



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM SRO-ADMJPM01
ON-SITE/OFF-SITE NOTIFICATIONS DURING A FORCED OUTAGE

Student Name: _____ Badge #: _____
Evaluator Name: _____ Badge #: _____
Student Signature: _____ Date: _____
(optional)
Evaluator Signature: _____ Date: _____
Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

1190403903 Perform required notifications of on-site and off-site personnel for off-normal events.

2.0 Conditions:

- A. The plant is in MODE 1 at 100% power.
- B. Plant management has decided to initiate a forced outage to perform repairs on a main generator breaker component.
- C. The plant will be shutting down at a 10% per hour ramp rate.
- D. The plant is expected to be shut down for approximately 24 hours.

3.0 Standards:

Determine required redeclaration/joint owner and NDDO notifications for this event.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
ODI.61, Redeclaration/Joint Owner and NDDO Notification Guidelines.

5.0 Limitations On Performance:

Simulate/Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

For the purpose of this JPM, phone usage will be simulated. The evaluator will act as the contact person.

6.0 References:

ODI.61, Redeclaration/Joint Owner and NDDO Notification Guidelines.

Sys	KA	Description	Value SRO
	2.1.6	Ability to supervise and assume a management role during plant transients and upset conditions.	4.0

7.0 Setting:

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

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JOB PERFORMANCE WORKSHEET

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

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JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Work Control Supervisor. You are going to perform the required redeclaration/Joint Owner and NDDO notification for a plant shutdown.
 - B. The following information is provided to you:

The plant is going to perform a shutdown to support repairs of a main generator breaker component. The shutdown will commence in 30 minutes.
 - C. The performance must meet the following standards:
 - 1) Successfully identify the required redeclaration and joint owner notifications for the plant shutdown.
 - D. Perform the task per ODI.61, Redeclaration/Joint Owner and NDDO Notification Guidelines.
 - E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
 - F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
 - G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
 - H. I will inform you when the JPM is complete.
 - I. We will begin after the Initiating Cue is read.
 - J. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

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JOB PERFORMANCE WORKSHEET

11.0 Initiating Cue:

Shift Manager to Work Control Supervisor, **“Work Control Supervisor, I want to remain in an oversight role for the plant shutdown. Using the applicable guidance, perform the re-declaration and joint owner notifications to support the plant shutdown”**.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

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PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
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1.	P	Start time	Initiating cue read.		
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NOTE: The student is expected to identify that the Authorized Bidder should be notified. The student does not have to simulate making the phone call.

Evaluator CUE: If the student asks what the plant shutdown rate will be, say **“We will be shutting the plant down at a rate of 25% per hour.”**

Evaluator CUE: When the student states that the Authorized Bidder must be called, say: You are now on the phone line with the Authorized Bidder **“Hello, this is the trading floor.”**

*2.	P	IDENTIFY that the Authorized Bidder must be notified.	*Identifies that the Authorized Bidder must be notified.	_____	_____	_____
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NOTE: The student is expected to identify that ISO New England should be notified. The student does not have to simulate making the phone call.

Evaluator CUE: When the student states that the ISO New England must be called, say: **“You are now on the phone line with ISO-New England.”**

Evaluator CUE: After the student reads the specific info to ISO-New England the evaluator can say: **“I have recorded all of your information, thank you.”**

*3	P	a. IDENTIFY that ISO New England must be notified.	*a. Identifies that ISO New England must be notified.	_____	_____	_____
		b. PROVIDE the following information to ISO New England:				
		1. Provide new power level.	1. Provides new power level. (0%)	_____	_____	
		2. Provide ramp rate.	2. Provides ramp rate. (10% per hr)	_____	_____	

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM01

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	

3. Provide expected duration at new power level.

3. Provides duration at new power level. (24 hours)

4. Provide reason for changing power level.

4. Provides reason for changing power level. (Main gen bkr repair)

Evaluator CUE: If the student states that a UNIT Journal entry should be made, respond: **“The Unit Journal entry has been made. Continue with the JPM.”**

*4 MAKE a Unit Journal Entry

*States that a Unit Journal must be made.

Evaluator CUE: If the student states that the Joint Owner Notification must be made, and that the Shift Manager normally delegates the Fire Fighter to notify the Joint Owners, say: **“ The Fire Fighters will make the Joint Owner notification. Continue with the JPM”.**

*5 NOTIFY Joint Owners per step 5.2:

a. STATE that the Joint Owners must be notified.

*a. States that the Joint Owners must be notified.

b. STATE that the Fire Fighter is normally delegated to contact the Joint Owners.

b. States that the Fire Fighter is normally delegated to contact the Joint Owners.

CUE: “The JPM is complete.”

15. Stop time

Evaluator calculates time to

Time to complete the task ≤ 30 minutes.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM01

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
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complete task.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

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TEAR-OFF SHEET FOR JPM

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Work Control Supervisor. You are going to perform the required redeclaration/Joint Owner and NDDO notification for a plant shutdown.
 - B. The following information is provided to you:

The plant is going to perform a shutdown to support repairs of a main generator breaker component. The shutdown will commence in 30 minutes.
 - E. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Shift Manager to Work Control Supervisor, **“Work Control Supervisor, I want to remain in an oversight role for the plant shutdown. Using the applicable guidance, perform the re-declaration and joint owner notifications to support the plant shutdown”.**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM01



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM SRO-ADMJPM02

TECHNICAL SPECIFICATIONS AND ALLOWED OUTAGE TIME (AOT)

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

Position: SRO

1190401203 Clarify TS and application of action statement requirements.

2.0 Conditions:

- A. The plant is in MODE 1 at 100% power.
- B. CBS-P-9A failed it's surveillance criteria and was removed from service for impeller replacement.
- C. Tech. Spec. 3.6.2.1, Containment Spray System, action item was entered at 0500 on July 1, 2007.
- D. Impeller replacement work is in progress .
- E. The OCC has contacted the Shift Manager and notified him that the new impeller has been damaged and current projected time of arrival on-site for a replacement is 10 days away.

3.0 Standards:

Determine whether the INOPERABLE DG has further restricted MODE 3 operation.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
ODI.30, ALLOWED OUTAGE TIME WORKSHEET
Technical Specifications

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

Procedures:

- ODI-30 ALLOWED OUTAGE TIME WORKSHEET

Technical Specifications

- 3.6.2.1, Containment Spray System

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM02

JOB PERFORMANCE WORKSHEET

Sys	KA	Description	Value SRO
	2.1.12	Ability to apply Technical Specifications for a system.	4.0

7.0 Setting:

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

30 minutes

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
2. You may be asked follow-up questions to confirm knowledge of the task.

A. You are the Work Control Supervisor.

B. The following information is provided to you:

- 1) The plant is in MODE 1 at 100% power.
- 2) CBS-P-9A failed it's surveillance criteria and was removed from service for impeller replacement.
- 3) Tech. Spec. 3.6.2.1, Containment Spray System, action item was entered at 0500 on July 1, 2007.
- 4) Impeller replacement work is in progress .
- 5) The OCC has contacted the Shift Manager and notified him that the new impeller has been damaged and current projected time of arrival on-site for a replacement is 10 days away.

C. The performance must meet the following standards:

- 1) Determine the time required to be in MODE 5, as applicable.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM02

JOB PERFORMANCE WORKSHEET

- D. Perform the task per Technical Specification ACTION statements and ODI 30 Worksheets.
- E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
- F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
- G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
- H. I will inform you when the JPM is complete.
- I. We will begin after the Initiating Cue is read.
- J. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

Shift Manager to Work Control Supervisor, "**Work Control Supervisor, using ~~ODI-30~~, DETERMINE the allowed outage time and MODE restrictions for the inoperable CBS-P-9A.**"

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM02

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	

		d) Hrs provided to change MODES from MODE 3 to MODE 4 or 5.	* Circles MODE 5 * d) = 30 hours	_____	_____	
*4.	P	1) Time LCO action statement entered.	*Enters 0500 and date (7/1/7) on line (e)	_____	_____	_____
5.	P	IF entered from MODE (Circle applicable)	Circles MODE 1.	_____	_____	_____
*6.	P	Based on entry from MODE 1, proceed to line 2.	* Proceeds to Line 2.	_____	_____	_____
*7.	P	2) Determine when mode reduction to MODE 3 must be started by.	* line f: Determines time and date to be in MODE 3 as 72 hours from entry into Tech. Spec. (0500 on 7/4/2007)	_____	_____	_____
*8	P	3) Determine time that plant must be in MODE 3.	* line g: Determines time and date that plant must be in MODE 3. (1100 on 7/4/7)	_____	_____	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM02

PERFORMANCE CHECKLIST

D=Discuss	ELEMENT/STEP	STANDARD	EVALUATION		INITIALS/DATE
P=Perform			SAT	UNSAT	
S=Simulate	* denotes a critical step	* denotes a critical step			

NOTE: Steps 4 and 5 of ODI.30A are for tracking successful MODE reduction to MODE 3. The students are performing the time calculations for reducing MODES to MODE 3, and then to MODE 5. Steps 4 and 5 are not required for this calculation. The student should continue with the JPM at step 6 of ODI.30A.

Evaluator CUE: If the student states that they need to know the time that the plant entered MODE 3, say: "The plant has not begun shutting down. Continue with ODI.30A and calculate the time that the plant must be in MODE 5."

*9.	P	6) Determine the time that MODE reduction to MODE 4 or 5 must be started.	Circles MODE 5. * line j: Determines the time that MODE reduction to MODE 5 must be started by. (1100 on 7/6/2007)	_____	_____	
*10	P	7) Determine the time that the plant must be in MODE 5.	* line k: Determines the time that the plant must be in MODE 5. (1700 on 7/7/2007)	_____	_____	_____

CUE: "The JPM is complete."

15.		Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 30 minutes.	_____	_____	_____
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Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM02

TEAR-OFF SHEET FOR JPM

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Work Control Supervisor. You are going to determine the time required to be in applicable MODES.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 at 100% power.
 - 2) CBS-P-9A failed it's surveillance criteria and was removed from service for impeller replacement. *at 0500 July 1, 2007*
 - 3) ~~Tech. Spec. 3.6.2.1, Containment Spray System, was entered at 0500 on July 1, 2007~~ *think do when the was entered JS*
 - 4) Impeller replacement work is in progress.
 - 5) The OCC has contacted the Shift Manager and notified him that the new impeller has been damaged and current projected time of arrival on-site for a replacement is 10 days away.
 - C. The evaluator will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Shift Manager to Work Control Supervisor, "**Work Control Supervisor, using ODI-30, DETERMINE the allowed outage time and MODE restrictions for the inoperable CBS-P-9A.**"

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM02



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM SRO-ADMJPM03

VERIFY RCS STEADY STATE LEAK RATE CALCULATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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INSTRUCTOR

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SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

0020200101 Perform RC Steady Leak Rate Calculation.

2.0 Conditions:

- A. The plant is in MODE 1, 100% steady state power.
- B. Your shift started a manual RCS leak rate calculation at 0030 to comply with OS07-01-02, RCS Leakage Monitoring/Action Commitment.
- C. Yesterdays RCS Unidentified Leak Rate was .004 gpm.

3.0 Standards:

Calculate the manual steady state leak rate.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
OX1401.02, RCS Steady State Leak Rate Calculation.
OS07-01-02, RCS Leakage Monitoring/Action Commitment.
Attached data table on JPM tear-off sheet.
Primary Tech. Data Book
Calculator

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

Procedures:

- OX1401.02, RCS Steady State Leak Rate Calculation
- OS07-01-02, RCS Leakage Monitoring/Action Commitment.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

JOB PERFORMANCE WORKSHEET

Sys	KA	Description	Value RO/SRO
	2.2.12	2.2.12 Knowledge of surveillance procedures.	3.0/3.4

7.0 Setting:

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

30 minutes

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
- A. You are the Work Control Supervisor. You have been called to the control room and are going to verify the results of a manual RCS steady state leak rate calculation.
- B. The following information is provided to you:
- 1) The plant is in MODE 1 at 100% power.
 - 2) The main plant computer system leak rate program is unavailable.
 - 3) Per procedure OS07-01-02, RCS Leakage Monitoring/Action Commitment, your shift started the daily manual RCS steady state leak rate surveillance at 0030.
 - 4) The previous days UNIDENTIFIED LEAK RATE measurement was .004 gpm.
- C. The performance must meet the following standards:
- 1) Verify the RCS steady state leak rate calculation and determine any actions necessary per OS07-01-02, RCS Leakage Monitoring/Action Commitment.
- D. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
- E. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
- F. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
- G. I will inform you when the JPM is complete.
- H. We will begin after the Initiating Cue is read.
- I. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

JOB PERFORMANCE WORKSHEET

11.0 Initiating Cue:

Unit Supervisor to Work Control Supervisor, "The time is 0630. Verify the manual steady state leak rate calculation per the completed Form B. After you have verified the calculation, continue with OS07-01-02, RCS Leakage Monitoring/Action Commitment, step 4.1 and let me know if RCS leakage is within the prescribed limits."

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
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NOTE: 1. The completed Leak Rate worksheet, OX1401.02, Form B can be used to show satisfactory completion of the leak rate calculation.
 2. The evaluator will act as the Unit Supervisor to complete communications with the student.

1.	P	Start time	Initiating cue read. Student obtains copy of OX1401.02, RCS Steady State Leak Rate Calculation.	_____	_____	_____
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Evaluator CUE: If the student inquires about the chemistry notification, provide the cue, **“All prerequisites For the surveillance were met at 0030 this morning.”**

Evaluator CUE: If the student states that they are going to verify the data on Form B, state: Unit Supervisor to Work Control Supervisor, **“The collected data on Form B has already been verified. I want you to verify that the leak rate calculations are correct for the data provided.”**

2.	P	If the main plant computer is not available PERFORM the following:				
		a. VERIFY the Prerequisites are complete.	Verifies prerequisites are complete.	_____	_____	_____
		b. Verify data as shown on Form B:	Verifies required data on Form B:			_____
		(1) TIME	Time: 360 minutes	_____	_____	
		(2) Tavg	Tavg: +8.396 gallons	_____	_____	
		(3) PZR LEVEL	PZR level: 0 gallons	_____	_____	
		(4) VCT LEVEL	VCT level: 93.42 gallons	_____	_____	
		(5) INTEGRATED MAKEUP	INT MAKEUP: 205 gallons	_____	_____	
		(6) PRT LEVEL	PRT level: 0 gallons	_____	_____	
		(7) RCDT LEVEL	RCDT level: 55 gallons	_____	_____	

Evaluator Cue: Student may ask if there is any additional leakage data. If the student asks, say **“There is No additional leakage”**.

*3	P	VERIFY the RCS leak rate calculation using Form B.		_____		
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Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
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	a. Identified leakage.	a. Verifies calculated IDENTIFIED LEAKAGE is correct. (Range: .14 to .16 gpm)	_____	_____
	b. Unidentified leakage.	*b. Verifies calculated UNIDENTIFIED LEAKAGE correct. (Acceptable range: .16 to .20 gpm.)	_____	_____

Evaluator CUE: If the student asks if the data was recorded on the Shift Tech. Spec. Logs or PM Data Sheet, say **“The data has been recorded, continue with the JPM.”**

4	P	RECORD the data using one or both of the following: a. Tech.Spec. Logs. b. PM Data Sheet.	The PM sheet is not included with this JPM, therefore, no action is required.	_____
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NOTE: The student should now be utilizing procedure OS07-01-02, RCS Leakage Monitoring/Action Commitment to determine if the UNIDENTIFIED LEAKAGE is less than the following limits:

- 0.27 (baseline + 0.25 gpm)
- 0.1 gpm greater than the previous day’s measurement.

Evaluator CUE: If the student asks if the unidentified leakage was recorded in the Unit Journal and Tech. Spec. Logs say **“The data has been recorded, continue with the JPM.”**

Evaluator CUE: If the student states that the Unidentified Leak Rate is more than 0.1 gpm greater than the previous days measurement, say: **“I understand that the Unidentified Leak Rate exceeds the limit. Continue with procedure OS07-01-02.”**

*5	P	VERIFY RCS unidentified leakage less than the following limits: a. <0.27 gpm (baseline + 0.25 gpm)	*Verifies YES. Unidentified Leak Rate is less than 0.27 gpm.	_____
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Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
--------------------------------------	---	---	--------------------------------	---------------

b. <0.1 gpm greater than previous day's measurement.

*VERIFIES **NO** the Unidentified Leak Rate is more than 0.1 gpm greater than the previous days measurement.

Evaluator CUE: The student may state that procedural guidance directs attempting to identify the leakage source. Say to the student “ **I will Refer to the RCS LEAK abnormal procedure and attempt to identify the leakage source. Continue with the JPM**”.

6 P ATTEMPT to identify the leakage source.

States that the crew should attempt to identify the leakage source.

Evaluator CUE: The student may state that procedural guidance directs referring to Commitment Letter L-2007-025. Say to the student “ **I will Refer to Commitment Letter L-2007-025. Continue with the JPM**”.

7 P REFER to Commitment Letter L-2007-025.

States that the crew should refer to Commitment Letter L-2007-025.

Evaluator CUE: State to the student “**Plant Engineering has confirmed that the leakage is coming from an instrument tap fitting and is not associated with the Pressurizer .**”

*8 P If within 72 hours the leakage source cannot be positively identified as coming from a location other than the pressurizer, and RCS Unidentified Leakage still exceeds one of the step 4.3 limits then PERFORM the following:

a. PLACE the plant in HOT STANDBY within 6 hours and in COLD SHUTDOWN in the next 36 hours.

*a. Student verifies that the plant does not have to be in HOT STANDBY within 6 hours and COLD SHUTDOWN in the next 36 hours.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
--------------------------------------	---	---------------------------------------	-------------------------	---------------

Evaluator CUE: "The JPM is complete."

9	Stop time_____	Time to complete task ≤ 30 minutes.
	Evaluator calculates time to complete task.	

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

TEAR-OFF SHEET FOR JPM Error! Reference source not found.

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Work Control Supervisor. You have been called to the control room and are going to complete a manual RCS steady state leak rate calculation.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 at 100% power.
 - 2) The main plant computer system leak rate computer is unavailable.
 - 3) Per procedure OS07-01-02, RCS Leakage Monitoring/Action Commitment, your shift started the daily manual RCS steady state leak rate surveillance at 0030.
 - 4) The previous days UNIDENTIFIED LEAK RATE measurement was .004 gpm.
 - C. The evaluator will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Unit Supervisor to Work Control Supervisor, **“The time is 0630. Verify the manual steady state leak rate calculation per the completed Form B. After you have verified the calculation, continue with OS07-01-02, RCS Leakage Monitoring/Action Commitment, step 4.1 and let me know if RCS leakage is within the prescribed limits.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM03

Completed Form B

Form B: PM Number 1-LEAK-OT002-000

Test Data Sheet

(Sheet 2 of 2)

MANUAL RCS LEAK RATE						
PARAMETER	INSTRUMENT USED	FINISH	START	CHANGE FINISH-START	CONVERSION	GALLONS OR MINUTES

TIME	MCB CLOCK	0630	0030	360	60 min/hr	360 min (1)
------	-----------	------	------	-----	-----------	-------------

OBTAIN DATA FROM THE MAIN CONTROL BOARD AND CP-38A

TAVG	DIGITAL	589.9 °F	589.8 °F	.1 °F	83.96 gal/°F (Note 2)	8.396 gal (2)
PZR LEVEL	(Note 4)	59 %	59 %	0 %	61.31 gal/% (Note 2)	0 gal (3)
VCT LEVEL	LI-185	51 %	48 %	3 %	31.14 gal/%	93.42 gal (4)
INTEGRATED MAKEUP	CS-FIQ-111 (Note 5)	230 gal	25 gal	205 gal	N/A	205 gal (5)

PRT LEVEL	LI-470	8150 gal (Note 3)	8150 gal (Note 3)	0 gal	N/A	0 gal (6)
RCDT LEVEL	LI-1403 (at CP-38A)	215 gal (Note 3)	160 gal (Note 3)	55 gal	N/A	55 gal (7)

OBTAIN THIS DATA FROM ANY KNOWN SOURCE AND RECORD GALLONS (Note 1)

0						gal (8)
						gal (8)

IDENTIFIED LEAKAGE

$$\frac{(0)^8 + (55)^7 + (0)^6}{1} = (0.153) \text{ gpm}^{(9)}$$

(360) Identified Leakage Acceptance
Criteria ≤ 10 gpm

UNIDENTIFIED LEAKAGE

$$\frac{(205)^5 + (8.396)^2 - (0)^3 - (93.42)^4}{1} - (0.153)^9 \text{ gpm} = 0.180 \text{ gpm}$$

Unidentified Leakage Acceptance
Criteria ≤ 1 gpm

- Note 1:** This is for sampling losses, accumulator leaks, steam generator tube leakage, etc.
- Note 2:** These conversion factors are only valid for normal operating temperature and pressure. If the plant is stable at a reduced pressure and temp and the computer is not available, use the conversion factors from Figure 2.
- Note 3:** Obtain tank volume from the Primary Technical Data Book and record gallons for calculation. Do not use % due to nonlinearity of the tank volume.
- Note 4:** Record the instrument number and use the same hot calibrated level indicator for both start and finish.
- Note 5:** Any RWST, BWST, or SF Pool makeups must be subtracted from the integrated makeup total.

Calculations checked by: _____



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM SRO-ADMJPM05

SITE AREA EMERGENCY NOTIFICATIONS

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

Position: SRO

1190402003 Perform required notifications of on-site and off-site personnel for emergency events.

2.0 Conditions:

- A. A reactor trip has occurred.
- B. A loss of all feedwater capability has forced a transition to FR-H.1, Response to Loss of Secondary Heat Sink.

3.0 Standards:

Perform required notifications of on-site and state personnel for this event.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
E-Plan folder drawer or copies of the following:
ER-1.1, Classification of Emergencies
ER-1.1A, Emergency Classification Flow Chart
ER-1.2, Emergency Plan Activation

5.0 Limitations On Performance:

Simulate/Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

Procedures:

- RE-1.1, Classification of Emergencies
- ER-1.2, Emergency Plan Activation

Sys	KA	Description	Value SRO
	2.4.40	Knowledge of the SRO's responsibilities in emergency plan implementation.	4.0

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

JOB PERFORMANCE WORKSHEET

7.0 Setting:

Simulator

Initialize the simulator to IC 390

-or-

- 1) Initialize to 100% power IC and activate the following:
- 2) Malfunction for "Failure of automatic reactor trip".
- 3) Override B PORV to AUTO to prevent valve from manually opening.
- 4) Remote function to close MS-V-129 with 15 second time delay.
- 5) Malfunction "Startup Feedwater Pump trips".
- 6) Rack-out FW-P-37B/ recirc valve.
- 7) Malfunction for both MFP's trips with no time delay.
- 8) Complete all actions of FR-S.1 and when S/G WR levels < 26% trip the reactor.
- 9) Transition to FR-H.1.
- 10) Ensure 3 S/G WR levels < 26% conditions for Bleed and Feed exist.
- 11) DTO the motor driven EFW pump and recris. Valve.
- 12) Place the simulator in FREEZE.
- 13) The US is continuing attempts to restore feed flow per FR-H.1.
- 14) Today is July 1.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
2. You may be asked follow-up questions to confirm knowledge of the task.

A. You are the Work Control Supervisor.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

JOB PERFORMANCE WORKSHEET

B. The following information is provided to you:

- 1) The plant was initially in Mode 1.
- 2) An ATWS event has just occurred.
- 3) FR-S.1 has been completed successfully.
- 4) The motor driven EFW pump is tagged out.
- 5) A transition from FR-S.1 to FR-H.1 has occurred and step 1 and 2 of FR-H.1 are complete.
- 6) The US is continuing with attempts to restore feed per FR-H.1.
- 7) E-Plan actions are complete up to step 9 of ER-1.1.
- 8) Today is July 1st.

C. The performance must meet the following standards:

- 1) Successfully perform required notifications of on-site and state personnel for this event.

D. Perform the task per ER1.1, Classification of Emergencies.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.

F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.

G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.

H. I will inform you when the JPM is complete.

I. We will begin after the Initiating Cue is read.

J. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

Shift Manager to Work Control Supervisor, **“Work Control Supervisor, due to a valid H Red, I have determined that we have a SITE AREA EMERGENCY. Today is July 1st. Activate the Emergency Plan for this event.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

JOB PERFORMANCE WORKSHEET

Notes To Evaluator

- **Because this JPM is done with the simulator in freeze the Control Board clock cannot be used to track time. The digital clock on the Communications Console or a wristwatch must be used.**
- **AFTER THE INITIATING CUE IS READ, TELL THE STUDENT ABOUT THIS ISSUE. There is also a cue in the body of the JPM that can be used if needed.**
- **If the student asks about evaluation of the Miscellaneous Emergency Conditions, tell them that another SRO is evaluating them. Evaluation of these conditions is not within the scope of this JPM.**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

PERFORMANCE CHECKLIST

D=Discuss	ELEMENT/STEP	STANDARD	EVALUATION	INITIALS/DATE
P=Perform			SAT	UNSAT
S=Simulate	* denotes a critical step	* denotes a critical step		

CUE: If the student inquires about safety hazards, respond: **“There are no safety hazards within the site boundry to evacuate personnel.”**

*4.	P	NOTIFY Station Personnel (Using message in Step 3 of ER-1.2C). • Ensures night muting is off.	Notifies station personnel: • Ensures night muting is off.	_____	_____
		• Sounds the plant emergency alarm.	*• Sounds the plant emergency alarm.	_____	_____
		• Uses the Gaitronics override, announce and note time.	* • Makes the Site Area Emergency announcement over the Gaitronics and noted time.	_____	_____

Time of Declaration: _____ . **(Time when student makes announcement.)**

• Repeats the plant emergency alarm.	• Repeats the plant emergency alarm.	_____	_____
• Using the Gaitronics override, repeat the announcement.	• Repeats the SAE announcement.	_____	_____
• Proceed to Step 5.	• Goes to Step 5.	_____	_____

*5.	P	NOTIFY Guard Island Security • Contact the Guard Island at ext. 4006.	Notifies Guard Island • Contacts the Guard Island supervisor.	_____	_____
-----	---	--	--	-------	-------

NOTE: An instructor must be in the instructor booth to answer the phone and provide necessary feedback.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	

Provide the following information:

- | | | | |
|---|---|--------------|--------------|
| <ul style="list-style-type: none"> • A Site Area Emergency has been declared. | <ul style="list-style-type: none"> *• SAE has been declared. | <p>_____</p> | <p>_____</p> |
| <ul style="list-style-type: none"> • Time of declaration. | <ul style="list-style-type: none"> *• Time of Gaitronics announcement. | <p>_____</p> | <p>_____</p> |
| <ul style="list-style-type: none"> • The emergency initiating condition. | <ul style="list-style-type: none"> *• EAL is H Red. | | |
| <ul style="list-style-type: none"> • Schiller Station is/is not being activated (as determined above). | <ul style="list-style-type: none"> *• Schiller Station not activated. | <p>_____</p> | <p>_____</p> |
| <ul style="list-style-type: none"> • Direct implementation of procedure GN1332.00, Security Response To A Declared Radiological Emergency. | <ul style="list-style-type: none"> *• Directs that GN1332.00 be implemented. | <p>_____</p> | <p>_____</p> |

<p>Proceed to Step 6.</p>	<p>Goes to Step 6.</p>	<p>_____</p>	<p>_____</p>	<p>_____</p>
---------------------------	------------------------	--------------	--------------	--------------

- | | |
|---|--|
| <p>*6. P Complete ER-2.0B, State Notification Fact Sheet.</p> | <p>Completes ER-2.0B:</p> |
| <ul style="list-style-type: none"> • Block 1-Leave Blank | <ul style="list-style-type: none"> • Block 1- Leaves blank. |

CUE: If asked, STED to WCS, “Time of declaration was _____ based on your announcement.”

- | | | | |
|---|--|--------------|--------------|
| <ul style="list-style-type: none"> • Block 2- Check “Site Area Emergency”. | <ul style="list-style-type: none"> *• Block 2- Checks “Declared” and checks “Site Area Emergency” and enters time declared. | <p>_____</p> | <p>_____</p> |
|---|--|--------------|--------------|

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	

Evaluator CUE: If the student asks if Bleed and Feed has been established, say **“Yes, Bleed and Feed has been established.”**

<ul style="list-style-type: none"> • Block 3- Enter emergency initiating condition. 	<ul style="list-style-type: none"> *• Enters H Red 	_____	_____
<ul style="list-style-type: none"> • Block 4- Use Figure 1, Site Area Emergency PAR Flowchart, to determine appropriate protective action recommendations. 	<ul style="list-style-type: none"> *• Checks evacuate NH beaches and close MASS beaches. 	_____	_____

CUE: IF asked, STED to WCS, **“There has been no release.”**

<ul style="list-style-type: none"> • Determines if a release has occurred. 	<ul style="list-style-type: none"> * • Block 5-checks a release has not occurred. 	_____	_____
---	--	-------	-------

NOTE: When student presents form for authorization: **Make no comments of any sort on the information recorded. Sign and fill in the date and time. Return the signed form to the student.**

<ul style="list-style-type: none"> • Block 6-Self explanatory. 	<ul style="list-style-type: none"> • Block 6- STED authorizes by signing and dating the form. 	_____	_____
---	--	-------	-------

CUE: Evaluator to student: **“Work Control Supervisor, implement ER 1.2E”**

NOTE: An instructor must be in the instructor booth to answer the NAS phone and provide necessary feedback.

<ul style="list-style-type: none"> *7 P IMPLEMENT ER-1.2E. 	<ul style="list-style-type: none"> IMPLEMENTS ER-1.2E 	_____	_____
<ul style="list-style-type: none"> • Enter your name/title in Block 1, and contact states: 	<ul style="list-style-type: none"> *• Enters name/title. 	_____	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	

- | | | | | |
|---|--|-------|-------|--|
| • Pick up the handset and dial Group Call number A1. | *• Contacts states via NAS phone. | _____ | _____ | |
| • Verify the NH and MASS dispatchers are on the line. | *• Verifies NH and MASS on line. | _____ | _____ | |
| • Ensure that the dispatchers have a copy of the State Notification Fact Sheet. | *• Ensures dispatchers have a State Notification Fact Sheet. | _____ | _____ | |
| • Enter contact time in upper right hand corner. | *• Enters contact time in upper right corner of ER-2.0B. | _____ | _____ | |

TIME: _____

The time contact time written in the upper right corner of ER-2.0B minus the “Time of Declaration” noted in JPM step 4 equals the time required for State Notification. (*Time must be less than or equal to 15 minutes.)

- | | | | | |
|---|---|-------|-------|--|
| • Read all information slowly and clearly. | *• Reads information to dispatchers. | _____ | _____ | |
| • Verify tha the dispatchers have received the correct information by assigning one to read the information back. | *• Asks one dispatcher to repeat information. | _____ | _____ | |
| • Obtain the names of the dispatchers and enter in Block 7. Also enter the current date and time. | • Enters names of dispatchers and enters date and time. | _____ | _____ | |

CUE: “The JPM is complete.”

15.	Stop time	Time to complete the task ≤ 30 minutes.			
	Evaluator calculates time to complete task.		_____	_____	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05

TEAR-OFF SHEET FOR JPM Error! Reference source not found.

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Work Control Supervisor. You are going to activate the emergency plan based on the following information.
 - B. The following information is provided to you:
 - 1) The plant was initially in Mode 1.
 - 2) An ATWS event has just occurred.
 - 3) FR-S.1 has been completed successfully.
 - 4) The motor driven EFW pump is tagged out.
 - 5) A transition from FR-S.1 to FR-H.1 has occurred and step 1 and 2 of FR-H.1 are complete.
 - 6) The US is continuing with attempts to restore feed per FR-H.1.
 - 7) E-Plan actions are complete up to step 9 of ER-1.1.
 - 8) Today is July 1st.
 - C. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Shift Manager to Work Control Supervisor, **“Work Control Supervisor, due to a valid H Red, I have determined that we have a SITE AREA EMERGENCY. Today is July 1st. Activate the Emergency Plan for this event.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO- ADMJPM05



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM SRO-ADMJPM04

VERIFY A LIQUID EFFLUENT WASTE SAMPLE REQUEST

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

0690301502 Authorize a release of liquid waste.

2.0 Conditions:

- A. The plant is in MODE 1 with two ocean Service Water and two Circulating Water pumps running with no expected change of configuration.
- B. WL-TK-63A, "A" Waste Test Tank has been filled to 18,000 gallons.
- C. WL-TK-63A, "A" Waste Test Tank has to be sampled to prepare a LEW permit for a release to the transition Structure.
- D. The Primary Operator has completed Section 1 of CP 4.1A, Liquid Effluent Waste Sample Requests.

3.0 Standards:

Perform verification of CP4.1A, Liquid Effluent Waste Sample Requests.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
ON1018.07, Waste Test Tank Recirculation.
CP-4.1, Effluent Sampling Program.

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

ON1018.07, Waste Test Tank Recirculation.
SSCP, Station Chemistry Manual
CP-4.1, Effluent Sampling Program.

Sys	KA	Description	Value RO/SRO
	2.3.10	Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.	2.9/3.3

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM04

JOB PERFORMANCE WORKSHEET

7.0 Setting:

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM04

JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are going to perform the verification of a Liquid Effluent Waste Sample Request, using the information provided.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 with two ocean Service Water and two Circulating Water pumps running with no expected change of configuration.
 - 2) WL-TK-63A, "A" Waste Test Tank has been filled to 18,000 gallons.
 - 3) WL-TK-63A, "A" Waste Test Tank has to be sampled to prepare a LEW permit for a release to the transition Structure.
 - 4) The Primary Operator has completed Section 1 of CP 4.1A, Liquid Effluent Waste Sample Request.
 - C. The performance must meet the following standards:
 - 1) Verify a Liquid Effluent Sample Request for release of the "A" Waste Test Tank.
 - D. Perform the task utilizing OS1018.07, Waste Test Tank Recirculation and CP 4.1, Effluent Sampling Program.
 - E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
 - F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
 - G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
 - H. I will inform you when the JPM is complete.
 - I. We will begin after the Initiating Cue is read.
 - J. I will act as the Primary Operator and provide the cues and communications for this JPM. Do you have any questions?

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM04

JOB PERFORMANCE WORKSHEET

11.0 Initiating Cue:

Primary Operator to Unit Supervisor , “Unit Supervisor, I have completed Section 1 of Form CP 4.1A. Please perform the verification”

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM04

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	
	d. Recirculation starting time and date.	*d. Verifies start time and date entered	_____	_____	
	e. Sample date and time	*e. Corrects sample time to reflect longer recirculation time. (7/08/07 @1200)	_____	_____	
	f. Disposition of tank.	f. Verifies DISCHARGE as disposition.	_____	_____	
	g. The projected CW and SW pump combination for the discharge.	g. Verifies projected pump combination is consistent with initial conditions.	_____	_____	
	h. Projected release start date and time (normally 8 hours from sample).	h. Corrects projected start time. (normally 8 hours from sample time)	_____	_____	
	i. Date, time of request, and initials of originator.	i. Verifies time, date and initials are entered.	_____	_____	
	j. Date, time, and initials of individual that performed verification of operational data.	j. Enters date, time, and initials.	_____	_____	
Evaluator CUE: "The JPM is complete".					
4	Stop time _____	Start-Stop time is ≤ 15 minutes.	_____	_____	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM04

TEAR-OFF SHEET FOR JPM

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are going to perform the verification of a Liquid Effluent Waste Sample Request, using the information provided.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 with two ocean Service Water and two Circulating Water pumps running with no expected change of configuration.
 - 2) WL-TK-63A, "A" Waste Test Tank has been filled to 18,000 gallons.
 - 3) WL-TK-63A, "A" Waste Test Tank has to be sampled to prepare a LEW permit for a release to the transition Structure.
 - 4) The Primary Operator has completed Section 1 of CP 4.1A, Liquid Effluent Waste Sample Request.
 - C. I will act as the Primary Operator and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Primary Operator to Unit Supervisor , **"Unit Supervisor, I have completed Section 1 of Form CP 4.1A. Please perform the verification"**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

SRO-ADMJPM04



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM RO-ADMJPM01

PERFORM RCS STEADY STATE LEAK RATE CALCULATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

0020200101 Perform RC Steady Leak Rate Calculation.

2.0 Conditions:

- A. The plant is in MODE 1, 100% steady state power.
- B. Your shift started a manual RCS leak rate calculation at 0030 to comply with OS07-01-02, RCS Leakage Monitoring/Action Commitment.
- C. Yesterdays RCS leakage was .004 gpm.

3.0 Standards:

Calculate the manual steady state leak rate.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
OX1401.02, RCS Steady State Leak Rate Calculation.
OS07-01-02, RCS Leakage Monitoring/Action Commitment.
Attached data table on JPM tear-off sheet.
Primary Tech. Data Book
Calculator

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

Procedures:

- OX1401.02, RCS Steady State Leak Rate Calculation
- OS07-01-02, RCS Leakage Monitoring/Action Commitment.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

JOB PERFORMANCE WORKSHEET

Sys	KA	Description	Value RO/SRO
	2.1.7	Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.	3.7/4.4

7.0 Setting:

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

30 minutes

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Primary Operator. You are going to complete a manual RCS steady state leak rate calculation.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 at 100% power.
 - 2) The main plant computer system leak rate program is unavailable.
 - 3) Per procedure OS07-01-02, RCS Leakage Monitoring/Action Commitment, your shift started the daily manual RCS steady state leak rate surveillance at 0030.
 - 4) The previous days UNIDENTIFIED LEAK RATE measurement was .004 gpm.
 - C. The performance must meet the following standards:
 - 1) Calculate the RCS steady state leak rate and determine any actions necessary per OS07-01-02, RCS Leakage Monitoring/Action Commitment.
 - D. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
 - E. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
 - F. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
 - G. I will inform you when the JPM is complete.
 - H. We will begin after the Initiating Cue is read.
 - I. I will act as the Unit Supervisor and provide the cues and communications for this JPM. Do you have any questions?

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

JOB PERFORMANCE WORKSHEET

11.0 Initiating Cue:

Unit Supervisor to Primary Operator, "The time is 0630. Complete the manual steady state leak rate calculation using OX1401.02 with the collected data provided. After you have completed the calculation let me know if RCS leakage is within the prescribed limits of OS07-01-02, RCS Leakage Monitoring/Action Commitment , step 4.3"

A) OX1401.02 collected data:

START DATA @ 0030	
Tavg	589.8°F
PZR Level	59%
VCT Level	48%
Integrated Makeup	25 gallons
PRT Level	60%
RCDT Level	46%

FINISH DATA @ 0630	
Tavg	589.9°F
PZR Level	59%
VCT Level	51%
Integrated Makeup	230 gallons
PRT Level	60%
RCDT Level	61%

B) Previous days UNIDENTIFIED LEAK RATE DATA:

.004 gpm

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

PERFORMANCE CHECKLIST

D=Discuss	ELEMENT/STEP	STANDARD	EVALUATION	INITIALS/DATE
P=Perform			SAT	UNSAT
S=Simulate	* denotes a critical step	* denotes a critical step		

NOTE: 1. The completed Leak Rate worksheet, OX1401.02, Form B can be used to show satisfactory completion of the leak rate calculation.
 2. The evaluator will act as the Unit Supervisor to complete communications with the student.

1.	P	Start time	Initiating cue read. Student obtains copy of OX1401.02, RCS Steady State Leak Rate Calculation.	_____	_____	_____
----	---	------------	--	-------	-------	-------

Evaluator CUE: If the student inquires about the chemistry notification, provide the cue, **“All prerequisites For the surveillance were met at 0030 this morning.”**

2.	P	If the main plant computer is not available PERFORM the following:				
		a. VERIFY the Prerequisites are complete.	Verifies prerequisites are complete.	_____	_____	_____
		b. CALCULATE and RECORD data as shown on Form B:	Records and calculates required data on Form B:			_____
		(1) TIME	Time: 360 minutes	_____	_____	
		(2) Tavg	Tavg: +8.396 gallons	_____	_____	
		(3) PZR LEVEL	PZR level: 0 gallons	_____	_____	
		(4) VCT LEVEL	VCT level: 93.42 gallons	_____	_____	
		(5) INTEGRATED MAKEUP	INT MAKEUP: 205 gallons	_____	_____	
		(6) PRT LEVEL	PRT level: 0 gallons	_____	_____	
		(7) RCDT LEVEL	RCDT level: 55 gallons	_____	_____	

Evaluator Cue: Student may ask if there is any additional leakage data. If the student asks, say **“There is No additional leakage”**.

*3	P	DETERMINE the RCS leak rate using Form B.				_____
		a. Calculate Identified leakage.	a. Calculates IDENTIFIED LEAKAGE. (Range: .14 to .16 gpm)	_____	_____	

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
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b. Calculate Unidentified leakage.	*b. Calculates UNIDENTIFIED LEAKAGE (Acceptable range: .16 to .20 gpm.)	_____	_____	
------------------------------------	---	-------	-------	--

Evaluator CUE: If the student asks to record the data on the Shift Tech. Spec. Logs or PM Data Sheet, say “I will record the data when you complete your actions, continue with the JPM.”

4	P	RECORD the data using one or both of the following: a. Tech.Spec. Logs. b. PM Data Sheet.	The PM sheet is not included with this JPM, therefore, no action is required.		
---	---	---	---	--	--

NOTE: The student should now be utilizing procedure OS07-01-02, RCS Leakage Monitoring/Action Commitment to determine if the UNIDENTIFIED LEAKAGE is less than the following limits:

- 0.27 (baseline + 0.25 gpm)
- 0.1 gpm greater than the previous day’s measurement.

Evaluator CUE: If the student asks to record the unidentified leakage in the Unit Journal and Tech. Spec. Logs say “I will record the data when you complete your actions, continue with the JPM.”

*5	P	VERIFY RCS unidentified leakage less than the following limits: a. <0.27 gpm (baseline + 0.25 gpm) b. <0.1 gpm greater than previous day’s measurement.	*Verifies YES. Unidentified Leak Rate is less than 0.27 gpm. *VERIFIES NO the Unidentified Leak Rate is more than 0.1 gpm greater than the previous days measurement.	_____	_____	_____
----	---	---	--	-------	-------	-------

Evaluator CUE: “The JPM is complete.”

9 Stop time _____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
--------------------------------------	---	---------------------------------------	----------------------------	---------------

Evaluator calculates time to complete task.

Time to complete task \leq 30 minutes.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

TEAR-OFF SHEET FOR JPM

Sheet 1 of 2

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
- A. You are the Primary Operator. You are going to complete a manual RCS steady state leak rate calculation.
- B. The following information is provided to you:
- 1) The plant is in MODE 1 at 100% power.
 - 2) The main plant computer system leak rate program is unavailable.
 - 3) Per procedure OS07-01-02, RCS Leakage Monitoring/Action Commitment, your shift started the daily manual RCS steady state leak rate surveillance at 0030.
 - 4) The previous days UNIDENTIFIED LEAK RATE measurement was .004 gpm.
- C. The evaluator will act as the Unit Supervisor and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Unit Supervisor to Primary Operator, **“The time is 0630. Complete the manual steady state leak rate calculation using OX1401.02 with the collected data provided. After you have completed the calculation let me know if RCS leakage is within the prescribed limits of OS07-01-02, RCS Leakage Monitoring/Action Commitment , step 4.3.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01

TEAR-OFF SHEET FOR JPM

Sheet 2 of 2

A) OX1401.02 collected data:

START DATA @ 0030	
Tavg	589.8°F
PZR Level	59%
VCT Level	48%
Integrated Makeup	25 gallons
PRT Level	60%
RCDT Level	46%

FINISH DATA @ 0630	
Tavg	589.9°F
PZR Level	59%
VCT Level	51%
Integrated Makeup	230 gallons
PRT Level	60%
RCDT Level	61%

B) Previous days UNIDENTIFIED LEAK RATE DATA:

.004 gpm

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM01



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM RO-ADMJPM02

SHUTDOWN MARGIN (MODE 2)

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are going to calculate Shutdown Margin in MODE 2.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 2, Beginning of Life (BOL) at 3% power.
 - 2) RCS boron concentration is 1298 ppm.
 - 3) During performance of OX1410.02, Quarterly Rod Operability Surveillance, rod H-2 dropped to the bottom of the core.
 - 4) Rod H-2 cannot be moved.
 - 5) All other rods are fully withdrawn.
 - 6) The Unit Supervisor has entered procedure OS1210.05, DROPPED ROD.
 - C. The performance must meet the following standards:
 - 1) Determine Shutdown Margin within +/- .15% Δ K/K.
 - D. Perform the task per RX1707, Shutdown Margin Surveillance.
 - E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
 - F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
 - G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
 - H. I will inform you when the JPM is complete.
 - I. We will begin after the Initiating Cue is read.
 - J. I will act as the Unit Supervisor and provide the cues and communications for this JPM. Do you have any questions?
-

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM02

JOB PERFORMANCE WORKSHEET

11.0 Initiating Cue:

Unit Supervisor says, **“Calculate Shutdown Margin per RX1707, Shutdown Margin Surveillance and let me know if we are in compliance with Tech. Spec. 3.1.1.1, Shutdown Margin.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM02

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	

1.	Start time	Initiating cue read			_____
----	------------	---------------------	--	--	-------

NOTE: Calculate SDM per RX1707, Section 4.4.

*2.	P	COMPLETE Part 1 of RX1707, Form C: Shutdown Margin Determination-Immovable, Untrippable, or Dropped Rod(s).			_____
		a. RECORD number of dropped rods.	a. Records number of dropped rods. (value a=1)	_____	_____
		b. OBTAIN/ RECORD RE-18 value for dropped rod.	b. Records RE-18 value for dropped rod. (value b=1083 pcm)	_____	_____
		c. CALCULATE Total Unavailable Rod Worth.	*c. Calculates Total Unavailable Rod Worth. (value c=1083 pcm)	_____	_____
		d. OBTAIN/RECORD Total Power Defect.	d. Records Total Power Defect. (Range: 40 to 70 pcm)	_____	_____
		e. OBTAIN/RECORD Worth of the Control Banks Inserted to the Rod Insertion Limit-For Current Relative Power.	e. Records Worth of the Control Banks Inserted to the Rod Insertion Limit-For Current Relative Power. (Range: 1850 to 1900 pcm)	_____	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP	STANDARD	EVALUATION	INITIALS/DATE
	* denotes a critical step	* denotes a critical step	SAT UNSAT	

f. OBTAIN/RECORD Total Control and Shutdown Rod Worth Minus Stuck Rod and 10% Uncertainty.

f. Records Total Control and Shutdown Rod Worth Minus Stuck Rod and 10% Uncertainty.
(value f=5881 pcm)

g. CALCULATE Shutdown Margin.

*g. Calculates Shutdown Margin.
(Within .15% ΔK/K of 2.88%ΔK/K. Acceptable range: 2.73 to 3.03 %ΔK/K)

h. DETERMINE if Shutdown Margin is adequate by comparing the calculated Shutdown Margin with the COLR Shutdown Margin limit.

*h. Determines that SDM is adequate by comparing the calculated SDM with the COLR SDM.
(COLR Shutdown Margin requirement is: In MODES 1, 2, and 3 the Shutdown Margin shall be greater than 1.3%ΔK/K)

3 P INFORM Unit Supervisor of results.

Informs Unit Supervisor of results.

CUE: "The JPM is complete."

15. Stop time

Evaluator calculates time to complete task.

Time to complete the task ≤ 15 minutes.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM02

TEAR-OFF SHEET FOR JPM

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are going to calculate Shutdown Margin in MODE 2.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 2, Beginning of Life (BOL) at 3% power.
 - 2) RCS boron concentration is 1298 ppm.
 - 3) During performance of OX1410.02, Quarterly Rod Operability Surveillance, rod H-2 dropped to the bottom of the core.
 - 4) Rod H-2 cannot be moved.
 - 5) All other rods are fully withdrawn.
 - 6) The Unit Supervisor has entered procedure OS1210.05, DROPPED ROD.
 - C. The evaluator will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Unit Supervisor says, **“Calculate Shutdown Margin per RX1707, Shutdown Margin Surveillance and let me know if we are in compliance with Tech. Spec. 3.1.1.1, Shutdown Margin.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM02



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM RO-ADMJPM03

SPENT FUEL POOL BLENDED MAKEUP CALCULATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

Position: RO

0040100601 Perform a boron change calculation.

2.0 Conditions:

A. A manual blended makeup to the Spent Fuel Pool is required to raise pool level.

3.0 Standards:

Calculate the required flow controller and totalizer setpoints for a 550 gallon manual blended makeup to the Spent Fuel Pool .

4.0 Student Materials:

Copy of the Tear-Off Sheet.
RS1735, REACTIVITY CALCULATIONS
OS1008.01, CVCS MAKEUP OPERATIONS

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

Procedures:

- RS1735, REACTIVITY CALCULATIONS
- OS1008.01, CVCS MAKEUP OPERATIONS

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03

JOB PERFORMANCE WORKSHEET

Sys	KA	Description	Value RO/SRO
	2.2.1	2.2.1 Ability to perform pre-startup procedures for the facility, including operating those controls associated with plant equipment that could affect reactivity.	3.7/3.6

7.0 Setting:

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03

JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Primary Operator. You are going to perform calculations for a 550 gallon blended makeup to the Spent Fuel Pool.
 - B. The following information is provided to you:
 - 1) A 550 gallon manual blended makeup to the Spent Fuel Pool is required for pool inventory addition.
 - 2) Makeup total flow rate should be 50 gallons per minute.
 - 3) Current Spent Fuel Pool boron concentration is 2686 ppm.
 - 4) The "A" Boric Acid tank is in service and the boron concentration is 7410 ppm.
 - 5) The makeup boron concentration should be at the current Spent Fuel Pool boron concentration.
 - C. The performance must meet the following standards:
 - 1) Calculate the required flow controller and totalizer setpoints for a 550 gallon manual blended makeup to the Spent Fuel Pool.
 - D. Perform the task per RS 1735, Reactivity Calculations, and OS1008.01, CVCS Makeup Operations.
 - E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
 - F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
 - G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
 - H. I will inform you when the JPM is complete.
 - I. We will begin after the Initiating Cue is read.

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03

JOB PERFORMANCE WORKSHEET

- J. I will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

Unit Supervisor to Primary Operator, **“Primary Operator, determine the required flow controller and totalizer setpoints for a 550 gallon manual blended makeup to the Spent Fuel Pool.”**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT UNSAT	INITIALS/DATE
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1.	P	Start time	Initiating cue read. Student obtains copy of RS1735 REACTIVITY CALCULATIONS and OS1008.01, CVCS MAKEUP OPERATION	_____
----	---	------------	--	-------

Evaluator CUE: If asked by the student, **“The desired makeup boron concentration is 2686 ppm.”**

*2.	P	Determine the desired flows and quantities of boric acid and total makeup from RS1735, REACTIVITY CALCULATIONS		_____
		a. On Form D, Item 1, ENTER the desired makeup boron concentration.	Enters the desired makeup boron concentration. (2686 ppm)	_____
		b. On Form D, Item 2, ENTER the desired flowrate makeup setpoint.	Enters the desired flowrate makeup setpoint. (50 gpm)	_____
		c. On Form D, Item 3, ENTER the actual Boric Acid Storage Tank concentration.	Enters the actual Boric Acid Storage Tank concentration. (7410 ppm)	_____
		d. On Form D, Item 4, ENTER the desired makeup quantity target.	Enters the desired makeup quantity target. (550 gallons)	_____
		*e. On Form D, CALCULATE the boric acid flowrate SETPOINT, (F _{BA}).	* Calculates the boric acid flowrate SETPOINT, (F _{BA}). (Acceptable range: 17.9 to 18.3 gpm)	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP	STANDARD	EVALUATION	INITIALS/DATE
	* denotes a critical step	* denotes a critical step	SAT UNSAT	

*f. On Form D, CALCULATE the boric acid quantity target, (G_{BA}).

* Calculates the boric acid quantity target, (G_{BA}).
(Acceptable range: 195 to 205 gpm)

Evaluator Cue: Student may ask for an Independent Verification of Form D. If student asks, say “ **For the purpose of this JPM an independent verification will not be performed.**”

CUE: “The JPM is complete.”

15.	Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 15 minutes.	_____	_____	_____
-----	--	--	-------	-------	-------

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03

TEAR-OFF SHEET FOR JPM Error! Reference source not found.

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are the Primary Operator. You are going to perform a 550 gallon blended makeup to the Spent Fuel Pool.
 - B. The following information is provided to you:
 - 1) A 550 gallon manual blended makeup to the Spent Fuel Pool is required for pool inventory addition.
 - 2) Makeup total flow rate should be 50 gallons per minute.
 - 3) Current Spent Fuel Pool boron concentration is 2686 ppm.
 - 4) The "A" Boric Acid tank is in service and the boron concentration is 7410 ppm.
 - 5) The makeup boron concentration should be at the current Spent Fuel Pool boron concentration.
 - C. The evaluator will act as the Shift Manager and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Unit Supervisor to Primary Operator, **"Primary Operator, determine the required flow controller and totalizer setpoints for a 550 gallon manual blended makeup to the Spent Fuel Pool."**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM03



FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE 2007 NRC EXAM RO-ADMJPM04

INITIATE A LIQUID EFFLUENT WASTE SAMPLE REQUEST

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

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PREPARED BY: _____ DATE: _____
INSTRUCTOR

REVIEWED BY: _____ DATE: _____
SUBJECT MATTER EXPERT (OPTIONAL)

APPROVED BY: _____ DATE: _____
TRAINING SUPERVISOR

JOB PERFORMANCE WORKSHEET

1.0 Task Number and Description:

Position: RO

1190153001 Initiate a release of liquid waste.

2.0 Conditions:

- A. The plant is in MODE 1 with two ocean Service Water and two Circulating Water pumps running with no expected change of configuration.
- B. WL-TK-63A, "A" Waste Test Tank has been filled to 18,000 gallons.
- C. WL-TK-63A, "A" Waste Test Tank has to be sampled to prepare a LEW permit for a release to the transition Structure.

3.0 Standards:

Using the information provided, initiate a Liquid Effluent Sample Request using CP-4.1, Effluent Sampling Program.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
ON1018.07, Waste Test Tank Recirculation.
CP-4.1, Effluent Sampling Program.

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator. Even if requested, no peer checks will be provided during the JPM.

6.0 References:

ON1018.07, Waste Test Tank Recirculation.
SSCP, Station Chemistry Manual
CP-4.1, Effluent Sampling Program.

Sys	KA	Description	Value RO/SRO
	2.3.10	Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.	2.9/3.3

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM04

JOB PERFORMANCE WORKSHEET

7.0 Setting:

Classroom

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM04

JOB PERFORMANCE WORKSHEET

10.0 Directions To The Student(s):

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are going to perform initiation of a Liquid Effluent Waste Sample Request, using the information provided.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 with two ocean Service Water and two Circulating Water pumps running with no expected change of configuration.
 - 2) WL-TK-63A, "A" Waste Test Tank has been filled to 18,000 gallons.
 - 3) WL-TK-63A, "A" Waste Test Tank has to be sampled to prepare a LEW permit for a release to the transition Structure.
 - 4) WL-TK-63A, 'A' Waste Test Tank was placed on recirculation at 0800 today.
 - C. The performance must meet the following standards:
 - 1) Initiate a Liquid Effluent Sample Request for release of the "A" Waste Test Tank.
 - D. Perform the task utilizing OS1018.07, Waste Test Tank Recirculation and CP 4.1, Effluent Sampling Program.
 - E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator.
 - F. During the course of the walkthrough examination, there may be some tasks you will be asked to perform that may require you to implement an alternative method directed by plant procedures in order to complete the assigned task. You are expected to make decisions and take actions based on the facility's procedural guidance and the indications available.
 - G. Failure to perform or simulate a critical element within the prescribed standard will result in a failure of the task.
 - H. I will inform you when the JPM is complete.
 - I. We will begin after the Initiating Cue is read.
 - J. I will act as the Unit Supervisor and provide the cues and communications for this JPM. Do you have any questions?
-

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM04

JOB PERFORMANCE WORKSHEET

11.0 Initiating Cue:

Unit Supervisor to Primary Operator, "Primary Operator, using the information provided, initiate a Liquid Effluent Sample Request in accordance with CP-4.1A. Provide the completed request to the Unit Supervisor for review"

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM04

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION		INITIALS/DATE
			SAT	UNSAT	
	h. ENTER the projected release date and time (normally 8 hours from the sample time).	h. Enters time that is 8 hours from the sample time.	_____	_____	
	i. ENTER name, date, and time of request.	i. Enters name, date, and time.	_____	_____	
	j. PROVIDES completed form to Unit Supervisor for review.	j. Provides completed form to Unit Supervisor for review.	_____	_____	
Evaluator CUE: "The JPM is complete".					
4	Stop time _____	Start-Stop time is ≤ 15 minutes.	_____	_____	_____

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM04

TEAR-OFF SHEET FOR JPM

Directions to the Student:

Evaluator gives Tear-Off sheet to the student.

Evaluator reads the following to student (Optional for multiple JPMs):

1. Ensure task is done correctly.
 2. You may be asked follow-up questions to confirm knowledge of the task.
-
- A. You are going to perform initiation of a Liquid Effluent Waste Sample Request, using the information provided.
 - B. The following information is provided to you:
 - 1) The plant is in MODE 1 with two ocean Service Water and two Circulating Water pumps running with no expected change of configuration.
 - 2) WL-TK-63A, "A" Waste Test Tank has been filled to 18,000 gallons.
 - 3) WL-TK-63A, "A" Waste Test Tank has to be sampled to prepare a LEW permit for a release to the transition Structure.
 - 4) WL-TK-63A, 'A' Waste Test Tank was placed on recirculation at 0800 today.
 - C. I will act as the Unit Supervisor and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

Unit Supervisor to Primary Operator, **"Primary Operator, using the information provided, initiate a Liquid Effluent Sample Request in accordance with CP-4.1A. Provide the completed request to the Unit Supervisor for review"**

Note to Evaluator - Obtain Tear Off Sheets from student following JPM completion (Ops only).

RO-ADMJPM04