Seabrook Station	Date of Examination: **01/31/05**
Examination Level (circle one): **RO**	Operating Test Number:

Control Room Systems @ (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)		
System / JPM Title	Type Code*	Safety Function
a. 001 LOIT01, Inadvertent Rod Withdrawal during Reactor S/D	N/S/L/A	1
b. 006 L0131J, Transfer to Hot Leg Injection	M/S/A	2
c. 010 L0024J, Post LOCA PORV Operation	D/S	3
d. 002 L0059J, Post Trip Primary Plant Stabilization	D/S	4
e. 076 L0058J, Transfer Service Water to the Cooling Tower	P/D/S	4
f. 028 L0084J, Start Hydrogen Recombiner	P/D/S	5
g. 029 LOIT02, Containment On-Line Purge System Lineup	N/S	8
h. 068 LOIT03, Respond to Liquid Radwaste High Radiation	N/S	9
In-Plant Systems @ (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. 063 L0022J, DC Load Shedding During ECA-0.0	D/E	6
j. 012 L0008J, Local Reactor Trip During ATWS	D/E/A	7
k. 008 L0055J, Makeup to CC Head Tank During System Leak	D/E/R/A	8

@ All control room (and in-plant) systems must be different and serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate Path	4-6 / 4-6 / 2-3
(C)ontrol Room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(L)ow power	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	

Seabrook Station	Date of Examination: **01/31/05**
Examination Level (circle one): **SRO(I)**	Operating Test Number:

Control Room Systems @ (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)		
System / JPM Title	Type Code*	Safety Function
a. 001 LOIT01, Inadvertent Rod Withdrawal during Reactor S/D	N/S/L/A	1
b. 006 L0131J, Transfer to Hot Leg Injection	M/S/A	2
c. 010 L0024J, Post LOCA PORV Operation	D/S	3
d. N/A for SRO(I) Candidates		
e. 076 L0058J, Transfer Service Water to the Cooling Tower	P/D/S	4
f. 028 L0084J, Start Hydrogen Recombiner	P/D/S	5
g. 029 LOIT02, Containment On-Line Purge System Lineup	N/S/A	8
h. 068 LOIT03, Respond to Liquid Radwaste High Radiation	N/S	9
In-Plant Systems @ (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. 063 L0022J, DC Load Shedding During ECA-0.0	D/E	6
j. 012 L0008J, Local Reactor Trip During ATWS	D/E/A	7
k. 008 L0055J, Makeup to CC Head Tank During System Leak	D/E/R/A	8

@ All control room (and in-plant) systems must be different and serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate Path	4-6 / 4-6 / 2-3
(C)ontrol Room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(L)ow power	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE LOIT01

INADVERTENT ROD WITHDRAWAL DURING REACTOR SHUTDOWN

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0010102901 Operate Control Rod Drive System to Shutdown the Reactor
0010400401 Diagnose Rod Control Malfunction

2.0 Conditions:

A. A plant shutdown is about to commence in accordance with OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby".
B. Step 4.6.1 has been completed and the student will commence procedure at step 4.6.2.

3.0 Standards:

While performing a reactor shutdown, recognize incorrect rod control response and take correct action in accordance with OS1210.04, "Continuous Control Rod Withdrawal".

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby", Rev. 05, Chg 03.
Copy of OS1007.01, "Automatic and Manual Rod Control".

5.0 Limitations On Performance:

Simulate/Perform all steps. Verbalize all actions to the evaluator.
Even if requested, no Peer Checks will be provided for the JPM.

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

6.0 References:

Procedures:

- OS1210.04, "Continuous Control Rod Withdrawal".

APE/ SYS	KA	Description	Value RO/SRO
001	AK2.01 AK2.05 AK2.08	Knowledge of interrelations between continuous rod withdrawal and rod step counters/rod motion lights/individual rod display lights and indications	2.9/3.2 2.9/3.1 3.1/3.0
001	AA1.05	Ability to operate and or monitor reactor trip switches as applied to continuous rod withdrawal	4.3/4.2
001	AA2.05	Ability to determine and interpret uncontrolled rod withdrawal from available indications as applied to continuous rod withdrawal.	4.4/4.6
001	A2.11	Ability to predict the impacts of situations requiring a reactor trip and based on those predictions use procedures to correct, control or mitigate the consequences of those malfunctions or operations.	4.4/4.7

7.0 Setting:

Reset simulator to IC#217 which has been snapped to meet plant conditions for this JPM. This JPM is an alternate path JPM. Event Trigger SW A has been created to actuate mfCP019.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

10.0 Directions To The Student(s):

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

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Primary Operator. You are going to perform a reactor shutdown beginning with Step 4.6.2 of OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby".

B. The following information is provided to you:

1. The plant is being shutdown due to a problem and no cooldown is required.
2. The crew has completed OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby" up to step 4.6.1.
3. Adequate Shutdown margin has been determined per RX 1707.
4. All prerequisites have been completed and you are to continue with reactor shutdown at step 4.6.2 of OS1000.03.
5. OS1007.01, "Automatic and Manual Rod Control" is provided.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby".

E. To perform the task successfully, you must perform all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:
US to Primary Operator, **"Primary Operator (or student's name), perform a reactor shutdown in accordance with OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby" beginning at step 4.6.2.**

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	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			
CUE:	If the student requests a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**				
2. P	Reviews OS1000.03, "Plant Shutdown to from Minimum Load to Hot Standby"	Reviews copy of OS1000.03 provided in preparation to shutdown reactor.	____	____	_____
3. P	Reviews OS1007.01, "Automatic and Manual Rod Control".	Reviews copy of OS1007.01 provided in preparation to manually insert control banks (section 4.8)	____	____	_____
4. P	Verifies bank selector switch is in MANUAL position.	Checks bank selector is in MANUAL	____	____	_____
5. P	Verify CP-SI-412, Rod Control Speed indicates 48 steps per minute	Checks CP-SI-412 is reading 48 steps/minute	____	____	_____
*6. P	Go to IN on the full length rod movement switch	• Places rod movement switch to the IN position	____	____	_____
*7. P	Verify control banks are moving in the programmed manner.	• *Recognizes control rods are moving out versus in and lets go of rod movement switch. • * Recognizes controls rods are still moving in the outward direction.	____ ____	____ ____	_____ _____
8. P	Informs US that control rods continue to move outward improperly	US is informed of continuous outward rod control motion.	____	____	_____

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 SAT	EVALUATION UNSAT	INITIALS/DATE
	* denotes a critical step	* denotes a critical step			

NOTE: The student may request guidance from the US on desired course of action. Also note that the RO may take control rods to AUTO in an attempt to stop rod motion which is acceptable, however will be unsuccessful.
CUE: If direction is requested from US; **Carry out the appropriate required action.**

*9.	P	Trip the Reactor.	• OS1210.04, "Continuous Control Rod Withdrawal" Step 1 actions must be taken either from memory or by referencing the procedure • Rods placed in MANUAL • *Verifies Control Rod withdrawal has NOT stopped • *Trips the reactor using reactor trip switches on MCB.	____	____	_____

CUE: "The JPM is complete."

10.		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).

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM LOIT01

Directions to the Student:

A. You are the Primary Operator. You are going to transfer ECCS to the hot leg recirculation mode.

B. The following information is provided to you:

1.The plant is being shutdown due to a problem and no cooldown is required.
2.The crew has completed OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby" up to step 4.6.1.
3. Adequate Shutdown margin has been determined per RX 1707.
4. All prerequisites have been completed and you are to continue with reactor shutdown at step 4.6.2 of OS1000.03.
5. OS1007.01, "Automatic and Manual Rod Control" is provided.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby"

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to Primary Operator, **"Primary Operator (or student's name), perform a reactor shutdown in accordance with OS1000.03, "Plant Shutdown from Minimum Load to Hot Standby" beginning at step 4.6.2.**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0131J

TRANSFER TO HOT LEG RECIRCULATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0060500401 Transfer SI To Hot Leg Recirculation

2.0 Conditions:

A. A reactor trip with SI occurred from 100% power.
B. The US transitioned through E-0, E-1, ES-1.3, back to E-1 and is in ES-1.4 at step 2.
C. It has been 9 hours after cold leg recirculation began.

3.0 Standards:

Align ECCS equipment to Hot Leg Recirculation per ES-1.4, Transfer to Hot Leg Recirculation

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of ES-1.4, Transfer to Hot Leg Recirculation, Rev. 21.

5.0 Limitations On Performance:

Simulate/Perform all steps. Verbalize all actions to the evaluator.
Even if requested, no Peer Checks will be provided for the JPM.

6.0 References:

Procedures:

- ES-1.4, Transfer To Hot Leg Recirculation.

Sys	KA	Description	Value RO/SRO
013	A1.08	Predict/monitor changes in Ctmt sump level.	3.7/3.8
013	A3.02	Monitor operation of actuated equipment.	4.1/4.2
006	K4.08	Knowledge of recirculation flowpath of reactor building sump.	3.4/3.6

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

7.0 Setting:

Reset simulator to IC#214 which has been snapped to meet plant conditions for this JPM. This JPM has been modified from the bank in that it is now an alternate path JPM.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Primary Operator. You are going to transfer ECCS to the hot leg recirculation mode.

B. The following information is provided to you:

1. A reactor trip with SI occurred from 100% power.
2. The US transitioned through E-0, E-1, ES-1.3, back to E-1 and is in ES-1.4 at step 2.
3. All CSF challenges have been addressed.
4. It has been 9 hours after cold leg recirculation began.
5. ORANGE path on **P** has been addressed.

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

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using ES-1.4, Transfer To Hot Leg Recirculation.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Primary Operator, **"Primary Operator (or student's name), transfer the Emergency Core Cooling System to Hot Leg Recirculation per ES-1.4."**

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	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			_____

CUE: If the student requests a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

*2.	P	Align RHR Pumps For Hot Leg Recirculation:				
		a. Close cold leg injection valve to cold legs 1 & 2:				
		• RH-V14	• * Verifies RH-V14 Closed		_____	_____
		b. Close cold leg injection valve to cold legs 3 & 4:				
		• RH-V26	• * Recognizes RH-V26 will not close and informs US & performs alternate path actions as specified in RNO- closes RH-V21		_____	_____
		c. Open Hot leg recirculation valves:				
		• RH-V32	• * Opens RH-V32		_____	_____
		• RH-V70	• * Opens RH-V70		_____	_____
*3.	P	Align SI Pumps For Hot Leg Injection:				
		a. Stop SI pump for Train A, SI-P-6A	*a. Stops SI-P-6A		_____	_____
		b. Close SI Train A discharge cross connect valve, SI-V112	*b. Closes SI-V112		_____	_____
		c. Open SI Train A discharge isolation to hot legs 1 and 4, SI-V102	*c. Opens SI-V102		_____	_____

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	EVALUATION UNSAT	INITIALS/DATE
	d. Start SI pump for train A, SI-P-6A	*d. Starts SI-P-6A	____	____	_____
	e. Stop SI pump for train B, SI-P-6B	*e. Stops SI-P-6B	____	____	_____
	f. Close SI Train B discharge cross connect valve, SI-V111	*f. Closes SI-V111	____	____	_____
	g. Close SI pumps common discharge isolation to cold legs, SI -V114	*g. Closes SI-V114	____	____	_____
	h. Open SI Train B discharge isolation to hot legs 2 and 3, SI-V77	*h. Opens SI-V77	____	____	_____
	i. Start SI pump for Train B, SI-P-6B	*I. Starts SI-P-6B	____	____	_____
4. P	Deenergize MCC-E522 and MCC-E622	Deenergizes MCC-E522 and MCC-E622	____	____	_____
CUE:	**"The JPM is complete."**				
5.	Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 10 minutes.			_____

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0131J

Directions to the Student:

A. You are the Primary Operator. You are going to transfer ECCS to the hot leg recirculation mode.

B. The following information is provided to you:

1. A reactor trip with SI occurred from 100% power.
2. The US transitioned through E-0, E-1, ES-1.3, back to E-1 and is in ES-1.4 at step 2.
3. It has been 9 hours after cold leg recirculation began.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using ES-1.4, Transfer To Hot Leg Recirculation.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to Primary Operator, **"Primary Operator (or student's name), transfer the Emergency Core Cooling System to Hot Leg Recirculation per ES-1.4.**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0024J

POST LOCA PORV OPERATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0100400201 Operate the PORV/Block valve to control RCS pressure.

2.0 Conditions:

A. The reactor tripped from 100% load due to a LOCA and SI initiated.
B. All actions were completed in E-0 and E-1. We are in ES-1.2, Post LOCA Cooldown And Depressurization, at step 11.
C. An RCS cooldown to cold shutdown is in progress.

3.0 Standards:

Refill the pressurizer to > 25% [50% adverse] per ES-1.2, Post LOCA Cooldown And Depressurization.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of ES-1.2, Post LOCA Cooldown And Depressurization, Rev. 29.

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

- ES-1.2, Post LOCA Cooldown And Depressurization.

Sys	KA	Description	Value RO/SRO
009	EA1.15	PORV and PORV block valve.	3.9/4.1
009	EA2.04	PZR Level.	3.8/4.0

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

7.0 Setting:

Reset simulator to IC#215 which has been snapped to meet plant conditions for this JPM. Do NOT take simulator out of freeze after initial stabilization until student is ready to perform JPM.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

10 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Primary Operator. You are going to depressurize the RCS to refill the pressurizer.

B. The following information is provided to you:

1. The reactor tripped from 100% load due to a LOCA and SI has actuated.
2. All actions were completed in E-0 and E-1. We are in ES-1.2, Post LOCA Cooldown and Depressurization, at step 11.
3. An RCS cooldown to cold shutdown is in progress.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using ES-1.2, Post LOCA Cooldown And Depressurization.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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.

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

G. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Primary Operator, **"Primary Operator (or student's name), depressurize the RCS to refill the Pressurizer using step 11 of ES-1.2."**

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP • denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			_____

CUE: If the student requests a Peer Check any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

2.	P	Depressurize RCS To Refill PZR:				
3.	P	PZR level - LESS THAN 25% [50% for adverse containment]	Verifies PZR level <25% since containment pressure is <4.0 psig.	_____	_____	_____
4.	P	Open normal PZR spray valve(s) to refill PZR	Verifies normal spray not available.	_____	_____	_____

NOTE: The student should recognize that the above ACTION/EXPECTED RESPONSE cannot be achieved and transition to the RNO. This is acceptable. If student opens the normal spray valve(s), then they should subsequently be closed and transition to the RNO for a satisfactory completion of the JPM. The following **CUE** may be given at any time:

CUE: US to Student: **"Because RCPs are off, we cannot use normal PZR spray valves."**

*5.	P	Use one PZR PORV	Uses one PZR PORV:			
			• • Opens one PORV (with associated block valve open).	_____	_____	_____

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	

CUE: If student continues with the step 11.c RNO (and step 12), then US says, **"We will wait here until Pressurizer level is above 25% [50% for Adverse Containment]."**

*6.	P	PZR Level - GREATER THAN 25% [50% for adverse containment]	a. Recognizes PZR Level not >25% or 50% if adverse.	_____	_____	_____
			b. Depressurizes until PZR Level >25% or 50% if adverse.	_____	_____	_____

CUE: When the student reports PZR level is greater than 25% or 50% if adverse, read the next step.

*7.	P	Stop RCS depressurization: • IF PZR PORV is in use, THEN close PZR PORV	Closes PORV.	____	____	_____

CUE: **"The JPM is complete."**

8.	Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 10 minutes.	

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0024J

Directions to the Student:

A. You are the Primary Operator. You are going to depressurize the RCS to refill the pressurizer.

B. The following information is provided to you:

1. The reactor tripped from 100% load due to a LOCA and SI has actuated.
2. All actions were completed in E-0 and E-1. We are in ES-1.2, Post LOCA Cooldown and Depressurization, at step 11.
3. An RCS cooldown to cold shutdown is in progress.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using ES-1.2, Post LOCA Cooldown And Depressurization.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Primary Operator, **"Primary Operator (or student's name), depressurize the RCS to refill the Pressurizer using step 11 of ES-1.2."**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0059J

POST TRIP PRIMARY PLANT STABILIZATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0120401001 Verify Proper Reactor Protection System Operation Following Actuation
0010104101 Determine Rx Sub-critical
0010403701 Verify Rods Fully Inserted (Check For Stuck Rod)
0010403901 Verify Reactor Trip
0100100401 Monitor PZR Pressure
0110100301 Monitor PZR Level Control System

2.0 Conditions:

A. The plant has just entered Mode 3 following a reactor trip from 100% power.
B. No SI occurred or is required.
C. All E-0 immediate actions are complete.
D. Another RO is performing secondary system verifications. You are to verify primary system status and report the status to the US.

3.0 Standards:

Verifications of primary systems stabilization are completed.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of ES-0.1, Reactor Trip Response, Revision 28.

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:

- ES-0.1, Reactor Trip Response

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

Sys	KA	Description	Value RO/SRO
2.1	2.1.21	Ability to obtain and verify control procedure copy.	3.1/3.2
2.1	2.1.20	Ability to execute procedural steps.	4.3/4.2
2.1	2.1.17	Ability to make accurate, clear, and concise verbal reports.	3.5/3.6
2.1	2.1.31	Ability to locate control room switches, controls, and indications, and to determine that they are correctly reflecting the desired plant lineup.	4.2/3.9
EPE 007	EA1.03	RCS pressure and temperature.	4.2/4.1
EPE 007	EA1.04	RCP operation and flow rates.	3.6/3.7
EPE 007	EA1.05	Nuclear instrumentation.	4.0/4.1
EPE 007	EA1.06	Reactor trip: Verification that all rods are in after trip.	4.4/4.5
EPE 007	EA1.09	CVCS.	3.2/3.3
EPE 007	EA2.01	Decreasing power level, from available indications.	4.1/4.3
EPE 007	EA2.03	Reactor trip breaker position.	4.2/4.4

7.0 Setting:

Reset simulator to IC#216 which has been snapped to meet plant conditions for this JPM. Do NOT take simulator out of freeze after initial stabilization until student is ready to perform JPM.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

10 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Primary Operator. You are going to verify primary system stabilization following a reactor trip per ES-0.1.

B. The following information is provided to you:

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

1. The plant has just entered Mode 3 following a reactor trip from 100% power.
2. No SI has occurred or is required.
3. All E-0 immediate actions are complete.
4. Another RO is performing secondary system verifications. You are to verify primary system status and report the status to the US.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using ES-0.1, Reactor Trip Response.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs) 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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Primary Operator, **"Primary Operator (or student's name), verify that the primary plant conditions have stabilized following a reactor trip, per ES-0.1, steps 1 through 11 as directed by the US."**

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	

NOTE: Only those EOP steps applicable to the Primary Operator are evaluated in this JPM.

1.	P	Start time	Initiating cue read.			_____

CUE: If the student requests a Peer Check at any time during the JPM, respond **"No one is available to peer check your actions. Please continue with the task".**

2.	P	Monitor RCS Temperature - STABLE AT OR TRENDING TO 557°F • T_{avg} recorder -OR- • Wide Range cold leg temperature recorders	Monitors and reports T_{avg} is stable at or trending to 557°F.			
*3.	P	Check FW Status:				
		a. Either of the following: • RCS average temperature LESS THAN 557°F. OR • Feedwater isolation signal ACTUATED.	a. Checks and reports feedwater isolation signal ACTUATED.			
		b. Verify FW isolation valves CLOSED BY STATUS PANEL.	b. Verifies FW isolation valves CLOSED BY STATUS PANEL.			
		c. Verify total feed flow to SGs GREATER THAN 500 GPM.	c. Verifies total EFW flow GREATER THAN 500 GPM.			
		d. Verify main FW pumps TRIPPED.	d. Verifies main FW pumps TRIPPED.			
		e. Close main FW pump discharge valves.	*e. Closes main FW pump discharge valves.			
*4.	P	Verify All Control Rods Fully Inserted - BY DRPI	* Verifies and reports all control rods fully inserted by DRPI			
*5.	P	Check PZR Level Control:				

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	EVALUATION UNSAT	INITIALS/DATE
	a. Level - GREATER THAN 17%.	*a. Checks and reports level >17%.	_____	_____	_____
	b. Verify Charging - IN SERVICE.	*b. Verifies and reports charging in service using any of the following: • CCP indicating lights. • CCP motor amps. • Valve alignment. • Charging flow.	_____	_____	_____
	c. Verify Letdown - IN SERVICE.	*c. Verifies and reports letdown in service by checking LD flow.			
	d. Level - TRENDING TO 25%.	*d. Checks and reports PZR level trending to 25%.			

CUE: RCS Boron concentration was 833 ppm prior to the trip. "A" BAT concentration is 7200 ppm.

	e. Check VCT makeup control system:	e. Verifies and reports the following:			
	1) Makeup set for required boron concentration.	1) Verifies flowrate at 15.1 gpm or increases existing CS-FIQ-110 flowrate setting to 40 gpm	_____	_____	_____
	2) Makeup set for AUTO	* 3) Verifies: • 1 RMW pump in AUTO. • 1 BA transfer pump in AUTO. • Makeup FCVs in AUTO	_____ _____ _____	_____ _____ _____	_____ _____ _____

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	EVALUATION UNSAT	INITIALS/DATE
		• BA blender mode SS in AUTO. • Blender mode start switch – ARMED.			
*6. P	Check PZR Pressure Control:				
	a. Pressure – GREATER THAN 1800 psig.	*a. Checks and reports pressure > 1800 psig			
NOTE: If RCS pressure is decreasing, use of the RNO column steps is acceptable.					
	b. Pressure – STABLE AT OR TRENDING TO 2235 PSIG.	*b. Checks and reports pressure stable or trending to 2235 psig.			
CUE: Steps 6 through and including 9 have been performed by the Balance of Plant Operator, continue on with Step 10 of the procedure.					
*7. P	Check RCP 1C - RUNNING	Checks and reports RCP 1C is running using any of the following: • RCP indicating lights. • RCP motor amps. • RCS loop flow indicators.			
8. P	Check if SR detectors should be energized.	Checks and reports the following:			
	a. Check intermediate range flux – LESS THAN 10^{-10} AMPS.	a. IR flux $<10^{-10}$ AMPS (or > if appropriate).			

NOTE: b is N/A if IR $>10^{-10}$ AMPS.

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	EVALUATION UNSAT	INITIALS/DATE
	b. Verify source range detectors - ENERGIZED	b. SR detectors - energized.	_____	_____	_____
CUE:	**"The JPM is complete."**				
9.	Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 10 minutes.			_____

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0059J

Directions to the Student:

A. You are the primary operator. You are going to verify primary system stabilization following a reactor trip per ES-0.1.

B. The following information is provided to you:

1. The plant has just entered Mode 3 following a reactor trip from 100% power.
2. No SI has occurred or is required.
3. All E-0 immediate actions are complete.
4. Another RO is performing secondary system verifications. You are to verify primary system status and report the status to the US.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using ES-0.1, Reactor Trip Response.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs) 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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:
US to Primary Operator, **"Primary Operator (or students name), verify that the primary plant conditions have stabilized following a reactor trip, per ES-0.1 steps 1 through 11 as directed by the US."**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0058J

TRANSFER SERVICE WATER TO THE COOLING TOWER

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0760103401 Switch From SW To Cooling Tower Operation

2.0 Conditions:

A. The plant is operating at 100%.
B. On line maintenance needs to be done on the Service Water System Train A.
C. The SM requested that Service Water Train A be transferred to the Cooling Tower, until the job is complete in approximately 12 hours.
D. Local prestarts are complete on the "A" Cooling Tower Pump.

3.0 Standards:

Place the Cooling Tower in operation per OS1016.05, Service Water Cooling Tower Operation.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of OS1016.05, Service Water Cooling Tower Operation, Rev. 08, Chg.2, Sect. 4.3, pages 21, 22, 23, and 24.
OP AID 90-0053 Pump Prestart Guidelines – SW-P-110A.

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:

- OS1016.05, Service Water Cooling Tower Operation

Sys	KA	Description	Value RO/SRO
076	A2.01	Ability to predict the impact of and use procedures to control a loss of SW.	3.5/3.7
076	K3.01	Knowledge of the effect that a loss of malfunction of SW on closed cooling water system.	3.4/3.6

7.0 Setting:

Reset simulator to IC#216 which has been snapped to meet plant conditions for this JPM.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Secondary Operator.

B. The following information is provided to you:

1. The plant is operating at 100%.
2. On line maintenance needs to be done on the Service Water System Train A.
3. The SM requested that Service Water Train A be transferred to the Cooling Tower, until the job is complete in approximately 12 hours.
4. Local prestarts are complete on the "A" Cooling Tower Pump.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1016.05, Service Water Cooling Tower Operation.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Secondary Operator, **"Secondary Operator (or student's name), using OS1016.05 section 4.3, transfer Service Water train A from the ocean to the Cooling Tower. All prerequisites, precautions/limitations are complete."**

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	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			_____

CUE: If the student requests a Peer Check at any time during the JPM, respond **"No one is available to peer check your actions. Please continue with the task".**

NOTE: Student may verify prerequisites, precautions & limitations.

NOTE: Student may put the color graphic on the MPCS for Service Water.

NOTE: Provide student with NPDES Sampling Form A when asked.

NOTE: Acknowledge if student requests an announcement made for any pump start.

2.	P	RECORD cooling tower level on NPDES Sampling Form A, as read on either SW-LI-6139, Cooling Tower Basin Level, or A1537.	Records cooling tower level.	____	____	_____

CUE: If the student attempts to perform pump pre-start checks, provide the cue: **"ALL pump pre-starts checks are complete."**

3.		PERFORM pump pre-starts for SW-P-110A, cooling tower pump A, as determined by the US.	Evaluator provides cue.	____	____	_____
4.	P	Verify SW-V-5, SW isolation to secondary loads is OPEN.	Verifies SW-V-5 open.	____	____	_____
5.	P	VERIFY SW-V-139, SW cooling tower train A spray bypass recirculation, is OPEN.	Verifies SW-V-139 open.	____	____	_____

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	EVALUATION UNSAT	INITIALS/DATE
*6. P	CLOSE SW-V-4, SW isolation to secondary loads.	*Closes SW-V4.	____	____	_____
7. P	CHECK CLOSED/CLOSE SW-V-74, turbine building SW cross-connect to PAB.	*Checks SW-V74 closed.	____	____	_____
*8. P	START SW-P-110A, cooling tower pump A.	*Starts SW-P-110A.	____	____	_____
*9. P	PLACE the train A standby SW pump control switch in PULL-TO-LOCK.	*Places SW-P-41C (A) in PTL.	____	____	_____
*10. P	SHUTDOWN the running train A SW pump, and PLACE its control switch in PULL-TO-LOCK.	*Stops P-41A (C) and places in PTL.	____	____	_____

NOTE: Using a stopwatch, start timing the flush when student starts opening SW-V54,

OR

Record current time _____ .

*11. P	OPEN SW-V54, Cooling Tower Pump A discharge isolation.	*Opens SW-V54.	____	____	_____
*12. P	When SW-V-54 indicates full OPEN, PLACE SW-V-54 control switch in AUTO.	*When SW-V54 is full open, place switch in AUTO.	____	____	_____

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
*13.	P	VERIFY SW-V-56, cooling tower train A spray header test, auto closed.	*Verify SW-V56 auto-closed.	____	____	_____
CUE: Inform the student that the RO is responding to monitoring PCCW.						
14		If required, manually control PCCW heat exchanger outlet temperature using CC-TK-2171 (Train A).	No action should be required.			
*15.	P	FLUSH the train A SW system to discharge transition structure for at least 103 seconds, then CONTINUE with step 4.3.15.	*Flushes to ocean for at least 103 seconds prior to proceeding to next step.	____	____	_____
NOTE: Record current time _____ or observe stop watch reading _____ .						
		***Elapsed time for flush _____ (≥ 103 seconds).**				
*16.	P	OPEN SW-V34, SW Train A return to cooling tower.	*Opens SW-V34.	____	____	_____
*17.	P	CLOSE SW-V20, SW Train A to discharge structure.	*Closes SW-V20.	____	____	_____
*18.	P	ADJUST SW-V-15, PCCW heat exchanger A SW isolation, as required to limit cooling tower pump A flow to less than 16,000 gpm.	*If necessary, adjusts SW-V15 to establish <16,000 gpm.	____	____	_____

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	EVALUATION UNSAT	INITIALS/DATE
CUE:	**"The JPM is complete."**				
19.	Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 20 minutes.			

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0058J

Directions to the Student:

A. You are the Secondary Operator.

B. The following information is provided to you:

1. The plant is operating at 100%.
2. On line maintenance needs to be done on the Service Water System Train A.
3. The SM requested that Service Water Train A be transferred to the Cooling Tower, until the job is complete in about 12 hours.
4. Local prestarts are complete on the "A" Cooling Tower Pump.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1016.05, Service Water Cooling Tower Operation.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to Secondary Operator, **"Secondary Operator (or student's name), using OS1016.05 section 4.3, transfer Service Water train A from the ocean to the Cooling Tower. All prerequisites, precautions/limitations are complete."**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0084J

START HYDROGEN RECOMBINERS

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0280500201 Start 'A' H_2 Recombiner From The Main Control Room.

2.0 Conditions:

A. The reactor is tripped with a loss of all AC power and with SI required. Power was restored to Bus E5, and the crew transitioned from ECA-0.0 to ECA-0.2.
B. The crew determined that inadequate core cooling conditions exist; therefore, they transitioned to FR-C.1, Response To Inadequate Core Cooling.

3.0 Standards:

Place a hydrogen recombiner in service.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of OS1023.40, Hydrogen Recombiner Operation, Rev. 7, Chg. 1.
Calculator.

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:

- FR-C.1, Response To Inadequate Core Cooling.
- OS1023.40, Hydrogen Recombiner Operation.

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

Sys	KA	Description	Value RO/SRO
028	A2.02	LOCA condition and concern over hydrogen.	3.5/3.9
028	A2.03	The hydrogen/air concentration in excess of limit flame propagation or detonation with resulting equipment damage in containment.	3.4/4.0
2.1	2.1.23	Ability to perform specific system and integrated plant procedures during all modes of operation.	3.9/4.0
2.1	2.1.21	Ability to obtain and verify controlled procedure copy.	3.1/3.2
2.1	2.1.20	Ability to execute procedure steps.	4.3/4.2
2.1	2.1.17	Ability to make accurate, clear, and concise verbal reports.	3.5/3.6
2.1	2.1.8	Ability to coordinate personnel activities outside the control room.	3.8/3.6
2.1	2.1.31	Ability to locate control room switches, controls, and indications, and determine that they are correctly reflecting the desired plant lineup.	4.2/3.9

7.0 Setting:

Reset the simulator to IC#217 which has been snapped for this JPM to be performed concurrently with another JPM on the front of the MCB. The **simulator must be in RUN** to allow the PWR OUT meter to respond to the potentiometer.
Verify the "PWR OUT" potentiometer is at MINIMUM and Power Out Switch is OFF (red light NOT on) prior to beginning the JPM.

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Secondary Operator. You are going to simulate placing Hydrogen Recombiner 'A' in service.

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

B. The following information is provided to you:

1. The reactor is tripped with a loss of all AC power and with SI required. Power was restored to Bus E5, and the crew transitioned from ECA-0.0 to ECA-0.2.
2. The crew entered FR-C.1 due to inadequate core cooling conditions, and they completed recovery actions up to and including checking containment H_2 concentration, which is 3.4 %.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1023.40, Hydrogen Recombiner Operation.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Secondary Operator, **"Secondary Operator (or student's name), we are in FR-C.1, and containment hydrogen concentration is presently 3.4%. Place Hydrogen Recombiner 'A' in service per OS1023.40, Hydrogen Recombiner Operation. Report to me when the recombiner is in service."**

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
1. P	Start time	Initiating cue read.			_____

CUE: If the student request a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

NOTE: **Place the Simulator in RUN.**

NOTE: If asked by the student, **"The electrical lineup has been completed".**

CUE: When student checks light, evaluator to student, **"The light is energized."**

2.	S	Verify the white PWR. IN AVAIL. light is energized.	Verifies the PWR. IN AVAIL. light is energized.	____ ____	_____
3.	P	Set the PWR. ADJ. potentiometer to zero.	Turns PWR ADJ pot to 000.	____ ____	_____
*4.	P	Place the PWR. OUT SW. switch to the ON position and VERIFY that the red light on the switch plate comes on.	• Moves switch to ON position.	____ ____	_____
			• Verifies the red light is on.	____ ____	_____

CUE: **AT EACH POWER LEVEL, INFORM THE OPERATOR THE STATED TIME HAS ELAPSED.**

*5.		Energize the Hydrogen Recombiner heater by PERFORMING the following:	Energizes the recombiner:		
	P	a. TURN the PWR. ADJ. Potentiometer clockwise until 5 kW is indicated on the PWR. OUT meter. MAINTAIN the 5 kW value for at least 10 minutes.	*a. Turns the PWR ADJ pot clockwise until 5 kW is indicated. Maintain 5 kW for 10 minutes.	____ ____	_____

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	EVALUATION UNSAT	INITIALS/DATE
P	b. TURN the PWR. ADJ. Potentiometer clockwise until 10 kW is indicated on the PWR. OUT meter. MAINTAIN the 10 kW value for at least 10 minutes.	*b. Turns the PWR ADJ pot clockwise until 10 kW is indicated. Maintain 10 kW for 10 minutes.	____	____	_____
P	c. TURN the PWR. ADJ. Potentiometer clockwise until 20 kW is indicated on the PWR. OUT meter. MAINTAIN the 20 kW value for at least 5 minutes.	*c. Turns the PWR ADJ pot clockwise until 20 kW is indicated. Maintain 20 kW for 5 minutes.	____	____	_____
P	d. DETERMINE the recombiner power setting per Form A, Power Out Setpoint Calculation.	d. Refers to Form A.	____	____	_____
P	e. Calculate the H_2 recombiner power setpoint by performing the following:	e. Determines power setting:			

CUE: When the student locates any of the required pressure instruments, cue the student: **"Containment pressure is 4 psig."**

• DETERMINE the current containment pressure from SI-PI-934 or SI-PI-935, MCB containment pressure indicators.	• Determines the current cntmnt pressure from SI-PI-934 or 935.	____	____	_____
• Current Containment Pressure + 14.7 psi = psia	* • Converts cntmnt pressure to psia and records on data sheet (= 18.7 psia).	____	____	_____
• Pre-accident Containment Average Temperature is 120°F.	• No action required.			

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
	• Using containment absolute pressure, pre-accident containment average temperature and Figure 2, Recombiner Power Correction Factor Curve determine the Pressure Factor (C_p).	* • Determines C_p and Records on data sheet - (C_p = 1.17 - 1.20). Enter student C_p value: C_p =	____ ____	_____
	• MULTIPLY the Pressure Factor (C_p) by Reference Power (45.24 kW). (C_p) x 45.24 = Power Setting kW	* • Multiplies C_p by the reference power. Records on data sheet - (52.9 – 54.3 kW). Enter student kW value: KW =_____	____ ____	_____

CUE: If the student requests a second person verification, respond: **"For the purpose of this evaluation, a second verification will not be performed. Please continue with the procedure."**

	• Have a second person VERIFY the power setting calculation.	• Requests second person verification.	____ ____	_____
P	f. Turn the PWR. ADJ. potentiometer clockwise until the power setpoint, as calculated in Step 4.2.4.4, is indicated on the PWR OUT meter.	*f. Turns the PWR ADJ pot clockwise until the power setpoint is indicated on the PWR OUT meter.	____ ____	_____

CUE: When student mentions that conference with the TSC is necessary to determine recombiner effectiveness, inform the student, **"The STED is aware of this and in contact with the TSC on this matter."**

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	EVALUATION UNSAT	INITIALS/DATE
P	g. CONFER with the TSC to determine recombiner effectiveness and the need to make adjustments to recombiner power.	g. Attempts to confer with the TSC.	____	____	_____
CUE:	**"The JPM is complete."**				
6.	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).

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0084J

Directions to the Student:

A. You are the Secondary Operator. You are going to simulate placing Hydrogen Recombiner A in service.

B. The following information is provided to you:

1. The reactor is tripped with a loss of all AC power and with SI required. Power was restored to Bus E5, and the crew transitioned from ECA-0.0 to ECA-0.2.
2. The crew entered FR-C.1 due to inadequate core cooling conditions, and they completed recovery actions up to and including checking containment H_2 concentration, which is 3.4 %.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1023.40, Hydrogen Recombiner Operation.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to Secondary Operator, **"Secondary Operator (or student's name), we are in FR-C.1, and containment hydrogen concentration is presently 3.4%. Place Hydrogen Recombiner 'A' in service per OS1023.40, Hydrogen Recombiner Operation. Report to me when the recombiner is in service."**

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

FPL Energy

Seabrook Station

JOB PERFORMANCE MEASURE LOIT02

CONTAINMENT ON-LINE PURGE - SYSTEM LINEUP

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Specialist Signature: _____ Date: _____

SAT UNSAT

This JPM was administered for qualification: YES NO

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
0290100201 Startup The COP System
0290100301 Shut Down the COP System

2.0 Conditions:

A. The plant is in MODE 1 at 100% power
B. Maintenance is preparing for a long duration job in containment and has requested the COP system be placed in service to improve air quality.

3.0 Standards:

Perform the COP system lineup per OS1023.69, Containment On-Line Purge System Operation in the control room.

4.0 Student Materials:

Copy of the Tear-Off sheet.
OS1023.69, Containment On-Line Purge System Operation, Rev 09 with applicable lineup requirements identified.

5.0 Limitations on performance:

Simulate/Perform all steps. Verbalize all actions to the evaluator.

6.0 References:

Procedures

OS1023.69, Containment On-Line Purge System Operation
ODI.45, System Lineup Performance

Technical Specifications

3.6.3, Containment Isolation Valves.

System	KA	Description	Value
	2.1.31	Ability to locate control room switches, controls and indication and to determine that they are correctly reflecting the desired plant lineup.	4.2/3.9

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

JOB PERFORMANCE WORKSHEET

7.0 Setting:

Reset the simulator to IC#214 which has been snapped for this JPM to be performed concurrently with another JPM on the front of the MCB. The CONTROL SWITCH for COP-FN-73 was snapped in **AUTO (alternate path)**. It is irrelevant that plant conditions do not reflect those given above.

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 the student (Optional for multiple JPMs):

Student:

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

A. You are the Primary System Operator (PSO).

B. The following information is provided to you:

1. The plant is steady state at 100% power with all conditions normal.
2. The US and BOP operator are "At the controls" monitoring the plant.
3. Maintenance is preparing for a long duration job in containment and has requested the COP system be placed in service to improve air quality.

C. The performance must meet the following standard:

1. Perform the COP system MCB SWITCH LINEUP per Form B (sheet 2 of 3) of OS1023.69, Containment On-Line Purge System Operation.

D. Perform the task using Form B (sheet 2 of 3) of OS1023.69, Containment On-Line Purge System Operation and ODI.45, System Lineup Performance.

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

E. To perform the task successfully, you must perform all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. During the course of the walk-through 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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to PSO; **"Perform the MCB SWITCH LINEUP in preparation for placing the COP System in service per Form B (sheet 2 of 3) of OS1023.69. The remaining portions of the lineup have already been performed."**

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 critical standard	EVALUATION SAT	EVALUATION UNSAT	INITIALS /DATE
1.		Start time _____	Initiating cue read.			_____
2.	P	Verify CS for COP-V1 ON-LINE PURGE SUP ISO in AUTO with the valve position lights de-energized (MCB-CR).	Verifies CS for COP-V1 ON-LINE PURGE SUP ISO in AUTO with the valve position lights de-energized.	____	____	_____
3.	P	Verify CS for COP-V4 ON-LINE PURGE EXH ORC ISO in AUTO with the valve position lights de-energized (MCB-CR).	Verifies CS for COP-V4 ON-LINE PURGE EXH ORC ISO in AUTO with the valve position lights de-energized.	____	____	_____

Evaluator CUE: **IF** the student informs the US that the control switch for COP-FN-73 was found in the wrong position, US to Primary Operator, **"Continue with the lineup. I will notify the SM and initiate an CR. Inform me when you have completed the lineup."**

*4.	P	Verify CS for COP-FN-73 CONTM ON-LINE PURGE SUPPLY FAN is in STOP (MCB-CR).	* NOTES that the Control Switch for COP-FN-73 is in **AUTO**. Places the control Switch for FN-73 to **STOP.**	____	____	_____
5.	P	Verify SS for COP-V4 CONTM ON-LINE PURGE/VENT MODE SELECTOR SWCH in PURGE (MCB-CR).	Verifies SS for COP-V4 CONTM ON-LINE PURGE/VENT MODE SELECTOR SWCH in PURGE.	____	____	_____
6.		Verify CS for COP-V7 ON-LINE PURGE FLOW (PRESS) CTL-FINE is at NORMAL 0% (MCB-CR)	Verifies the CS for ON-LINE PURGE FLOW (PRESS) CTL-FINE is at NORMAL 0%.	____	____	_____
7.		Verify CS for COP-V8 ON-LINE PURGE FLOW (PRESS) CTL-COARSE is at NORMAL 0% (MCB-CR)	Verifies the CS for COP-V8 ON-LINE PURGE FLOW (PRESS) CTL-COARSE is at NORMAL 0%.	____	____	_____

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 critical standard	EVALUATION SAT	EVALUATION UNSAT	INITIALS /DATE
8.	P	Verify CS for COP-V2 ON-LINE PURGE SUP IRC ISO is in AUTO with the valve position lights de-energized (MCB-CR).	Verifies CS for COP-V2 ON-LINE PURGE SUP IRC ISO is in AUTO with the valve position lights de-energized.	____	____	_____
9.	P	Verify CS for COP-V3 ON-LINE PURGE EXH IRC ISO is in AUTO with the valve position lights de-energized (MCB-CR).	Verifies CS for COP-V3 ON-LINE PURGE EXH IRC ISO is in AUTO with the valve position lights de-energized.	____	____	_____
10.	P	Verify SS for COP-V3 CONTM ON-LINE PURGE/VENT MODE SELECTOR B is in PURGE (MCB-CR)	Verifies SS for COP-V3 CONTM ON-LINE PURGE/VENT MODE SELECTOR B is in PURGE	____	____	_____
11.	P	Verify UL5(E-1) for COP-V1 CONTM PRG CLOSED is ENERGIZED (MCB-AF)	Verifies UL5(E-1) for COP-V1 CONTM PRG CLOSED is ENERGIZED (MCB-AF)	____	____	_____
12.	P	Verify UL5(E-2) for COP-V4 CONTM PRG CLOSED is ENERGIZED (MCB-AF)	Verifies UL5(E-2) for COP-V4 CONTM PRG CLOSED is ENERGIZED (MCB-AF)	____	____	_____
13.	P	Verify UL3(E-1) for COP-V2 CONTM PRG CLOSED is ENERGIZED (MCB-BF)	Verifies UL3(E-1) for COP-V2 CONTM PRG CLOSED is ENERGIZED (MCB-BF)	____	____	_____
14.	P	Verify UL3(E-2) for COP-V3 CONTM PRG CLOSED is ENERGIZED (MCB-BF)	Verifies UL3(E-2) for COP-V3 CONTM PRG CLOSED is ENERGIZED (MCB-BF)	____	____	_____

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 critical standard	EVALUATION SAT UNSAT	INITIALS /DATE
CUE:	**"The JPM is complete."**			
15.	Stop time Evaluator calculates the time to complete the task.	Time to complete the task ≤ 15 minutes.	____ ____	_____

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM LOIT02

Directions to the Student:

Student:

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

A. You are the Primary System Operator (PSO).

B. The following information is provided to you:

1. The plant is steady state at 100% power with all conditions normal.
2. The US and BOP operator are "At the controls" monitoring the plant.
3. Maintenance is preparing for a long duration job in containment and has requested the COP system be placed in service to improve air quality.

C. The evaluator will act as the US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to PSO; **"SIMULATE / Perform the MCB SWITCH LINEUP in preparation for placing the COP System in service per Form B (sheet 2 of 3) of OS1023.69. The remaining portions of the lineup have already been performed."**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE LOIT03

RESPOND TO LIQUID RADWASTE HIGH RADIATION

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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

0720101401 Operate RDMS Console to initiate Alarm History Display
0720101601 Operate RDMS Console Channel/Monitor Control Functions

2.0 Conditions:

A. Plant conditions are irrelevant to perform this JPM.
B. RM-6521-1, Turbine Building Sump in High Alarm

3.0 Standards:

Properly responds to a Liquid High Radiation condition in accordance with OS1252.01, "Process or Effluent High Radiation".

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of OS1252.01, "Process or Effluent High Radiation".

5.0 Limitations On Performance:

Perform all steps. Verbalize all actions to the evaluator.
Even if requested, no Peer Checks will be provided for the JPM.

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

6.0 References:

Procedures:

- OS1252.01, "Process or Effluent High Radiation".

APE/ SYS	KA	Description	Value RO/SRO
068	A4.03	Ability to manually operate and/or monitor in the control room stoppage of release if limits exceeded related to the Liquid Radwaste System.	3.9/3.8
068	A4.04	Ability to manually operate and/or monitor in the control room automatic isolation of Liquid Radwaste System.	3.8/3.7

7.0 Setting:

Reset simulator to IC#215 which has been snapped to meet plant conditions for this JPM.
RM-6521-1 Turbine Building Sump was snapped in High Alarm as follows:
SELECT: MF List
SELECT: Radiation Monitoring (component)
SELECT: rm806521
SELECT: Go to POS # CH1
SELECT: Highest Valve
SELCT: INSERT

8.0 Safety Considerations:

None

9.0 Approximate Completion Time:

15 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

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

JOB PERFORMANCE WORKSHEET

A. You are the Balance of Plant Operator. You are going to respond to a process/effluent High Radiation Alarm using OS1252.01, "Process or Effluent High Radiation".
B. The following information is provided to you:

   1. An RDMS Alarm was just received in the control room.
   2. You are to focus on this alarm ONLY, despite other alarms or plant conditions.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1252.01, "Process or Effluent High Radiation".

E. To perform the task successfully, you must perform all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

K. US to Balance of Plant Operator, **(Balance of Plant Operator or Students Name) You are to respond to RDMS Alarm RM-6521-1 using OS1252.01, "Process or Effluent High Radiation".**

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	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			_____

CUE: If the student requests a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

CUE: If student begins to check for indications of S/G Tube Leaks per NOTE prior to step 1, respond: **"There are no indications of a Steam Generator Tube Leak".**

2.	P	Obtains a copy of OS1252.01, "Process or Effluent High Radiation"	When student locates OS1252.01, "Process or Effluent High Radiation", provide a copy.	____	____	_____
3.	P	Check RDMS Console –In Alarm	Accesses RDMS Console and notes RM6521-1, "Turbine Building" is in High Alarm.	____	____	_____

CUE: When requested, NSO reports, **"Turbine Building Sump Pumps are Running"**

*4.	P	Determines if Release Paths are Isolated	*Refers to Attachment A and verifies control functions for RM-6521-1 have actuated. *Requests NSO to verify Turbine Building Sump Pumps have stopped.	____	____	_____

CUE: Only if requested, NSO reports, **"I have locally secured Turbine Building Sumps Pumps and placed controllers in OFF.**

*5.	P	Directs NSO to locally secure Turbine Building Sump Pumps and to place the controller in OFF.	*Ensure that follow-up communications have occurred with NSO that Turbine Building Sump Pumps have been secured by placing the controller to OFF.	____	____	_____

CUE: When requested, Chemistry reports, **"Sample results indicate a VALID ALARM"**

CUE: **"The JPM is complete."**

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
6.	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).

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

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):

A. You are the Balance of Plant Operator. You are going to respond to a process/effluent High Radiation Alarm using OS1252.01, "Process or Effluent High Radiation".

B. The following information is provided to you:

1. RDMS Alarm RM-6521-1, was just received in the control room.
2. You are to focus on this alarm ONLY, despite other alarms or plant conditions.
3. Using OS1252.01, "Process or Effluent High Radiation", determine correct course of action".

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using OS1252.01, "Process or Effluent High Radiation".

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

L. US to Balance of Plant Operator, **(Balance of Plant Operator or Students Name) You are to respond to RDMS Alarm RM-6521-1, using OS1252.01, "Process or Effluent High Radiation".**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0022J

DC LOAD SHEDDING (ECA-0.0)

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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: NSO

0630100604 De-energize DC Equipment.

2.0 Conditions:

A. The reactor is tripped with a loss of all AC power.
B. All EOP actions up to step 14 of ECA-0.0 have been performed.
C. The US has determined that both EDGs and offsite power are unavailable.

3.0 Standards:

Simulate shedding DC loads per Attachment A of ECA-0.0.

4.0 Student Materials:

Copy of the Tear-Off Sheet.
Copy of Attachment D of ECA-0.0, Rev. 29.

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:

- ECA-0.0, Loss Of All AC Power.

Sys	KA	Description	Value RO/SRO
063	K3.02	Components using DC control power.	3.5/3.7

7.0 Setting:

Plant, Essential Switchgear Rooms

8.0 Safety Considerations:

None

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

L0022J

JOB PERFORMANCE WORKSHEET

9.0 Approximate Completion Time:

10 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Secondary NSO. You are going to simulate DC load shedding.

B. The following information is provided to you:

   1. The reactor is tripped with a loss of all AC power.
   2. All EOP actions up to step 14 of ECA-0.0 have been performed.
   3. The US has determined that both EDGs and offsite power are unavailable.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using Attachment D of ECA-0.0.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US 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).

11.0 Initiating Cue:

US to Secondary NSO, **"Secondary NSO (or student's name), initiate DC load shedding per Attachment D of ECA-0.0."**

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	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			_____

NOTE: The loads marked with an * in ECA-0.0 must be shed as soon as possible (per the caution); therefore, they are critical steps in this JPM.

CUE: If the student requests a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

CUE: As the student simulates opening specified doors for CP-185/183, evaluator to student, **"The door is open."** As student simulates opening circuit breakers, evaluator to student, **"The breaker opens."**

CUE: If student calls control room to verify "MSIV cabinet door open" VAS alarm, evaluator to student, **"We have received the door alarms for opening the MSIV cabinets."** (Doors are not locked.)

*2.	S	Open the front and back doors on the 1-MS-CP-185 cabinet.	*Opens front and back doors on 1-MS-CP-185.	_____	_____	_____
*3.	S	Open the front and back doors on the 1-MS-CP-183 cabinet.	*Opens front and back doors on 1-MS-CP-183.	_____	_____	_____
*4.	S	Shed loads on 1-EDE-PP-1F: • Ckt #2	*Opens circuit 2 on 1-EDE-PP-1F.	_____	_____	_____

NOTE: The student may choose to shed Ckt #10 on EDE-PP-11E concurrently with Ckt #4, or it may be shed anytime after the critical loads have been shed.

*5.	S	Shed loads on 1-EDE-PP-11E	Opens circuits on 1-EDE-PP-11E:			
		• Ckt #4	*• Ckt #4.	_____	_____	_____
		• Ckt #10	• Ckt #10.	_____	_____	_____

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

L0022J

PERFORMANCE CHECKLIST

D=Discuss P=Perform S=Simulate	ELEMENT/STEP * denotes a critical step	STANDARD * denotes a critical step	EVALUATION SAT	 UNSAT	INITIALS/DATE
*6. S	Shed loads on 1-EDE-PP-1E	Opens circuits on 1-EDE-PP-1E:			
	• Ckt #1	*• Ckt #1.	_____	_____	_____
	• Ckt #2	*• Ckt #2.	_____	_____	_____
	• Ckt #8	*• Ckt #8.	_____	_____	_____
	• Ckt #20	*• Ckt #20.	_____	_____	_____
7. S	Shed loads on 1-ED-PP-3A: • Ckt #11	Opens circuit 11 on 1-ED-PP-3A.	_____	_____	_____
CUE:	**"The JPM is complete."**				
8.	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).

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

L0022J

TEAR-OFF SHEET FOR JPM L0022J

Directions to the Student:

A. You are the Secondary NSO. You are going to simulate DC load shedding.

B. The following information is provided to you:

1. The reactor is tripped with a loss of all AC power.
2. All EOP actions up to step 14 of ECA-0.0 have been performed.
3. The US has determined that both EDGs and offsite power are unavailable.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using Attachment D of ECA-0.0.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to Secondary NSO, **"Secondary NSO (or student's name), initiate DC load shedding per Attachment D of ECA-0.0."**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0008J

LOCAL REACTOR TRIP

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Coordinator Signature _____ Date: _____
(optional)

SAT UNSAT

This JPM was administered for qualification: YES NO

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: NSO

0010101604 Locally operate reactor trip breaker
0010150204 Trip rod drive motor generator sets
0120100104 Locally trip reactor trip breaker and bypass breaker

2.0 Conditions:

A. The reactor has a trip demand and should have tripped, but both reactor trip breakers are still closed and control rods are withdrawn.
B. The reactor trip bypass breakers are racked out and open.
C. The Primary Operator has unsuccessfully tried to manually trip the reactor trip breakers from both switch locations on the MCB.
D. The control room is executing FR-S.1, and they are using the Operator Action Summary (OAS) page to have you locally trip the reactor.

3.0 Standards:

SIMULATE locally tripping the reactor.

4.0 Student Materials:

Copy of the Tear-Off Sheet.

5.0 Limitations On Performance:

SIMULATE and verbalize all actions to the evaluator.
Even if requested, no Peer Checks will be provided during the JPM.

6.0 References:

Procedures / Good Practices:

- FR-S.1, Response to Nuclear Power Generation/ATWS.
- OGP-1, Control Switch Operation

Sys	KA	Description	Value RO/SRO
007	EA2.04	If the reactor should have tripped but has not, carry out actions in ATWS EOP.	4.4/4.6
2.4	2.4.35	Knowledge of local NSO tasks during emergency operations.	3.3/3.5

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

L0008J

7.0 Setting:

Train A Essential Switchgear Room.

8.0 Safety Considerations:

Do not permit opening of the reactor trip breaker cubicles or the rod drive MG set cubicles without explicit authorization from the control room.

9.0 Approximate Completion Time:

5 minutes

10.0 Directions To The Student(s):

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

Evaluator gives Tear-Off sheet to the student.
Evaluator reads the following to student (Optional for multiple JPMs):

A. You are the Secondary NSO. You are going to SIMULATE tripping the reactor locally.

B. The following information is provided to you:

1. The reactor has a trip demand and should have tripped, but both reactor trip breakers are still closed and control rods are withdrawn.
2. The reactor trip bypass breakers are racked out and open.
3. The Primary Operator has unsuccessfully tried to manually trip the reactor trip breakers from both switch locations on the MCB.
4. The control room is executing FR-S.1, and they are using the Operator Action Summary (OAS) page to have you locally trip the reactor.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using verbal direction from the US.

E. To perform the task successfully, you must SIMULATE all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

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

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US and provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Secondary NSO, **"Secondary NSO (or student's name), locally open the reactor trip breakers."**

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	EVALUATION UNSAT	INITIALS/DATE
1. P	Start time	Initiating cue read.			_____

CUE: If the student requests a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

CUE: US to Secondary NSO, **"That is correct."**

2.	P	Acknowledge the order to locally trip the reactor.	Acknowledges order to locally trip the reactor.	_____	_____ _____

CAUTION: DO NOT allow the student to depress the trip plate as this will cause an actual reactor trip.

CUE: The reactor trip breakers indicate closed locally. When student simulates depressing the red trip plate, evaluator to NSO, **"The reactor trip breakers DO NOT open."**

*3.	S	Locally open the reactor trip breakers:	Simulates tripping the reactor trip breakers:		
		• Depress red trip plate for A reactor trip breaker.	*• Simulates tripping the A reactor trip breaker.	_____	_____ _____
		• Depress red trip plate for B reactor trip breaker.	*• Simulates tripping the B reactor trip breaker.	_____	_____ _____

CUE: US to Secondary NSO: **"I copy, the reactor trip breakers will not open. Open the A & B rod drive MG set motor and generator breakers."**

4.	P	Inform the control room that the reactor trip breakers will not open.	Informs the control room that the reactor trip breakers will not open.	_____	_____ _____

CAUTION: DO NOT allow the student to actually open or jar the MG set breakers.

NOTE: The order in which the breakers are tripped is not critical. Also, just one breaker (motor or generator) for each MG set is critical.

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	

CUE: When student looks at each breaker, evaluator to NSO, **"The breaker indicates closed."**

CUE: When student takes each breaker handle switch to TRIP, evaluator to NSO, **"The breaker opens."**

*5.	S	Open the input (motor) and/or output (generator) breakers for both MG sets:	Simulates opening the motor and/or generator breaker for both MG sets:			
		Open the A MG set motor and/or generator breaker.	*• Simulates opening the A MG set motor and/or generator breaker.	_____	_____	_____
		Open the B MG set motor and/or generator breaker.	*• Simulates opening the B MG set motor and/or generator breaker.	_____	_____	_____

CUE: US to Secondary NSO, **"I copy, the input and output breakers for both rod drive MG sets are open. All control rods are inserted."**

6.	P	Inform the control room that the input and output breakers for both rod drive MG sets are open.	Informs the control room that the input and output breakers for both rod drive MG sets are open.	_____	_____	_____

CUE: **"The JPM is complete."**

7.		Stop time Evaluator calculates time to complete task.	Time to complete the task ≤ 5 minutes.			_____

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0008J

Directions to the Student:

A. You are the Secondary NSO. You are going to SIMULATE tripping the reactor locally.

B. The following information is provided to you:

1. The reactor has a trip demand and should have tripped, but both reactor trip breakers are still closed and control rods are withdrawn.
2. The reactor trip bypass breakers are racked out and open.
3. The Primary Operator has unsuccessfully tried to manually trip the reactor trip breakers from both switch locations on the MCB.
4. The control room is executing FR-S.1, and they are using the Operator Action Summary (OAS) page to have you locally trip the reactor.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using verbal direction from the US.

E. To perform the task successfully, you must SIMULATE all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 US 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).

TEAR-OFF SHEET FOR JPM L0008J

Initiating Cue:

US to Secondary NSO, **"Secondary NSO (or student's name), locally open the reactor trip breakers."**

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

FPL Energy
Seabrook Station

JOB PERFORMANCE MEASURE L0055J

MAKE-UP TO THE CC HEAD TANK

Student Name: _____ Badge #: _____

Evaluator Name: _____ Badge #: _____

Student Signature: _____ Date: _____
(optional)

Evaluator Signature: _____ Date: _____

Training Specialist Signature: _____ Date: _____

SAT UNSAT

This JPM was administered for qualification: YES NO

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: NSO

0080102204 Make-Up To The CC Head Tank

2.0 Conditions:

A. The plant at 100% power.
B. Train A CC head tank level is at 60% and slowly decreasing.
C. The control room is executing abnormal procedure OS1212.01, PCCW System Malfunction.

3.0 Standards:

Manipulate valves required to refill the CC head tank and isolate the CC system rad monitor.

4.0 Student Materials:

Copy of the Tear-Off Sheet.

5.0 Limitations on performance:

Simulate all steps. Verbalize all actions to the evaluator.
Even if requested, no Peer Checks will be provided during the JPM.

6.0 References:

Procedures:

OS1212.01, PCCW System Malfunction, Rev.9.
OS1012.03, PCCW Loop A Operation, Rev13, Chg.6.

Sys	KA	Description	Value RO/SRO
008	A1.04	Surge tank level.	3.1/3.2
008	A2.02	High/Low surge tank level.	3.2/3.5
008	K1.05	Sources of makeup water.	3.0/3.1

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

7.0 Setting:

Plant, PAB 53' elevation (73' platform).

8.0 Safety Considerations:

All applicable ALARA and security precautions.

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):

Student:

1. Ensures task is done correctly.
2. May be asked follow-up questions to confirm knowledge of task.

A. You are the Primary NSO. You are going to simulate a make-up to the train A PCCW head tank.

B. The following information is provided to you:

1. The plant is at 100% power.
2. Train "A" PCCW head tank level is 60% and slowly decreasing.
3. The control room is executing abnormal procedure OS1212.01, PCCW System Malfunction.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using verbal direction from the US.

E. To perform the task successfully, you must perform/simulate all critical steps correctly and verbalize all your actions to the evaluator. Practicing STAR techniques and using the station communication standard will safeguard successful completion of the task.

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

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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.

E. I am the US in the control room. I will provide the cues and communications for this JPM. Do you have any questions?

11.0 Initiating Cue:

US to Primary NSO, **"Primary NSO (or student's name), Train A PCCW head tank level is slowly decreasing. Go to the A PCCW head tank and commence filling at the maximum rate using DM-V13."**

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 critical standard	EVALUATION SAT	EVALUATION UNSAT	INITIALS/DATE
1.	Start time _____	Initiating cue read.			_____

CUE: If the student requests a Peer Check at any time during the JPM, respond: **"No one is available to peer check your actions. Please continue with the task".**

CUE: **"DM-V-13 opens."**

*2.	S	COMMENCE filling the "A" CC head tank.	Commences filling the "A" CC head tank:			
			*a. Opens DM-V-13 by turning handwheel counter-clockwise.	____	____	_____
			b. Informs control room DM-V-13 is open.	____	____	_____

CUE: US to Primary NSO, **"I copy, DM-V-13 is open. "A" CC head tank level is now stable at 55%. Investigate the PCCW Radiation Monitor (RM-RE-6516/6515) for potential leaks".**

CUE: If the student calls the control room for the location of the Radiation Monitor, **"the PCCW radation monitor is located on the +25 ft. level of the PAB on the North end".**

3.	P	Proceeds to the PCCW Radiation Monitor.	Locates the PCCW radiation monitor on the +25' north end of the PAB.	____	____	_____

CUE: When the student arrives at the radiation monitor, **"Water is rushing from the CC piping within the "A" Train Radiation Monitor, RM-RE-6516 (6515)."**

4.	S	Informs control room of plant status.	Calls the control room and informs them of leakage coming from the CC piping within the PCCW Radiation Monitor. May also recommend isolation.	____	____	_____

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 critical standard	EVALUATION SAT	EVALUATION UNSAT	INITIALS/DATE

CUE: When control room is informed of plant status or at the discretion of the examiner: **"Shut CC-V975 and CC-V-1298, the Train A CC Radiation Monitor supply and return valves. The appropriate Tech. Spec. action statement is entered."**

NOTE: CC-V-975 and CC-V-1298 control switches are located at +25' north wall of PAB.

*5.	S	SHUT CC-V-975 and CC-V-1298.	*Takes CC-V-975 and CC-V-1298 control switches to CLOSE.	____	____

CUE: After the student performs the above action: **"The green light for CC-V975 and CC-V1298 are lit and the red light is out". "Water is no longer rushing from the PCCW radiation monitor".**

6.	S	INFORM control room the radiation monitor was leaking, and closing CC-V-975 and CC-V-1298 stopped the leak.	Informs control room the leak has stopped.	____	____

CUE: **"The JPM is complete."**

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

PERFORMANCE SUMMARY

Provide comments on unsatisfactory performance of an element/step or for deviation from performance as stated. Record interruptions in performance such as retraining, shift change, and processing of procedure changes. Recommend remedial training, if necessary.

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

TEAR-OFF SHEET FOR JPM L0055J

Directions to the Student:

Student

1. Ensures task is done correctly.
2. May be asked follow-up questions to confirm knowledge of task.

A. You are the Primary NSO. You are going to simulate a make-up to the Train A PCCW head tank.

B. The following information is provided to you:

1. The plant at 100% power.
2. Train "A" PCCW head tank level is 60% and slowly decreasing.
3. The control room is executing abnormal procedure OS1212.01, PCCW System Malfunction.

C. You may request a Peer Check of your actions while performing the task.

D. Perform the task using verbal direction from the US.

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

F. (Statement optional for multiple JPMs)
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. (Statement optional for multiple JPMs)
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 am the US in the control room. I will provide the cues and communications for this JPM. Do you have any questions?

Initiating Cue:

US to Primary NSO, **"Primary NSO (or student's name), Train A PCCW head tank level is slowly decreasing. Go to the A PCCW head tank and commence filling at the maximum rate using DM-V13."**

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