of 29 in step #5, "Pages Affected". • Place a check mark next to "NO" in step #6, "Does this TC supersede or replace existing TC's". • Inserts System Manager will verify and report Coolant Expansion tank level to the Control Room and will have coolant added as necessary in step #7, "TC Description". • Inserts Diesel Generator #1 Coolant Expansion tank level sightglass is broken, valved out and won't be fixed before the Diesel needs to be slow started in step #8, "Reason for TC".

STEP NO	STEP	ACT	STANDARD
*6	Present the temporary change for review and approval. CUE: Accept Attachment 3 and SO 52A.1.B, Diesel Generator Operations, Slow Start” from the Student as the SQR and SRO.	P	Presents Attachment 3 of AD-PB-101-1003, “Temporary Changes to Procedures” and the entire Diesel Generator Operation procedure SO 52A.1.B, “Diesel Generator Operations, Slow Start” with the marked up step 4.1.1.4 to the SQR and SRO for review and approval.
7	As an evaluator ensure that you have positive control of all exam material provided to the examinee (Task Conditions/Prerequisites) AND procedures.	P	Positive control established.

Under “ACT” P - must perform
S - must simulate

I. TERMINATING CUE:

When Attachment 3 of AD-PB-101-1003, “Temporary Changes to Procedures” and the entire Diesel Generator Operation procedure SO 52A.1.B, “Diesel Generator Operations, Slow Start” with the marked up step 4.1.1.4 have been presented to the SQR and SRO for review and approval, the evaluator will terminate the exercise.

J. SPECIAL INSTRUCTIONS:

None

ATTACHMENT 1

TASK CONDITIONS/PREREQUISITES

- 1. The Plant is operating at full power.**
- 2. A “slow start” of the E-1 Diesel Generator, per ST-O-052-201-2 “E1 Diesel Generator Slow Start and Full Load Test” and SO 52A.1.B “Diesel Generator Operations, Slow Start”, is required for operability requirements.**
- 3. The E-1 Diesel Generator Coolant Expansion Tank level indicating sightglass has a crack in it. The sightglass is isolated with an Equipment Status Tag (EST), but the tank is still available for use.**
- 4. Maintenance reports that the sightglass will be repaired prior to the next scheduled run of the E-1 Diesel Generator.**
- 5. The Control Room Supervisor has directed that the System Manager will determine and verify Coolant Expansion Tank level, then report it to the Control Room as part of the pre-start check of the E-1 Diesel Generator.**

INITIATING CUE

The Control Room Supervisor directs you to initiate a “single use” temporary change to SO 52A.1.B, “Diesel Generator Operations, Slow Start”, step 4.1.1.4, using AD-PB-101-1003, “Temporary Changes to Procedures”.

ATTACHMENT 2

SO 52A.1.B, DIESEL GENERATOR OPERATIONS

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: X / PLOR-172C

K/A: 2.1.24

URO: 2.8 SRO: 3.1

TASK DESCRIPTION: Familiarity and Use of P&IDs

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. M-315 Sheet 1, Rev. 64, "Emergency Service Water and High Pressure Service Water System" print
2. M-315 Sheet 4, Rev. 50, "Emergency Service Water and High Pressure Service Water System" print
3. M-330 Sheet 1, Rev. 33, "Emergency Cooling System" print

C. REFERENCES

1. M-315 Sheet 1, Rev. 64, "Emergency Service Water and High Pressure Service Water System" print
2. M-315 Sheet 4, Rev. 50, "Emergency Service Water and High Pressure Service Water System" print
3. M-330 Sheet 1, Rev. 33, "Emergency Cooling System" print

D. TASK STANDARD

1. Satisfactory task completion is indicated when it has been determined that following any start of the Diesel Generators the:
 - a. A and B ESW pump will automatically start and continue to run normally.
 - b. ECW pump will automatically start and shut down after 45 seconds.
 - c. ECW discharge valve (MO-0841) will remain closed.
2. Estimated time to complete: 15 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform necessary steps to determine the impact of a damaged instrument on cooling water operation using the appropriate P&IDs. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

An Equipment Operator reports to the control room that PS-0246B, mounted on the "B" Emergency Service Water Pump (OBP057) discharge pipe has been damaged by scaffolding such that it cannot sense high pressure.

G. INITIATING CUE

The Control Room Supervisor directs you to use P&IDs to determine the impact of the damaged PS-0246B on cooling water operation during a Diesel Generator start without additional operator actions.

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
1	Obtain M-315 Sh. 4, "P&I Diagram Emergency Service Water and High Pressure Service Water Sys's".	P	M-315 for ESW is located using the M-300 index. Sheet 4 is located as featuring the "B" ESW pump.
2	Locate the "B" ESW pump on M-315 Sh. 4.	P	"B" ESW is located at coordinates A-5 on M-315 Sh. 4.
3.	Locate PS-0246B on the discharge pipe of the "B" ESW pump.	P	PS-0246B is located at coordinates B-5 on M-315 Sh. 4.
*4	Determine that the "B" ESW pump will start on a Diesel Generator Start.	P	Diesel Generator start is identified as a start signal from the logic illustrated on M-315 Sh. 4 coordinates B-5 <u>OR</u> from individuals knowledge base.
5	Determine that if a damaged PS-0246B is unable to sense high pressure it will contribute a "LOW" to the logic.	P	Logical outputs of "LOW" and "NOT LOW" are located on M-315 Sh. 4 coordinates B-5. A logic output of "LOW" is determined.
6	Trace logic lines to M-315 Sh. 1 G-6.		Logic lines are traced to M-315 Sh.1 using continuation identifiers on M-315 Sh. 4 coordinates B-6.
7	Obtain M-315 Sh. 1, "P&I Diagram Emergency Service Water and High Pressure Service Water Sys's".	P	M-315 Sh. 1 is located using continuation identifiers on M-315 Sh. 4.
8	Determine that logic lines from M-315 Sh. 4 input to "AND" logic on M-315 Sh. 1 coordinates G-6.	P	Logic lines from M-315 Sh.4 are traced to "AND" logic on M-315 Sh. 1 coordinates G-6.
*9	Determine that the "A" ESW pump will start on a Diesel Generator start.	P	Diesel Generator start is identified as a start signal from the logic illustrated on M-315 Sh. 1 coordinates G-5 <u>OR</u> from individuals knowledge base.
10	Determine that PS-0246A will contribute a "NOT LOW" to the logic.	P	Logical outputs of "LOW" and "NOT LOW" are located on M-315 Sh. 1 coordinates G-7. A logic output of "NOT LOW" is determined.
11	Determine that the "AND" logic will <u>not</u> be satisfied due to <u>lack of</u> "LOW" from PS-0246A and "LOW" from PS-0246B.	P	Logic lines from PS-0246A are traced to "AND" logic on M-315 Sh. 1 coordinates G-6. "AND" logic is not satisfied due to lack of "LOW" from PS-0246A.
12	Determine that the "OR" logic will be satisfied by PS-0246A "NOT LOW".	P	Logic lines from PS-0246A are traced to "OR" logic on M-315 Sh. 1 coordinates G-6. "OR" logic is satisfied by singular input of "NOT LOW" from PS-0246A.
13	Trace logic lines to M-330 Sh. 1 coordinates G-3.	P	Logic lines are traced to M-330 Sh. 1 using continuation identifiers on M-315 Sh. 1 coordinates G-6.
14	Obtain M-330 Sh. 1 "P&I Diagram Emergency Cooling System".	P	M-330 Sh. 1 is located using continuation identifier on M-315 Sh.1.

STEP NO	STEP	ACT	STANDARD
15	Determine that the "AND" logic for the ECW pump will be satisfied by either ESW pump A or B discharge pressure "NOT LOW" and ECW pump not started manually when an auto start has existed for 45 seconds.	P	Logic lines from M-315 Sh. 1 G-6 are traced to "AND" logic on M-330 Sh. 1, coordinates G-3. "AND" logic is determined to be satisfied with inputs from either the A or B ESW pump discharge pressure "NOT LOW" and ECW not started manually when auto has existed for 45 seconds.
*16	Determine that the ECW pump will trip 45 seconds after an ECW auto start signal on Diesel Generator start.	P	Logic line from "AND" is traced to ECW "TRIP" when auto start signal has existed for 45 seconds.
*17	Determine that the "AND" logic for the ECW discharge valve MO-0841 will <u>NOT</u> be satisfied since ESW A <u>AND</u> B discharge pressure is <u>NOT</u> low. The ECW discharge valve will remain closed following an ECW auto start signal.	P	Logic lines are traced to "AND" logic on M-330 Sh. 1 coordinates H-3.
18	Control Room Supervisor informed of plant impact of damaged PS-0246B on cooling water should a Diesel Generator start occur. (Cue: Acknowledge report.)	P	Inform the Control Room Supervisor that on a Diesel Generator start, the: <ul style="list-style-type: none"> • A and B ESW pumps will automatically start and continue to run normally. • ECW pump will automatically start and shutdown after 45 sec. • ECW discharge valve (MO-0841) will remain closed.

Under "ACT" P - must perform
S - must simulate

I. TERMINATING CUE

When the impact of the damaged PS-0246B on ESW and ECW operation following a Diesel Generator start has been determined, the Control Room Supervisor should be informed. The evaluator will then terminate the exercise.

TASK CONDITIONS/PREREQUISITES

An Equipment Operator reports to the control room that PS-0246B, mounted on the “B” Emergency Service Water Pump (OBP057) discharge pipe has been damaged by scaffolding such that it cannot sense high pressure.

INITIATING CUE

The Control Room Supervisor directs you to use P&IDs to determine the impact of the damaged PS-0246B on cooling water operation during a Diesel Generator start without additional operator actions.

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: 2730130202

K/A: 2.3.11

URO: 2.7 SRO: 3.2

TASK DESCRIPTION: Ability to control radiation releases.

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. Copy of ST-C-095-805-2, Rev. 9, completed through step 6.12.8.

C. REFERENCES

1. ST-C-095-805-2, Rev. 9, "Liquid Radwaste Discharge".

D. TASK STANDARD

1. Satisfactory task completion is indicated when section 6.13 has been completed in its entirety.
2. Estimated time to complete: 12 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform the necessary steps to set-up the plant in preparation for a Liquid Radwaste discharge. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. Both units are operating at 100% power.
2. The Floor Drain Sample Tank (FDST) needs to be discharged.
3. Chemistry and Shift Management have completed ST-C-095-805-2, "Liquid Radwaste Discharge" through step 6.12.8.
4. Six Circulating Water Pumps are in operation.
5. The discharge Canal-To-Intake Pond crosstie gate is closed.
6. The PRO review and set-up has not been completed.

G. INITIATING CUE

You are the PRO. Complete section 6.13 of ST-C-095-805-2 "Liquid Radwaste Discharge".

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
1	Record actual number of operating Circulating Pumps.	P	Visually verify six Circulating Pumps are operating, record and initial step 6.13.1.
*2	Set the HI Trip Setpoint.	P	Manually adjust the HI Setpoint Pot setting for RIS-0-17-350 to ≤ 4.43 , and record and initial step 6.13.2.
*3	Set the HI HI Trip Setpoint.	P	Manually adjust the HI HI Setpoint Pot setting for RIS-0-17-350 to ≤ 4.46 , and record and initial step 6.13.3.
4	Review PRO steps.	P	Visually verify all the PRO steps in section 6.13 are complete, and initial step 6.13.5 SAT.
5	Record your name and initials.	P	Print your name and initials in Section 10.0.
6	Forward the test. (Cue: Radwaste Operator has received the test.)	P	Forward this test to the Radwaste Operator, and initial step 6.13.6 SAT.
*** NOTE ***			
Terminate the exercise when the activities listed above are performed.			

Under "ACT" P - must perform
S - must simulate

I. TERMINATING CUE

When Section 6.13 of ST-C-095-805-2 has been completed, terminate the exercise.

TASK CONDITIONS/PREREQUISITES

- 1. Both units are operating at 100% power.**
- 2. The Floor Drain Sample Tank (FDST) needs to be discharged.**
- 3. Chemistry and Shift Management have completed ST-C-095-805-2, "Liquid Radwaste Discharge" through step 6.12.8.**
- 4. Six Circulating Water Pumps are in operation.**
- 5. The discharge Canal-To-Intake Pond crosstie gate is closed.**
- 6. The PRO review and set-up has not been completed.**

INITIATING CUE

You are the PRO. Complete section 6.13 of ST-C-095-805-2 "Liquid Radwaste Discharge".

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: 3440230503 / PLOR-094C

K/A: 2.4.43

URO: 2.8 SRO: 3.5

TASK DESCRIPTION: Direct a Site Evacuation

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a **CRITICAL STEP**. **CRITICAL STEPS** are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

None

C. REFERENCES

ERP-130, Rev. 20, "Site Evacuation"

D. TASK STANDARD

1. Satisfactory task completion is indicated when a site evacuation has been directed.
2. Estimated time to complete: 18 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform necessary steps to direct a site evacuation using appropriate procedures. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

A Site Area Emergency has just been declared by the Emergency Director.

G. INITIATING CUE

The Emergency Director has directed you to implement ERP-130, "Site Evacuation" Step 2.2 in order to evacuate the site of non-essential personnel and have them report to the North Substation.

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
1	Obtain a copy of procedure ERP-130.	P	A copy of procedure ERP-130 is obtained.
*2	Activate the Page Alert Tone system. (Cue: Siren noise audible on loudspeaker.)	P	Station Alert Tone system pushbutton is momentarily depressed at the Plant Reactor Operator's desk.
*3	Make evacuation announcement <u>twice</u> over the Plant Public Address system. "This is NOT a drill. This is NOT a drill. Attention all Personnel. This is a site evacuation notification. All non-essential personnel evacuate to the North Substation. All members of the Emergency Response organization report to your emergency response facility. This is NOT a drill. This is NOT a drill". (Cue: Acknowledge announcement.)	P	Depress and hold pushbutton on GAI-Tronics handset while making evacuation announcement <u>twice</u> over the Plant Public Address System.
*4	Rotate "Evacuation Alarm/Mic selector" switch to position 6 (plant). (Cue: Acknowledge control switch operation.)	P	Mic/Siren Selector, switch 43 is placed in "POSITION 6" at panel 00C026B.
*5	Sound evacuation siren for approximately 1 minute by pulling handle out. (Cue: Acknowledge control switch operation.)	P	Mic/Siren Selector, switch 43 is PULLED OUT for approximately 1 minute at panel 00C026B.
6	Push switch #43 on Diesel Panel <u>IN</u> . (Cue: Acknowledge control switch operation.)	P	Mic/Siren Selector, switch 43 is PUSHED IN at panel 00C026B.

STEP NO	STEP	ACT	STANDARD
*7	<p>Make evacuation announcement <u>twice</u> over the PLANT RADIO SYSTEM.</p> <p>"This is NOT a drill. This is NOT a drill. Attention all Personnel. This is a site evacuation notification. All non-essential personnel evacuate to the North Substation. All members of the Emergency Response organization report to your emergency response facility. This is NOT a drill. This is NOT a drill".</p> <p>(Cue: Acknowledge announcement)</p>	P	Depress the pushbutton on the radio system microphone while making evacuation announcement <u>twice</u> over the PLANT RADIO SYSTEM.
*8	<p>Rotate the "Evacuation Alarm/Mic selector" switch, (while in the IN mode) to position 2, (microphone river speakers). Activate microphone by pulling handle <u>OUT</u>.</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, Switch 43, is placed in "POSITION 2", THEN handle is PULLED OUT at panel 00C026B.
*9	<p>Make evacuation announcement <u>twice</u> over the Pond Paging system.</p> <p>"This is NOT a drill. This is NOT a drill. Attention all Personnel. This is a site evacuation notification. All non-essential personnel evacuate to the North Substation. All members of the Emergency Response organization report to your emergency response facility. This is NOT a drill. This is NOT a drill".</p> <p>(Cue: Acknowledge announcement.)</p>	P	Key microphone at panel OOC026B while making evacuation announcement <u>twice</u> over Pond Paging System.
10	<p>Push switch #43 selector switch on Diesel Generator Panel <u>IN</u>.</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, Switch 43 is PUSHED IN at panel 00C026B.

STEP NO	STEP	ACT	STANDARD
*11	<p>Activate the Page Alert Tone system.</p> <p>(Cue: Siren noise audible on loudspeaker.)</p>	P	Station Alert Tone system pushbutton is momentarily depressed at the Plant Reactor Operator's desk.
*12	<p>Make evacuation announcement <u>twice</u> over the Plant Public Address system.</p> <p>"This is NOT a drill. This is NOT a drill. Attention all Personnel. This is a site evacuation notification. All non-essential personnel evacuate to the North Substation. All members of the Emergency Response organization report to your emergency response facility. This is NOT a drill. This is NOT a drill".</p> <p>(Cue: Acknowledge announcement.)</p>	P	Depress and hold pushbutton on GAI-Tronics handset while making evacuation announcement <u>twice</u> over the Plant Public Address System.
*13	<p>Rotate "Evacuation Alarm/Mic selector" switch to position 6 (plant).</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, switch 43 is placed in "POSITION 6" at panel 00C026B.
*14	<p>Sound evacuation siren for approximately 1 minute by pulling handle out.</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, switch 43 is PULLED OUT for approximately 1 minute at panel 00C026B.
15	<p>Push switch #43 on Diesel Panel <u>IN</u>.</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, switch 43 is PUSHED IN at panel 00C026B.

STEP NO	STEP	ACT	STANDARD
*16	<p>Make evacuation announcement <u>twice</u> over the PLANT RADIO SYSTEM.</p> <p>"This is NOT a drill. This is NOT a drill. Attention all Personnel. This is a site evacuation notification. All non-essential personnel evacuate to the North Substation. All members of the Emergency Response organization report to your emergency response facility. This is NOT a drill. This is NOT a drill".</p> <p>(Cue: Acknowledge announcement)</p>	P	Depress the pushbutton on the radio system microphone while making evacuation announcement <u>twice</u> over the PLANT RADIO SYSTEM.
*17	<p>Rotate the "Evacuation Alarm/Mic selector" switch, (while in the IN mode) to position 2, (microphone river speakers). Activate microphone by pulling handle <u>OUT</u>.</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, Switch 43, is placed in "POSITION 2", THEN handle is PULLED OUT at panel 00C026B.
*18	<p>Make evacuation announcement <u>twice</u> over the Pond Paging system.</p> <p>"This is NOT a drill. This is NOT a drill. Attention all Personnel. This is a site evacuation notification. All non-essential personnel evacuate to the North Substation. All members of the Emergency Response organization report to your emergency response facility. This is NOT a drill. This is NOT a drill".</p> <p>(Cue: Acknowledge announcement.)</p>	P	Key microphone at panel 00C026B while making evacuation announcement <u>twice</u> over Pond Paging System.
19	<p>Push switch #43 selector switch on Diesel Generator Panel <u>IN</u>.</p> <p>(Cue: Acknowledge control switch operation.)</p>	P	Mic/Siren Selector, Switch 43 is PUSHED IN at panel 00C026B.

STEP NO	STEP	ACT	STANDARD
20	Inform Emergency Director of task completion. (Cue: Emergency Director acknowledges report.)	P	Task completion reported.

Under "ACT" P - must perform
S - must simulate

I. TERMINATING CUE

When a site evacuation has been performed per ERP-130 the Emergency Director should be informed. The evaluator will then terminate the exercise.

TASK CONDITIONS/PREREQUISITES

A Site Area Emergency has just been declared by the Emergency Director.

INITIATING CUE

The Emergency Director has directed you to implement ERP-130, "Site Evacuation" Step 2.2 in order to evacuate the site of non-essential personnel and have them report to the North Substation.

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: X

K/A: Generic 2.1.4

URO: 2.3 SRO: 3.4

TASK DESCRIPTION: Knowledge of shift staffing requirements.

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. None

C. REFERENCES

1. OP-PB-101-111 Rev. 2, Peach Bottom Operations Department
2. OP-AA-105-101 Rev. 1, Administrative Process for NRC License and Medical Requirements
3. A-C-40 Rev. 1, Working Hour Limitations
4. A-C-40-1 Rev. 2, Working Hours Limitation Deviation Form
5. OPM-P-40 Rev. 0, Peach Bottom Operations Overtime Policy
6. OPM-P-30 Rev. 0, Operations Policy Manual Reactor Operator Staffing Policy

D. TASK STANDARD

1. Satisfactory task completion is indicated when the Shift Manager has chosen an appropriately qualified individual that will not exceed overtime requirements to replace the disqualified operator, in accordance with approved procedures.
2. Estimated time to complete: 15 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform the steps necessary to ensure that your shift is appropriately staffed. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. The Plants are operating at full power conditions.
2. Unit #2 is expected to do a "load drop" later this morning to facilitate investigation of air inleakage on the Main Condenser.
3. PS06 has just assumed the watch and you, as the Shift Manager, are reviewing the daily line-up Sheet.
4. The Shift is staffed as indicated on the "Shift Lineup Sheet" and the "Shift Attendance Briefing Sheet".

G. INITIATING CUE

As the PS06 Shift Manager (SM), using appropriate procedures and Shift Line-up Sheets, determine if Shift manning requirements are being met.

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
	<p>CUE: Provide the Student with the Attachment #2 to this JPM.</p>		
	<p>CUE: When the Student has had time to review Attachment #2 of this JPM, tell him that you are with Regulatory Services and that you have just been informed that <u>D. Paul's</u> NRC Medical examination expired yesterday.</p>		
1	Obtain a copy of the procedure and review/utilize the correct section of the procedure.	P	Obtains a copy of OP-AA-105-101, "Administrative Process for NRC License and Medical Requirements".
*2	Evaluate the impact of D. Paul's medical qualification expiring.	P	<p>Using OP-AA-105-101, "Administrative Process for NRC License and Medical Requirements", step 4.5 determines:</p> <ul style="list-style-type: none"> • D. Paul has to be removed from licensed duties, and • Remain that way until such time as the medical exam is completed.
*3	Determine if Shift Staffing Requirements are met.	P	<p>May refer to OPM-P-30, "Reactor Operator Staffing Policy" and/or a copy of Technical Specification 5.2.</p> <p>Directs the fourth RO to relieve D. Paul as the PRO.</p> <p>Determines the minimum staffing requirements are now met with three (3) Reactor Operators.</p>

STEP NO	STEP	ACT	STANDARD
	<p>CUE: As the Unit #2 CRS state that for the impending load drop, four (4) Reactor Operators are needed in the Control Room and no more are available on shift.</p>		
3	<p>Call-out of a qualified Reactor Operator.</p> <p>CUE: As the SOA/SSV hand the Student Attachment 3 of this JPM, the Off-Shift RO call-out list.</p>	P	<p>May refer to the following procedures:</p> <ul style="list-style-type: none"> • OPM-P-40, Peach Bottom Operations Overtime Policy. • A-C-40, Working Hour Limitations. • A-C-40-1, Working Hour Limitation Deviation Form. <p>Requests from the SOA/SSV a copy of the RO off-shift callout list.</p>
*4	<p>Determine which of the qualified Reactor Operators on the list is available without exceeding A-C-40 limitations.</p>	P	<p>May refer to Technical Specification 5.2, A-C-40, and A-C-40-1:</p> <p>Determines that Booker, T is the only Reactor Operator on the supplied list that can be called out for the full twelve (12) hours without exceeding procedural and Technical Specification limitations.</p> <p>May also determine that Garlic, T and Hook, U could be called out for up to eight (8) hours each but would have to use them in combination with each other to cover the entire shift.</p>
5	<p>As an evaluator ensure that you have positive control of all exam material provided to the examinee (Task Conditions/Prerequisites) AND procedures.</p>	P	<p>Positive control established.</p>

Under "ACT" P - must perform
S - must simulate

TERMINATING CUE:

When the Shift Manager determines the status of the individuals on the Call-Out List in respect to the A-C-40 requirements, the evaluator will terminate the exercise.

J. SPECIAL INSTRUCTIONS:

None

ATTACHMENT 1

TASK CONDITIONS/PREREQUISITES

- 1. The Plants are operating at full power conditions.**
- 2. Unit #2 is expected to do a “load drop” later this morning to facilitate investigation of air inleakage on the Main Condenser.**
- 3. PS06 has just assumed the watch and you, as the Shift Manager, are reviewing the daily line-up Sheet.**
- 4. The Shift is staffed as indicated on the “Shift Lineup Sheet” and the “Shift Attendance Briefing Sheet”.**

INITIATING CUE

As the PS06 Shift Manager (SM), using appropriate procedures and Shift Line-up Sheets, determine if Shift manning requirements are being met.

ATTACHMENT 2

**Shift Lineup Sheet and
Shift Attendance Briefing Sheet**

Shift Attendance Briefing Sheet

Monday - July 29, 2002

D

Report Date / Time: 8/1/02 14:24

	SHIFT	UTILITY	OTHER
Shift Managers		C. Bore 2R14 Prep	S. Hills OPS Spt
SM	P. Jones	R. Clocks SelfAsmt	
Shift Supervisors			ILT / EOT
U2 CRS	B. Smith	D. Soul SelfAsmt	P. Pans 3p-11p
U3 CRS	J. Johnson	H. Hooper SelfAsmt/D4	D. Towers 3p-11p
STA	T. Olsen		R. Rogers 3p-11p
WCS	T. Olsen		T. Sawyer 3p-11p
FS	W. Thompson	J. Wayne	V. Shell EO OJT/8x
IA		A. Aunts SelfAsmt	R. Paper EO OJT/8x
Reactor Operators		D. Admiral Project	P. Show EO OJT/12x
Pro	D. Paul	D. Harris Substation	
U2	B. Johns	D. Hughes Substation	
U3	M. Life	B. Which Labeling/10x	
4th	M. Marks 630a-230p	M. Dew 2R14 Prep	
	H. Hooper 230p-630p	G. Glass SelfAsmt	
Staff Scheduler		M. Ball SelfAsmt	
	A. Dees 10x		
Equipment Operators			
R2	B. King		
T2	D. Duck		
R3	S. Clause		
T3	J. Cats		
RW	J. Stone		
WT	K. Mart		
Sub Station O/S	T. Bones		
Extra #8	M. Enam		
Safe S/D Extra #9			
Shift Chemist	Adams		
BOP Chemist	Jefferson		
Shift Tech 2			
Shift Tech 1			
HP Supervisor			

Safe Shutdown EO's	
1	B. King R2
2	S. Clause R3
3	M. Marks 4th RO / 8x
	H. Hooper 4th RO / 4x

FIRE BRIGADE	
IC	D. Duck T2
1	K. Mart WT
2	J. Cats T3
3	J. Stone RW
4	M. Enam Extra #8

SHIFT LINEUP SHEET

93925	93924	93923	93922	93921	
					SHIFT MANAGER
					Jones, P.
					SSV
					A Qualified
					**STA Qualified
					CO/RO
					*WC Qualified
					Paul, D.* Johns, B.* Life, M.* Marks, M.*/ Hooper, H.*
					EQUIP. OPERATORS
					++HP Qualified
					King, B. Duck, D. Clause, S. Cats, J.++ Stone, J.++ Mart, K. Bones, T. Enam, M.
					93926: SRO TRNG
					RO TRNG
					EO TRNG
					Hills, S
					OPS SUPPORT (93902)
					SERVICES (93905)
					OFF SHIFT/MNT FIN
					OPS 93903
					OFF SHIFT TRNG

ATTACHMENT 3

RO Off-Shift Call-Out List

RO Off-Shift Call-out List

Work Date: _____

Authorized By: _____

Work Shift: _____

Date: _____

Task: _____

Reason: _____

Call-out Order	Name	Phone	Attempt Made	Result I	Result II	Pay	Schedules	List Reset
1	Garlic, T	(717) 555-1212	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
2	Booker, T	(717) 549-6969	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
3	Hook, U	(410) 111-2222	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

Work Hours for the Last Seven (7) Days:

Call-out Order	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	OFF	D 2	D 2	OFF	OFF	D 4 8x	D 4 12x 4x
2	D 3	D 3	D 3	OFF	OFF	D C	D C
3	OFF	N C	N C	N C	N C 4x	OFF	D 2

LEGEND: *N* 18:30 – 06:30
 D 06:30 – 18:30

2 Unit #2 URO
 3 Unit #3 URO
 4 Fourth RO
 C PRO (Chief)

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: 2830150401

K/A: Generic 2.1.7

URO: 3.7 SRO: 4.4

TASK DESCRIPTION: Perform GP-13, "Resolution of Thermal Limit Violations."

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. None

C. REFERENCES

1. GP-13 Rev. 17, Resolution of Thermal Limit Violations
2. RE-C-01 Rev. 4, Appendix 7, Control Rod Movement and Core Flow Change Guidelines

D. TASK STANDARD

1. Satisfactory task completion is indicated when the SRO has authorized a power reduction using control rods only, in accordance with the approved procedure.
2. Estimated time to complete: 15 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform necessary steps to review the initial 3D P1 edit following the previous shift's power ascension. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. Reactor Power is currently stable at 100%.
2. During the previous shift, Reactor Engineering had requested and received a Reactor Power ascension using Control Rods.
3. Reactor Power was raised from 90% to 100% during this evolution.
4. Shift turnover has been completed, all required log entries have been completed and you have assumed the duties to the Control Room Supervisor.
5. The official 3D P1 edit is being run at this time to assess the recently completed Reactor Power ascension.

G. INITIATING CUE

As the Control Room Supervisor, review the official 3D P1 edit to ensure Reactor Core limits have been controlled during the recent power ascension.

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
	<p>CUE: Provide the Student with the official 3D P1 edit, which is Attachment 2 of this JPM.</p>		
<p>***Note***</p> <p>The out of limit parameter for this JPM is the Fraction of Limiting Load Line Power (FLLLP). Please note that this is NOT a thermal limit as specified in Technical Specification, however, per GP-13 "Resolution of Thermal Limit Violations", it is to be treated as though it is one.</p>			
1	Review the Official 3D P1 Edit to ensure Core Thermal Limits.	P	Reviews the Official 3D P1 Edit.
*2	<p>Recognize the condition of the Core as indicated on the official 3D P1 edit.</p> <p>CUE: Role Play as necessary.</p>	P	<p>Recognizes the following concerning the condition of the Core:</p> <ul style="list-style-type: none"> • The Core FLLLP has exceeded the specified limit. • (All other Core parameters are within their specified limits.) • GP-13 is required to be entered to address the thermal limit violation.
3	Obtain a copy and enter GP-13 "Resolution of Thermal Limit Violations".	P	<p>Reviews GP-13 prerequisites.</p> <p>Reviews procedure "NOTE" prior to step 3.1 of GP-13.</p>
*4	<p>Make immediate notification of Core conditions.</p> <p>CUE: Role Play as necessary.</p>	P	<p>Immediately informs the following:</p> <ul style="list-style-type: none"> • Shift Management • Reactor Engineers <p>Reports that FLLLP limit has been exceeded and that if it cannot be restored within two (2) hours that Reactor Power will have to be reduced to less than 25 % within the next four (4) hours.</p>

STEP NO	STEP	ACT	STANDARD
			<p>Also reports to Reactor Engineering the intent to reduce power using Control Rods <u>ONLY</u>.</p> <p>Requests Reactor Engineering assistance with returning FLLLP to below its limit.</p>
	<p>CUE: Role Play as the Reactor Engineer, provide the Student with RE-C-01, Appendix 7, Attachment 1.</p> <p>CUE: As the Reactor Engineer state that: “RE-C-01, Appendix 7 has been completed through step 6.1.4. Your review and approval is required on Attachment 1. We recommend reversing the rod sequence and inserting Group 17.”</p>		
5	Review and approve Attachment 1 of RE-C-01, Appendix 7.	P	<p>Performs the following:</p> <ul style="list-style-type: none"> • Reviews the Control Rod movement recommendation, AND • Approves by initialing the appropriate block of Attachment 1.
6	<p>Inform evaluator of Task completion.</p> <p>NOTE: When the Student has approves RE-C-01 Attachment 1, the JPM is terminated.</p>	P	Informs the evaluator that the Task has been completed.
7	As an evaluator ensure that you have positive control of all exam material provided to the examinee (Task Conditions/Prerequisites) AND procedures.	P	Positive control established.

Under "ACT" P - must perform
S - must simulate

TERMINATING CUE:

When the CRS has authorized a reduction in Reactor power by **Control Rods ONLY** in accordance with GP-5 AND RE-C-01, the evaluator will terminate the exercise.

J. SPECIAL INSTRUCTIONS:

ATTACHMENT 1

TASK CONDITIONS/PREREQUISITES

- 1. Reactor Power is currently stable at 100%.**
- 2. During the previous shift, Reactor Engineering had requested and received a Reactor Power ascension using Control Rods.**
- 3. Reactor Power was raised from 90% to 100% during this evolution.**
- 4. Shift turnover has been completed, all required log entries have been completed and you have assumed the duties to the Control Room Supervisor.**
- 5. The official 3D P1 edit is being run at this time to assess the recently completed Reactor Power ascension.**

INITIATING CUE

As the Control Room Supervisor, review the official 3D P1 edit to ensure Reactor Core limits have been controlled during the recent power ascension.

ATTACHMENT 2

Official 3D P1 Edit

PEACH BOTTOM-2 CY-14SEQUENCE NO 8

CORE PARAMETERS

POWER MWT 3463.
 POWER MWE 11399.
 FLOW MLB/HR 91.380
 FPAPDR 0.775
 SUBC BTU/LB 29.02
 PR PSIA 1033.8
 CORE MWD/ST 27938.9
 CYCLE MWD/ST 12409.2
 MCPR 1.598

3D MONICORE
 PERIODIC LOG

CALC RESULTS

KEFF 1.0000
 XE WORTH % -2.47
 XE/RATED 1.12
 FLLP 1.002

(Current time/date minus 10 minutes) CALCULATED

(Current time/date) PRINTED
 CASE ID FMLS1020404155957
 RESTART FMLS1020404135957
 LPRM ABSOLUTE - FULL CORE

LOAD LINE SUMMARY

CORE POWER 100.0%
 CORE FLOW 100.5%
 LOAD LINE 115.23%

CORRECTION FACTOR:
 OPTION: ARTS

MFLCPR=1.000 MFLPD=1.000 MAPRAT=1.000
 DUAL LOOP MANUAL FLOW MCPRLIM = 1.350

ZBB = 2.96 ft
 FCBB = N/A

MOST LIMITING LOCATIONS (NON-SYMMETRIC)

MFLCPR	LOC	MFLPD	LOC	MAPRAT	LOC	PCRAT	LOC
0.891	19-20	0.729	25-54-5	0.832	27-52-5	0.695	25-52-5
0.889	29-52	0.724	53-26-5	0.831	51-28-5	0.695	51-26-6
0.888	25-52	0.720	25-52-5	0.825	17-50-5	0.691	19-50-5
0.881	27-50	0.711	51-26-6	0.824	19-52-5	0.689	49-20-5
0.881	35-26	0.711	19-50-5	0.822	51-20-5	0.683	25-54-5
0.879	25-44	0.707	49-20-5	0.820	49-18-5	0.683	17-52-5
0.879	49-28	0.694	49-28-5	0.804	43-28-5	0.679	35-26-5
0.877	43-30	0.694	35-26-5	0.803	41-26-5	0.678	51-18-5
0.875	51-32	0.694	17-52-5	0.794	49-26-5	0.678	41-20-6
0.874	43-26	0.692	41-20-6	0.788	23-52-5	0.677	53-26-5

SEQ. A-2

C=MFLCPR

D=MFLPD

M=MAPRAT

P-PCRAT

*=MULTIPLE

CORE AVE AXIAL

NOTCH	REL PW	LOC
	0.147	25
00	0.350	24
02	0.679	23
04	0.852	22
06	0.963	21
08	1.067	20
10	1.129	19
12	1.134	18
14	1.093	17
16	1.120	16
18	1.114	15
20	1.097	14
22	1.130	13
24	1.151	12
26	1.156	11
28	1.184	10
30	1.225	09
32	1.243	08
34	1.235	07
36	1.256	06
38	1.250	05
40	1.188	04
42	1.086	03
44	0.811	02
46	0.340	01

CORE AVERAGE RADIAL POWER DISTRIBUTION

RING #	1	2	3	4	5	6	7	8
REL PW	1.020	1.229	1.092	1.261	1.097	1.257	1.070	0.523

59

L

55

51

L

47

43

L

39

35

L

31

27

L

23

19

L

15

11

L

07

03

02 06 L 10 L 14 L 18 L 22 L 26 L 30 L 34 L 38 L 42 L 46 L 50 L 54 L 58

D

*

C

ATTACHMENT 3

**RE-C-01, Appendix 7,
Control Rod Movement and Core Flow Change Guidelines**

PECO NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: K/A: 294001G213
URO: 3.6 SRO: 3.8

TASK DESCRIPTION: REVIEW AND APPROVE A CLEARANCE

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. Prepare a Clearance Request that is complete but is lacking SRO approval. Include errors associated with the blocking points.
2. Copy of M-314, Sheet 3, Rev. 64, Service Water System, with Clearance Points highlighted.
3. Copy of E-178, Rev. 10, Fuel Pool Booster Pump 480 VAC Starter, with Clearance Points highlighted.
4. Copy of E-1606, Rev 45 Single Line Meter and Relay Diagram with Clearance Points highlighted.

C. REFERENCES

1. Clearance and Tagging Manual, Rev. 6.
2. M-314, Sheet 3, Rev. 64, Service Water System.
3. E-178, Rev. 10, Fuel Pool Booster Pump 480 VAC Starter.
4. E-1606, Rev 45, Single Line Meter and Relay Diagram.

D. TASK STANDARD

1. Satisfactory completion of this task is indicated when errors in the Clearance Request have been identified and the request disapproved.
2. Estimated time to complete: 20 minutes. (Not time-critical)

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, review the Clearance Request for approval. I will describe the initial conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. The "A" Service Water Booster Pump is shutdown and requires a Clearance to permit inspection of the pump internals.
2. The "B" Service Water Booster Pump is in service.
3. The "C" Service Water Booster Pump is available.
4. The Work Order, Clearance and Prints will be submitted to you for review.

G. INITIATING CUE

The Clearance request for the "A" Service Water Booster Pump has just been prepared and requires approval for immediate application. The Shift Manager directs you to review and approve the request, and inform the Control Room Supervisor when complete.

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
<p>NOTE: The following steps may be done in a different order as long as all steps are completed prior to placing the APPROVED BY signature on the Clearance. This Clearance should be REJECTED by the candidate.</p>			
1	<p>Verify the Component ID, Component Description and Clearance Description are correct.</p> <p>(Cue: Acknowledge verification of the Data.)</p>	P	<p>The operator verifies the Component ID, Component Description and the Clearance Description are correct.</p>
2	<p>Check Comment Section to verify impact of Clearance is accurate and complete.</p> <p>(Cue: Acknowledge Clearance impact.)</p>	P	<p>The operator checks the Comments Section and verifies the impact of the Clearance to be the 2A FP Service Water Booster Pump will be OOS.</p>
3	<p>Verify Instructions are adequate for the Clearance.</p> <p>(Cue: Acknowledge the verification of instructions.)</p>	P	<p>The operator verifies the Instructions to ensure 2BP145 and/or 2CP145 in service are adequate for the Clearance.</p>
*4	<p>Verify clearance Points to determine if they are correct and adequate for the work to be performed under this Clearance.</p> <p>(Cue: Acknowledge the verification of Clearance Points and the identification of HV-2-30-21818B and HV-2-30-21816B as incorrect points.)</p>	P	<p>The operator reviews the adequacy and accuracy of the Clearance Points and identifies the valves identified for the 'B' pump:</p> <ul style="list-style-type: none"> • HV-2-30-21818B Discharge Valve • HV-2-30-21816B Suction Valve • HV-2-30-21819B Drain Valve • HV-2-30-21817B Vent Valve <p>are INCORRECT Clearance Points for the 'A' Pump.</p>
5	<p>Notify the Control Room Supervisor of the incorrect Clearance Points and the return of the Clearance without Approval.</p> <p>(Cue: The Control Room Supervisor acknowledges the report.)</p>	P	<p>The operator notifies the Control Room Supervisor of the incorrect Clearance Points and of the return of the Clearance without Approval.</p>

Under "ACT" P - must perform
S - must simulate

TERMINATING CUE:

When the tagging request review is complete, inform the Control Room Supervisor. The evaluator will then terminate the exercise

TASK CONDITIONS/PREREQUISITES

1. The "A" Service Water Booster Pump is shutdown and requires a Clearance to permit inspection of the pump internals.
2. The "B" Service Water Booster Pump is in service.
3. The "C" Service Water Booster Pump is available.
4. The Work Order, Clearance and Prints will be submitted to you for review.

INITIATING CUE

The Clearance request for the "A" Service Water Booster Pump has just been prepared and requires approval for immediate application. The Shift Manager directs you to Review and Approve the request, and inform the Control Room Supervisor when complete.

WORK ORDER ACTIVITY

NUMBER : 92
STATUS : HOLD 02AUG02

WORK ORDER NUMBER : C0151434
STATUS : PLNED 18NOV94

*** ***** ** **
***** ***** ** **
** ** ** ** ** ** ** ** ** **
*** ** ** ** ** **
*** ** ** ** ** **
*** ** ** ** ** **
***** ***** ** **

DESCRIPTION

W/O DESCRIPTION : "PLANNING USE ONLY" SEE C0182906FOR TEMPLATES
ACT DESCRIPTION : SYSTEM-94 CLEAN / INSPECT / LUBE COUPLING
PERFORMING ORG : PMM
COMPONENT ID : PB 2 94 F MISC SYSTEM-94
EQUIPMENT LOCATION: * DAP PUNCH LISTED UNDER REVIEW
CLR NUMBER :
WO RESP ORG : PMM WORK STANDARD :
DATE/SHIFT : N/A
FOREMAN :
SSV AUTH :
ORG-INSP/HOLD :
ACT TYPE : C SUPPORT DATES: N/A N/A
PREPARED BY : NULL, JIM DATE : 05JUN99
HOLDS : MODE PARTS N CHEM + RAD Y CLR Y PLAN SCH
SAFETY/PLANT IMPACT CONSIDERATIONS

BARRIER PERMIT RQD: N CHEMICAL HAZARD : N CSP REQ : N
FIRE PROTECTION : N SECURITY : N FSI REQ : N
HAZARD BARRIER : N /

CHEM AND RAD DATA

SYSTEM BREACH : N INSULATION REQUIRED: N
HWP REQ : N SCAFFOLDING REQD : N TECH SPEC:
MULTIPLE WORK LOC : N MAP NBR: UNIT 2 REACTOR BLDG | 165' ELEV.
HP REQD : A ADVANCED RAD WORKER ACTIVITY

SCHEDULING DATA

PREMIS ID :
START DATE : 14JUL99 SCHED ID/WIN : PB
EST DUR (HRS) : 8
CLEARANCE REQD : Y

INITIAL REVIEWS

ASME/ISI REVIEW : ASME XI R&R: DATE: N/A
QC PLAN REVIEW : DATE: N/A
APPROVED BY : MSG/MCKELVEY, JM DATE: 02AUG02
WORK INSTRUCTION : MAINT ENGR: DATE: N/A

PRINT NAME AND WRITE INITIALS OF ALL PERSONNEL WHO INITIALED THIS ACTIVITY

FOR INFO ONLY XXX FOR INFO ONLY XXX FOR INFO ONLY XXX
FOR INFO ONLY XXX FOR INFO ONLY XXX FOR INFO ONLY XXX
FOR INFO ONLY XXX FOR INFO ONLY XXX FOR INFO ONLY XXX
FOR INFO ONLY XXX FOR INFO ONLY XXX FOR INFO ONLY XXX

WORK ORDER ACTIVITY

NUMBER : 92
STATUS : HOLD 02AUG02

** **
** **
** **
** **
** **
** **
** **
** **
** **
** **

WORK ORDER
NUMBER : C0151434
STATUS : PLNNED 18NOV94

=====ACTIVITY PROCEDURE LIST=====

===== ACTIVITY FOLLOWER DESCRIPTION =====

STEP NBR	DESCRIPTION	INITIAL/DATE	
		COMPLT	INSP

1. PURPOSE:

A. COUPLING PM

- 1) CLEAN INSPECT COUPLING INTERNALS,
- 2) REPLENISH GREASE, AND
- 3) VERIFY ALIGNMENT/SOFT FOOT IS SAT.

2. SPECIAL CLEARANCE REQUIREMENTS

A. SCT BLOCKING IS REQUESTED TO RUN THE
PUMP, TO TAKE VIBRATION DATA AND TEMPS.

3. SUPPORT INFORMATION

A. EQUIPMENT LOCATIONS:

- 1) 1R4-R-B (2564) ... MCU FOR 2BP145-DR
UNIT 2 REACTOR BLDG | 135' ELEVATION
NEAR DRYWELL EQUIPMENT ACCESS DOOR
IN MCC 20B025
- 2) 2AP145 ... 2'A' FUEL POOL CLG WTR PUMP
UNIT 2 REACTOR BLDG | 165' ELEVATION

B. LUBRICATION REQUIREMENTS:

WORK ORDER ACTIVITY

NUMBER : 92
 STATUS : HOLD 02AUG02

WORK ORDER
 NUMBER : C0151434
 STATUS : PLNED 18NOV94

```

    ***          *****          **          **
    *****          *****          ****  ****
    **  **          **          **  ****  **
          ***          **          **  **  **
          ***          **          **          **
          ***          **          **          **
          ***          *****          **          **
    *****          *****          **          **
    
```

===== ACTIVITY FOLLOWER DESCRIPTION =====

STEP NBR	DESCRIPTION	INITIAL/DATE COMPLT INSP
	1) PUMP BEARINGS ... HARMONY 100	
	2) MOTOR BEARINGS ... EP-2 GREASE	
	3) COUPLING, FAST ... KOPPERS GREASE	
	4. JOB SCOPE	
	A. COUPLING INSPECTION:	
	1) REMOVE THE COUPLING GUARD.	
	2) OPEN THE COUPLING.	
	3) CLEAN OUT THE OLD GREASE AND EXAMINE FOR ANY METALIC SUBSTANCE AND ABNORMALITIES OR HARDNESS.	
	4) AFTER CLEANING THE COUPLING, EXAMINE IT FOR WEAR, CRACKS, OR ANY DEFECTS NOT MENTIONED. REWORK AS REQUIRED.	
	5) LUBE AND MAKE-UP COUPLING	
	6) ALIGN MOTOR TO PUMP USING M-C-700-315	
	* NOTE: IF THE COUPLING OR ALIGNMENT REQUIRED REWORK OR CORRECTION; THE PMT, (STEP C), WILL BE REQUIRED.	
	7) LUBRICATE THE COUPLING WITH NEW GREASE AND CLOSE.	
	8) REINSTALL THE COUPLING GUARD.	

WORK ORDER ACTIVITY

NUMBER : 92
STATUS : HOLD 02AUG02

WORK ORDER
NUMBER : C0151434
STATUS : PLNNED 18NOV94

*** ***** ** **
***** ***** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **
** ** ** ** ** **

===== ACTIVITY FOLLOWER DESCRIPTION =====

STEP NBR	DESCRIPTION	INITIAL/DATE	
		COMPLT	INSP

B. MOTOR MAINTENANCE:

1) CLEAN THE MOTOR'S EXTERIOR AND ITS
VENTILATION PORTS.

C. POST MAINTENANCE TESTING:

1) SEE ACTIVITY 02 FOR CONTINGENT P.M.T.

NOTE: ACT 02 P.M.T. IS TO BE PERFORMED,
ONLY, IF PARTS WERE REPLACED OR
IF THE ALIGNMENT REQUIRED CORRECTION

* * * * > END JOB SCOPE < * * * *

WORK ORDER ACTIVITY

NUMBER : 92
STATUS : HOLD 02AUG02

WORK ORDER

NUMBER : C0151434
STATUS : PLNNED 18NOV94

***	*****	**	**
*****	*****	****	****
**	**	**	** **** **
***	**	**	** ** **
***	**	**	** **
***	**	**	** **
***	*****	**	**
*****	*****	**	**

MEASUREMENT AND TEST EQUIPMENT

ACTIVITY	ID NUMBER	DATE USED	DESCRIPTION
----------	-----------	-----------	-------------

PECO NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: 27301300202

K/A: 2.3.6

URO: 2.1 SRO: 3.1

TASK DESCRIPTION: Knowledge of the requirements for reviewing and approving release permits.

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

1. Calculator
2. Copy of ST-C-095-805-2 "Liquid Radwaste Discharge", Rev. 9, completed through step 6.11.
3. A calculation error made in step 6.10.1.2.

C. REFERENCES

1. ST-C-095-805-2, Rev. 9, "Liquid Radwaste Discharge".

D. TASK STANDARD

1. Satisfactory task completion of this task is indicated when the Shift Management review has been completed, the errors in the procedure have been identified and the release is disapproved pending resolution of the problems.
2. Estimated time to complete: 15 minutes Non-Time Critical

E. DIRECTIONS TO EXAMINEE

When given the initiating cue, perform the necessary steps to review a Liquid Radwaste discharge, using appropriate procedures. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

1. Unit 2 is operating at 100% power.
2. The Floor Drain Sample Tank (FDST) needs to be discharged.
3. Chemistry has completed ST-C-095-805-2, "Liquid Radwaste Discharge" through step 6.11.
4. RIS-0-17-350 "Radwaste Effluent" Radiation Monitor is operable.
5. FS-0-20-493 "RWS Low Purity Waste" High Flow Trip Set Pot and the associated flow control valve are operable.
6. The discharge Canal-To-Intake Pond crosstie gate is closed.
7. The Shift Management review and approval has not been completed.

G. INITIATING CUE

As the Control Room Supervisor, complete Section 6.12 of ST-C-095-805-2, "Liquid Radwaste Discharge".

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
1	Review ST-C-095-805-2 for completeness.	P	Visually verify all CT actions in steps 6.1 through 6.11 have been completed satisfactorily and initial step 6.12.1 SAT.
2	Verify calculations.	P	Perform all calculations that were done in section 6.8 and 6.10 and verify they are correct and recorded on Data Sheet 3 & 4.
*3	Recognize Calculation error.	P	Recognize error in step 6.10.1.2 for High Flow Discharge setting. Initial step 6.12.2 UNSAT.
*4	Disapprove the Radwaste Discharge. Cue: Acknowledge the disapproval.)	P	Disapprove the discharge and return the paperwork to the Chemistry Department.
*** NOTE ***			
Terminate the exercise when the activities listed above are performed.			

Under "ACT" P - must perform
S - must simulate

I. TERMINATING CUE

When the review of ST-C-095-805-2 has been completed, and the release is disapproved, terminate the exercise.

TASK CONDITIONS/PREREQUISITES

- 1. Unit 2 is operating at 100% power.**
- 2. The Floor Drain Sample Tank (FDST) needs to be discharged.**
- 3. Chemistry has completed ST-C-095-805-2, "Liquid Radwaste Discharge" through step 6.11.**
- 4. RIS-0-17-350 "Radwaste Effluent" Radiation Monitor is operable.**
- 5. FS-0-20-493 "RWS Low Purity Waste" High Flow Trip Set Pot and the associated flow control valve are operable.**
- 6. The discharge Canal-To-Intake Pond crosstie gate is closed.**
- 7. The Shift Management review and approval has not been completed.**

INITIATING CUE

As the Control Room Supervisor, complete Section 6.12 of ST-C-095-805-2, "Liquid Radwaste Discharge".

EXELON NUCLEAR
PEACH BOTTOM ATOMIC POWER STATION
JOB PERFORMANCE MEASURE

POSITION TITLE: Unit Reactor Operator/Senior Reactor Operator

TASK-JPM DESIGNATOR: 2007510502 / PILT-ADMIN 000 K/A: 2.4.41
URO: 2.3 SRO: 4.1

TASK DESCRIPTION: Reactor Power EAL Classification - Site Area Emergency

A. NOTES TO EVALUATOR:

1. An asterisk (*) before the step number denotes a CRITICAL STEP. CRITICAL STEPS are those steps which when not performed correctly will prevent the system from functioning properly or prevent successful task completion.
2. System cues included in the performance checklist are to be provided to the examinee when no system response is available.
3. JPM Performance
 - a. "Control Room" JPMs are designed to be performed in the simulator. If a "Control Room" JPM is to be performed in the Control Room all perform steps (P) shall be simulated (S).
 - b. When performing "In-Plant" JPMs, no equipment will be operated without Shift Management approval.
4. Satisfactory performance of this JPM is accomplished if:
 - a. The task standard is met.
 - b. JPM completion time requirement is met.
 - 1) For non-time critical JPMs, completion within double the estimated time (listed in paragraph D.2) is acceptable provided the evaluator determines that the progress to completion is acceptable.
 - 2) For time critical JPMs, completion within the estimated time (listed in paragraph D.2) is required.
5. The estimated time to complete this JPM, though listed in the task standard, is not to be given to the examinee.

B. TOOLS AND EQUIPMENT

None

C. REFERENCES

1. ERP-101, Rev. 23, "Classification of Emergencies" Table 2
2. ERP-200, Rev. 18, "Emergency Director (ED)"
3. ERP-200, Appendix 1, Rev. 6, "Emergency Director Checklist (MCR)"
4. ERP-200, Appendix 3, Rev. 4, "Event Notification Form"

D. TASK STANDARD

1. Satisfactory task completion is indicated when plant conditions have been classified as a Site Area Emergency in accordance with ERP-101 Table 2.2.3, and the appropriate steps of ERP-200, Appendix 1, "Emergency Director Checklist (MCR)" have been completed.
2. Estimated time to complete: 15 minutes - Time Critical (To classify the Event)
15 minutes - Non-Time Critical To complete ERP-200, Appendix 1 actions)

E. DIRECTIONS TO EXAMINEE

This is a 2-part JPM. When given the first initiating cue, perform necessary steps to classify the event using appropriate procedures. When the event is classified, I will give you an additional cue to perform Emergency Director actions for the same event. I will describe initial plant conditions and provide you access to the materials required to complete this task.

F. TASK CONDITIONS/PREREQUISITES

An open SRV resulted in a attempted manual reactor scram. The following is the current plant status:

1. RPS failed to generate an automatic scram.
2. The manual scram pushbuttons and ARI failed to insert control rods.
3. Reactor power is 35% and steady.
4. Torus temperature is 160 degrees F.
5. Torus level is 15 feet.
7. Reactor pressure is 1000 psig and steady.
8. RPV level is being controlled between -120 inches and -150 inches.

9. There is NO radioactive release in progress and NO indication of fuel damage.
10. The TSC and EOF are not yet activated.

G. INITIATING CUE

As the Emergency Director, classify the event in accordance with ERP-101, "Classification of Emergencies"

NOTE: When the event has been classified, give the following cue.

As the Emergency Director, complete the INITIAL ACTIONS of ERP-200 Appendix 1 "Emergency Director (ED) Checklist".

H. PERFORMANCE CHECKLIST

STEP NO	STEP	ACT	STANDARD
NOTE			
Note the time when the Emergency Director receives the Task Conditions/Prerequisites. Step 1 and 2 below must be completed within 15 minutes.			
1	Obtain a copy of procedure ERP-101.	P	A copy of procedure ERP-101 is obtained.
*2	Classify the event. (Cue: Classification is acknowledged.)	P	ERP-101 Table 2.2.3, "Reactor Power" is referenced. The event is classified as a Site Area Emergency.
NOTE			
Ensure that Step 2 is completed within 15 minutes of the start of the JPM. Hand the Emergency Director the second Task Conditions/Prerequisites Sheet.			
3	Obtain a copy of procedure ERP-200.	P	A copy of procedure ERP-200 is obtained.
4	Obtain copies of procedure ERP-200 Appendix 1 and Appendix 3.	P	Copies of procedure ERP-200 Appendix 1 and Appendix 3 are obtained.
*5	Perform the ED Initial Actions using the ERP 200 Appendix 1 Checklist: <ul style="list-style-type: none"> • NOTE: Classification steps have been performed previously in part 1 of this JPM. • Call the SAS Operator (Security) and direct activation of the ERO per ERP-140. • Refer SAS Operator to the Emergency Notification Binder. (Cue: The SAS Operator acknowledges the direction.)	S S	Call the SAS Operator (281 or 4277) and direct activation of the ERO per ERP-140. Refers the SAS Operator to Emergency Notification Binder

STEP NO	STEP	ACT	STANDARD
*6	<p>Complete the ERP-200, Appendix 3, "Event Notification Form",</p> <ul style="list-style-type: none"> • Emergency Classification. • Unit, Time, Date. • Initial Declaration. • Brief Non-Technical Description. • Non-Routine Radiological Release in Progress. • Wind Direction and Speed. <p>(Cue: Acknowledges completion of Appendix 3.)</p>	<p>P</p> <p>P</p> <p>P</p> <p>P</p> <p>P</p> <p>P</p>	<p>"Site Area Emergency" box checked.</p> <p>Unit, "2", Current Time and Date.</p> <p>"Initial Declaration" box checked</p> <p>Any paraphrase of conditions is acceptable.</p> <p>"NO" Box checked.</p> <p>Wind Direction 0 Wind Speed 10</p>
*7	<ul style="list-style-type: none"> • Fax Completed Appendix 3 to the SAS Operator. • Phones the SAS operator to confirm receipt of fax. <p>(Cue: The Fax has been sent to the SAS operator. SAS Operator confirms receipt of fax.)</p>	<p>S</p> <p>S</p>	<p>Fax Appendix 3 to the SAS at 3228.</p> <p>Phone the SAS Operator at 281 or 4277.</p>
8	<p>Continues ERP-200 Appendix 1 ED Checklist:</p> <ul style="list-style-type: none"> • Evaluates necessity to relocate the TSC per Appendix 9 or the OSC per Appendix 10. • N/A step for GE and PAR. 	<p>P</p> <p>P</p>	<p>Determines there is no need to relocate TSC or OSC.</p> <p>Determines no GE and no PAR required. Directs NRC communicator actions.</p>

*9	<ul style="list-style-type: none"> Appoints NRC Communicator to: <ul style="list-style-type: none"> Complete ENS Worksheet. Activate ERDS. Call the NRC on ENS phone. (Acknowledges NRC Communicator actions directed.) Directs the PA Announcement for Site Area Emergency per Appendix 4. (Acknowledges PA Announcement.) 	P	Directs NRC Communicator actions per checklist.
10	<ul style="list-style-type: none"> Evaluates the need for Dose Assessment. Include Accident Assessment in MCR logs. (Acknowledges accident information to be recorded in control room logs.) 	P	Determines no need for Dose Assessment.
*11	Directs Site Evacuation per ERP-130. (Acknowledges direction to perform a Site Evacuation)	P	Directs personnel to perform a Site Evacuation per ERP-130.

***** NOTE *****

Terminate the exercise when the activities listed above are performed. A dose assessment, use of SAMPs and completion of the Turnover/Briefing form (App 7) are NOT required.

Under "ACT" P - must perform
S - must simulate

I. TERMINATING CUE

When the event is classified, the Station Public Address Announcement is directed, the NRC Communicator has been assigned, and the Site Evacuation has been directed, the evaluator will then terminate the exercise.

TASK CONDITIONS/PREREQUISITES

An open SRV resulted in an attempted manual scram. The following is the current plant status:

- 1. RPS failed to generate a reactor scram.**
- 2. The manual scram pushbuttons and ARI failed to insert control rods.**
- 3. Reactor power is 35% and steady.**
- 4. Torus temperature is 160 degrees F.**
- 5. Torus level is 15 feet.**
- 7. Reactor pressure is 1000 psig and steady.**
- 8. RPV level is being controlled between -120 inches and -140 inches.**
- 8. There is NO radioactive release in progress and NO indication of fuel damage.**
- 9. The TSC and EOF are not yet activated.**

INITIATING CUE Part 1 of 2

As the Emergency Director, classify the event in accordance with ERP-101, Classification of Emergencies”.

TASK CONDITIONS/PREREQUISITES

Conditions have not changed since the Emergency Classification.

INITIATING CUE Part 2 of 2

As the Emergency Director, complete the INITIAL ACTIONS of ERP-200 Appendix 1 "Emergency Director (ED) Checklist".