

VC-22-SF-1, PLACE ALTERNATE LETDOWN IN SERVICE, REV. 4**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**INITIAL CONDITIONS:**

- Unit 1 is operating at 4% power.
- A fuel failure has occurred which has resulted in elevated RCS activity levels.
- Normal Letdown has been isolated.
- A Charging pump is operating in manual and flow has been reduced to minimum.
- RCS activity is 6×10^4 $\mu\text{Ci}/\text{CC}$.
- A pre-job briefing has been conducted.
- 1C12.1 AOP4, Alternate Letdown Flowpaths, is in progress.
- In step 2.4.3; the SS has selected the method in Section 2.4.4.

INITIATING CUES (IF APPLICABLE):

- The SS directs you to place alternate letdown in service per 1C12.1 AOP4, Section 2.4.4 and control pressurizer level between 25% and 50%.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

VC-22-SF-1, PLACE ALTERNATE LETDOWN IN SERVICE, REV. 4

JPM PERFORMANCE INFORMATION

Required Materials: Simulator

General References: 1C12.1 AOP4

Task Standards: Alternate letdown is established and pressurizer level is being controlled.

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical (SEQ-1)	Open SV-37037, Gas Vent from Reactor Head to RCS Vent Sys Train A OR Open SV-37038, Gas Vent from Reactor Head to RCS Vent Sys Train B.
Standard:	SV-37037 open using CS-46283 OR SV-37038 open using CS-46286.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-1)	Open SV-37039, RCS Vent Sys to Press Relief Tank Train A to establish letdown flow from the RCS to the PRT.
Standard:	Attempts to open SV-37039 using CS-46284. Valve will NOT Open.
Evaluator Cue:	If asked, as SS, acknowledge report of failure and inform the candidate, "Instrument air is available, place control switches which were repositioned, back to their original position and proceed to section 2.4.5 of 1C12.1 AOP4."
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

VC-22-SF-1, PLACE ALTERNATE LETDOWN IN SERVICE, REV. 4

Performance Step: Critical Y (SEQ-2)	Verify CV-31339, LTDWN LINE CNTMT ISOL valve, is closed.
Standard:	CV-31339 closed using CS-46166.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-3)	Establish charging to the Regen HX by adjusting CV-31198, CHG Line Flow Cont valve and the inservice charging pump speed. Verify sufficient charging to prevent flashing of letdown.
Standard:	CHG FLOW TO REGEN HX, 1FI-128B, increased to about 20 gpm or more while maintaining seal injection flow between 6 and 10 gpm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-4)	Open CV-31226 , Letdown Line Isol valve.
Standard:	CV-31226 opened using CS-46165.
Evaluator Note:	The control switch must be held open until the valve is full open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-4)	Open CV-31255, Letdown Line Isol valve.
Standard:	CV-31255 opened using CS-46133.
Evaluator Note:	The control switch must be held open until the valve is full open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

VC-22-SF-1, PLACE ALTERNATE LETDOWN IN SERVICE, REV. 4

Performance Step: Critical Y (SEQ-4)	Open the desired letdown orifice isolation valve.
Standard:	CV-31325 opened using CS-46170 or CV-31326 opened using CS-46171 or CV-31327 opened using CS-46174.
Evaluator Note:	This flowpath is from the letdown line, through the letdown relief to the PRT.
Evaluator Cue:	If asked, direct the examinee to open CV-31325 ONLY.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-5)	When the desired pressurizer level is obtained, then perform the following: <ul style="list-style-type: none"> • Close the letdown orifice isolation valve opened in the previous step. • Close CV-31226 and CV-31255.
Standard:	The Candidate closes the following at the desired Pressurizer level of 25% to 50%. <ul style="list-style-type: none"> • CV-31325 using CS-46170 or CV-31326 using CS-46171 or CV-31327 using CS-46174. • CV-31226 using CS-46165 <u>and</u> CV-31255 using CS-46133.
Evaluator Note:	47012-0406 AND 47015-0608 are expected alarms when the letdown begins to go the PRT.
Evaluator Cue:	When pressurizer level is trending downward, inform the candidate that, "pressurizer level is 30% and lowering at 2% per minute."
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: After Pressurizer level is being maintained 25% to 50%, inform the candidate, "this JPM is complete."

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 is operating at 4% power.
- A fuel failure has occurred which has resulted in elevated RCS activity levels.
- Normal Letdown has been isolated.
- A Charging pump is operating in manual and flow has been reduced to minimum.
- RCS activity is 6×10^4 $\mu\text{Ci}/\text{CC}$.
- A pre-job briefing has been conducted.
- 1C12.1 AOP4, Alternate Letdown Flowpaths, is in progress.
- In step 2.4.3; the SS has selected the method in Section 2.4.4.

INITIATING CUES (IF APPLICABLE):

- The SS directs you to place alternate letdown in service per 1C12.1 AOP4, Section 2.4.4 and control pressurizer level between 25% and 50%.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

VC-22SF-1, PLACE ALTERNATE LETDOWN IN SERVICE

SIMULATOR SETUP

INSTRUCTOR GUIDE:

- Initialize the simulator to IC-6.
- Place simulator in "RUN" and allow ERCS to come up and stabilize. Power must be stabilized at 4%.

Note: R-4 and R-9 high range of detection is 10R/hr. The malfunctions enter values slightly higher.

- Enter malfunctions to cause R-9 and R-4 to read 10 R/hr. **(Relative Order 0)**
- Use ERCS to check the local meters to ensure that R-4 and R-9 read >10 R/hr.
- Enter override to fail SV-37039 as is. **(Relative Order 1)**
- Per 1C12.1, isolate letdown as follows:
 - Close letdown isolation valves CV-31226 and CV-31255
 - Verify orifice isolations are closed.
 - Allow pressurizer level to rise to about 40%.
 - Reduce charging to minimum & close the charging line flow control valve CV-31198.
 - Place letdown pressure controller in "MANUAL" at 50% output with the manual knob

<i>Relative Order</i>	<i>System or Panel Drawing</i>	<i>TYPE</i>	<i>CODE</i>	<i>Severity or Value</i>	<i>Event Trigger</i>	<i>TIMING</i>	<i>DESCRIPTION</i>
0		Malf	RM04	100			Fails R4 high > 10R
0		Malf	RM09	100			Fails R4 high > 10R
1	CB C1-C24	OVRD DI	DI-46284O OPEN	OFF			SV-37039 Fails As-Is

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

	JOB PERFORMANCE MEASURE (JPM)
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SITE: PRAIRIE ISLAND

JPM TITLE: PLACE 11 AND 12 ACCUMULATORS IN SERVICE

JPM NUMBER: SI-8S REV. 3

RELATED PRA INFORMATION: NONE

TASK NUMBERS / TASK TITLE(S): 006 ATI 001

K/A NUMBERS: 2.1.23

APPLICABLE METHOD OF TESTING:

Discussion: Simulate/walkthrough: Perform:

EVALUATION LOCATION: In-Plant: Control Room:
 Simulator: Other:
 Lab:

Time for Completion: 6 Minutes Time Critical: NO

Alternate Path: NO

TASK APPLICABILITY: SRO: RO: NLO

Additional site-specific signatures may be added as desired.

Developed by:	Bill Markham	07/12/07
	Developer	Date
Validated by:	Bill Markham	07/12/07
	Validator (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	Travis Ouret	07/13/07
	Training Supervisor	Date

SI-8S, PLACE 11 AND 12 ACCUMULATORS IN SERVICE, REV. 3**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM Briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- RCS heatup is in progress.
- Unit heatup checklist C1-A Part II has been completed.
- Accumulator check valve leak test SP-1269 has been completed.
- RCS pressure is 950 psig.

INITIATING CUES:

- Place 11 and 12 Accumulators in service using 1C1.2 Step 5.7.10

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

SI-8S, PLACE 11 AND 12 ACCUMULATORS IN SERVICE, REV. 3

JPM PERFORMANCE INFORMATION

Required Materials: 1C1.2

General References: 1C1.2

Task Standards: 11 and 12 Accumulators are in service per 1C1.2, step 5.7.10 A-D

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical Y (S-1)	<p>Prior to RCS pressure exceeding 1000 psig, place 11 and 12 Accumulators in service as follows:</p> <p>A. Remove Safeguards Hold Cards from the Accumulator Isolation Valve breakers AND turn the breakers to ON.</p> <ul style="list-style-type: none"> • MCC 1LA1-D3, 11 ACCUM TO LOOP A COLD LEG (MV-32071) • MCC 1LA2-C4, 12 ACCUM TO LOOP B COLD LEG (MV-32072)
Standard:	Examinee directs the Auxiliary Building Operator to turn BKRS 1LA1-D3 and 1LA2-C4 ON.
Evaluator Cue:	<p>Simulator Operator will turn on the breakers for MV-32071 and MV-32072.</p> <p>Simulator Operator responds as Auxiliary Building Operator that breakers for MV-32071 and MV-32072 are turned ON.</p>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

SI-8S, PLACE 11 AND 12 ACCUMULATORS IN SERVICE, REV. 3

Performance Step: Critical Y (S-2)	B. Open Accumulator Isolation Valves <ul style="list-style-type: none"> • MV-32071 using CS-46200 • MV-32072 using CS=46201
Standard:	Examinee opens MV-32071 and MV-32072.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	C. Verify the accumulator discharge valve CLOSED status lights NOT LIT on the SI NOT READY panel. <ul style="list-style-type: none"> • 44102-D2 ACC DISCH CLOSED • 44012-E2 ACC DISCH CLOSED
Standard:	Examinee determines 44102-D2 and 44102-E2 are NOT LIT.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	D. Turn the accumulator isolation valve breakers to OFF AND attach Safeguards Hold Cards on the breakers. <ul style="list-style-type: none"> • MCC 1LA1-D3 • MCC 1LA2-C4
Standard:	Examinee directs the Auxiliary Building Operator to turn OFF 1LA1-D3 and 1LA2-C4.
Evaluator Cue:	<p>Simulator Operator to turn off the breakers for MV-32071 and MV-32072.</p> <p>Simulator Operator to respond as the Auxiliary Building Operator that breakers for MV-32071 and MV-32072 are OFF and Safeguards Hold Cards are attached.</p>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

SI-8S, PLACE 11 AND 12 ACCUMULATORS IN SERVICE, REV. 3

Terminating Cues: When the examinee completed Step 5.7.10 A-D and breakers are turned OFF.

Stop Time: _____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- RCS heatup is in progress.
- Unit heatup checklist C1-A Part II has been completed.
- Accumulator check valve leak test SP-1269 has been completed.
- RCS pressure is 950 psig.

INITIATING CUES:

- Place 11 and 12 Accumulators in service using 1C1.2 Step 5.7.10

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

SI-13S, INADVERTENT TRAIN B SAFETY INJECTION WHILE SHUTDOWN, REV. 1

JPM Number: SI-13S

JPM Title: Inadvertent Train B Safety Injection Actuation While Shutdown

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

SI-13S, INADVERTENT TRAIN B SAFETY INJECTION WHILE SHUTDOWN, REV. 1**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**INITIAL CONDITIONS:**

- Unit 1 cooldown is in progress per 1C1.3.
- Conditions have just been established to place RHR in service per section 5.6.
- Train B SI has actuated.
- I&C reports the actuation was due to a shorted test lead while connecting test equipment in the ESF racks.

INITIATING CUES (IF APPLICABLE):

- You are directed to respond to the inadvertent SI using 1C18 AOP2, INADVERTENT SAFETY INJECTION WHILE SHUTDOWN.

SI-13S, INADVERTENT TRAIN B SAFETY INJECTION WHILE SHUTDOWN, REV. 1

JPM PERFORMANCE INFORMATION

Required Materials: Simulator

General References: 1C18 AOP2

Task Standards: Containment Isolation and Safety Injection are reset, and all SI and RHR pumps are off.

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical Y (SEQ-1)	CHECK SI - INADVERTENT - RCS pressure <1800 psig prior to SI - YES - Containment pressure <3 psig - YES - RCS subcooling >50°F _YES - RCS pressure stable or increasing - YES
Standard:	SI determined to be inadvertent and transition is NOT made to 1E-0, and Train A SI is NOT actuated.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-2)	Check if SI Pump(s) Should Be Placed in Pullout.
Standard:	Determines 12 SI pump is running and places 12 SI pump in PULLOUT.
Evaluator Note:	
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

SI-13S, INADVERTENT TRAIN B SAFETY INJECTION WHILE SHUTDOWN, REV. 1

Performance Step: Critical	Check if RCP(s) should be stopped.
Standard:	Running RCP #1 seal D/P verified >210 psid and RCP stop NOT required.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Check if RCS purification flow should be stopped.
Standard:	Verifies purification jumper NOT in service and goes to Step 5. (Note- purification jumper is placed in service after RHR is in service per C1.3)
Evaluator Cue:	IF asked, reply "Purification jumper is not in service."
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-3)	Reset SI
Standard:	Train B SI reset pushbutton depressed and "AUTOMATIC SI RESET" aqua light 47014-0504 LIT.
Evaluator Note:	The examinee may depress BOTH Train A and Train B reset pushbuttons. This is acceptable.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

SI-13S, INADVERTENT TRAIN B SAFETY INJECTION WHILE SHUTDOWN, REV. 1

Performance Step: Critical Y (SEQ-4)	Check if RHR Pump(s) Should be Stopped.
Standard:	Verifies RWST to 12 RHR pump MV-32085 is OPEN. Stops 12 RHR pump.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Check if AFW Pump(s) should be stopped.
Standard:	Verifies RCS temperature <350°F and goes to step 8. Note: 12 AFW pump was in service for level control prior to the SI.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Reset Containment Isolation
Standard:	Containment Isolation reset using pushbutton PB-46084 and verified by checking annunciator 47018-0505, Containment Isolation, is NOT lit.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When Containment Isolation and Safety Injection are reset, and all SI and RHR pumps are off, this JPM is complete.

Stop Time: _____

SIMULATOR SETUP

INSTRUCTOR GUIDE:

- Initialize simulator to IC-15.
- Allow ERCS to come up.
- Place 11 SI pump in pullout with the cover on the switch and a SS hold card.
- Insert malfunction RP04B Train B SI Actuation.
- Run simulator for 10 seconds then place in FREEZE until the turnover is completed.
- Provide the examinee with the turnover information.
- WHEN the examinee is ready to begin, THEN place the simulator in RUN.

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 cooldown is in progress per 1C1.3.
- Conditions have just been established to place RHR in service per section 5.6.
- Train B SI has actuated.
- I&C reports the actuation was due to a shorted test lead while connecting test equipment in the ESF racks.

INITIATING CUES (IF APPLICABLE):

- You are directed to respond to the inadvertent SI using 1C18 AOP2, INADVERTENT SAFETY INJECTION WHILE SHUTDOWN.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

CD-1S, ALIGN COOLING WATER TO THE AFW PUMP SUCTION, REV. 8**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM Briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**INITIAL CONDITIONS:**

- Unit 1 was at 100% power with 11 TDAFWP Out of Service.
- A Safety Injection occurred.
- Water treatment is OUT OF SERVICE.
- During the transient caused by the SI, water-hammer has DAMAGED the outlet of the main condenser hotwell to the condensate pumps thus draining the hotwell and continuing the draining of the Condensate Storage Tanks.
- The auto makeup valve to the hotwell also was DAMAGED and is failed about 50% open.

INITIATING CUES (IF APPLICABLE):

- The immediate actions of 1E-0 are complete.
- 47010-0106, Condensate Storage Tank LO LO LVL, is in alarm.
- The SS directs you, the extra RO, to respond to the alarm.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

CD-1S, ALIGN COOLING WATER TO THE AFW PUMP SUCTION, REV. 8

JPM PERFORMANCE INFORMATION

- Required Materials:** Consumable copy of C28.1 AOP2
- General References:** C28.1 AOP2, Loss of Condensate Supply to AFW Pump Suction
- Task Standards:** IAW C28.1 AOP2, Cooling water is lined up to 11 or 12 AFW pump.

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical (SEQ-1)	Respond with 47010-0106, Condensate Storage Tank LO LO LVL. Condensate Storage Tank Level should be less than 6’ and examinee should refer to C28.1 AOP2.
Standard:	Examinee goes to C28.1 AOP2.
Evaluator Note:	If asked, tell examinee that you will implement Technical Specifications for low tank level.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

CD-1S, ALIGN COOLING WATER TO THE AFW PUMP SUCTION, REV. 8

Performance Step: Critical (SEQ-1)	<u>IF</u> Water Treatment is available, <u>THEN</u> perform the following: 1. Place water treatment in service per C32.
Standard:	Examinee does not perform steps. The turnover sheet states that water treatment is not available.
Evaluator Note:	These steps should not be attempted based on initial conditions for JPM, remainder of step 2.4.1 is N/A'd.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-1)	<u>IF</u> a condensate pump is running, <u>THEN</u> condensate can be transferred from the condenser to the CST:
Standard:	Does not perform steps based on initial turnover of CST level and condenser hotwell system.
Evaluator Note:	These steps should not be attempted based on initial conditions for JPM, remainder of step 2.4.2 is N/A'd.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-1)	<u>IF</u> the condenser spray system is available, <u>THEN</u> condensate can be transferred from the condenser hot well to the CST. The line up is as follows:
Standard:	Does not perform steps based on initial turnover of CST level and condenser hotwell system.
Evaluator Note:	These steps should not be attempted based on initial conditions for JPM, remainder of step 2.4.3 is N/A'd.
Evaluator Cue:	If asked, have the turbine building operator report that the condenser spray pump is cavitating.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

CD-1S, ALIGN COOLING WATER TO THE AFW PUMP SUCTION, REV. 8

Performance Step: Critical (SEQ-1)	<u>I</u> F sufficient inventory is available in an ADT Monitor Tank, <u>T</u> HEN transfer to the CST:
Standard:	Calls the Auxiliary Building Operator who informs him that the ADT monitor tanks are empty.
Evaluator Cue:	If asked, as the Auxiliary Building Operator report “the ADT monitor tanks are empty.”
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-1)	<u>I</u> F all other actions fail, <u>T</u> HEN as a last resort perform: A. OPEN the cooling water supply to the desired AFW pump suction
Standard:	OPENS MV-32027, 12 MD AFW PMP SUCT CL SPLY
Evaluator Note:	11 TDAFWP is Out of Service. The candidate must use 12 MDAFWP related valves. Valve stroke time is approximately 1 minute.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-2)	<u>I</u> F all other actions fail, <u>T</u> HEN as a last resort perform: B. CLOSE the CST supply to the desired AFW pump suction
Standard:	CLOSES MV-32335, 12 MD AFW PMP SUCT FROM CST MV
Evaluator Note:	11 TDAFWP is Out of Service. The candidate must use 12 MDAFWP related valves. Valve stroke time is approximately 1 minute.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

CD-1S, ALIGN COOLING WATER TO THE AFW PUMP SUCTION, REV. 8

Performance Step: Critical (SEQ-3)	<u>IF</u> all other actions fail, <u>THEN</u> as a last resort perform : 2.4.5.C. CLOSE the associated AFWP suction vent valve
Standard:	Directs the closing of CL-115-4, 12 AFW PMP CLG WTR SPLY DNSTRM VENT
Evaluator Cue:	If asked to close the valves, report as the TBO “CL-115-4 is closed.”
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-3)	Transfer the associated AFP pump recirc flow to cooling water 2.4.6.A. OPEN the AFW pump recirc valves to cooling water
Standard:	Directs the opening of AF-32-4, 12 AFW PMP RECIRC TO UNIT 1 CLG WTR HDR
Evaluator Cue:	If asked to open the valves, report as the TBO “AF-32-4 is open.”
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-3)	Transfer the associated AFP pump recirc flow to cooling water 2.4.6.B. CLOSE the associated AFW pump recirc valves to the CST
Standard:	Directs the closing of AF-33-2, 12 AFW PMP RECIRC TO 11 CST
Evaluator Cue:	If asked to close the valves, report as the TBO “AF-33-2 is closed.”
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical (SEQ-3)	Observe the running AFW pump discharge pressure and flow. <u>IF</u> inadequate (less than 850 psig and 180 gpm), <u>THEN</u> check the Cooling Water System to see if non-essential loads may be shed
Standard:	Observes system parameters and determines they are adequate.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

CD-1S, ALIGN COOLING WATER TO THE AFW PUMP SUCTION, REV. 8

Terminating Cues: 12 AFW Pump is running and supplying cooling water flow to the steam generators. This JPM is complete.

Stop Time: _____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

SIMULATOR SETUP

Instructor Actions Prior to JPM Administration:

- Initialize the simulator to IC-10
- Insert the following

Relative Order	Type	Code	Severity/Value	Event Trigger	TITLE
0	AO OVRD	AO-4122302	14%		11 CST Level
0	AO OVRD	AO-4122303	14%		21/22 CST Level
0	AO OVRD	AO-4122301	0%		Condenser Hotwell Level
0	Ann OVRD	47009:0603W	Cry Wolf		Cond Storage tnk Lo level
0	Ann OVRD	47009:0601W	Cry Wolf		1A Cond Hotwell lo level
0	Ann OVRD	47008:0606W	Cry Wolf		Turbine Room Sump Hi Level
0	Ann OVRD	47010:0106W	Cry Wolf		Condensate Storage Tank Lo/Lo Level
0	Ann OVRD	47010:0505W	Cry Wolf		11 TD AFWP Lube Oil Lo Press

- Place 11 TDAFWP in PULLOUT and tag its handswitch and selector switch.
- Open CV-31121 to 50% "Cond M-U to A CDSR" 4308301
- Insert manual SI
- Silence annunciators
- Perform E-0 Immediate Actions
- Freeze after Immediate Actions are complete.
- Give initial conditions
- Take the Simulator to RUN.

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 was at 100% power with 11 TDAFWP Out of Service.
- A Safety Injection occurred.
- Water treatment is OUT OF SERVICE.
- During the transient caused by the SI, water-hammer has DAMAGED the outlet of the main condenser hotwell to the condensate pumps thus draining the hotwell and continuing the draining of the Condensate Storage Tanks.
- The auto makeup valve to the hotwell also was DAMAGED and is failed about 50% open.

INITIATING CUES (IF APPLICABLE):

- The immediate actions of 1E-0 are complete.
- 47010-0106, Condensate Storage Tank LO LO LVL, is in alarm.
- The SS directs you, the extra RO, to respond to the alarm.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

	JOB PERFORMANCE MEASURE (JPM)
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SITE: PRAIRIE ISLAND

JPM TITLE: CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES

JPM NUMBER: EO-31SF-3 **REV.** 3

RELATED PRA INFORMATION: NONE

TASK NUMBERS / TASK TITLE(S): CRO 026 005 01 01

K/A NUMBERS: 026 A4.01

APPLICABLE METHOD OF TESTING:

Discussion: Simulate/walkthrough: Perform:

EVALUATION LOCATION: In-Plant: Control Room:

 Simulator: Other:

 Lab:

Time for Completion: 10 Minutes Time Critical: NO

Alternate Path: YES

TASK APPLICABILITY: SRO: RO: NLO

Additional site-specific signatures may be added as desired.

Developed by:	Bill Markham	07/11/07
	Developer	Date
Validated by:	Bill Markham	07/11/07
	Validator	Date
	(See JPM Validation Checklist, Attachment 1)	
Approved by:	Travis Ouret	07/12/07
	Training Supervisor	Date

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**INITIAL CONDITIONS:**

- Unit 1 was operating at 100% power with no equipment out of service.
- Unit 1 has just experienced a Large Break LOCA.
- 1E-0, Reactor Trip or Safety Injection, is in progress.

INITIATING CUES (IF APPLICABLE):

- The Unit 1 SS directs you to perform Attachment L.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3

JPM PERFORMANCE INFORMATION

Required Materials: Simulator

General References: 1E-0 Attachment L SI Alignment Verification

Task Standards: Manually actuate Containment Spray system, manually close 12 MSIV, manually close MV-32115.

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step:	Verify Safeguards Component Alignment
Critical	<ul style="list-style-type: none"> • Both Trains of SI Actuated <ul style="list-style-type: none"> ○ Both RHR Pumps running OR ○ Both SI Pumps Running
Standard:	Verifies either both SI pumps or both RHR pumps Running
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step:	SI NOT READY lights – NOT LIT
Critical	
Standard:	Verifies SI NOT READY lights are not lit
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3

Performance Step: Critical Y (SEQ-1)	SI ACTIVE lights – lit for plant conditions
Standard:	Verifies SI ACTIVE Lights are LIT
Evaluator Note:	The examinee may manually actuate Containment Spray since Containment Pressure is still greater than 23 psig. A later step specifically checks if a Containment Spray actuation is required. The Critical Task is satisfied if Containment Spray is actuated prior to JPM completion.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Containment Isolation lights – lit for plant conditions.
Standard:	Verifies CI lights are lit.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Category I doors - CLOSED
Standard:	Verifies Category I doors are closed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3

Performance Step: Critical	Check Category I Special Vent Zone Report – NO openings requiring closure within 6 minutes
Standard:	Checks current report. There are no openings.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-1)	CLOSE MV-32115, 122 SFP HX Inlet Header MV B
Standard:	Positions CS-46064 to close position. Green light ON.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Check Loop A and Loop B Cooling Water Pressures greater than 65 psig
Standard:	Verifies CL Header pressures >65psig.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Verify Plant Announcements Complete.
Standard:	Announces Unit 1 Reactor Trip & Safety Injection Pages Shift Manager & SEC to report to the Control Room
Evaluator Cue:	If asked, report announcements have been made.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3

Performance Step: Critical Y (SEQ-1)	Check if MSIVs and bypasses - closed. <ul style="list-style-type: none"> • IF OPEN, then check if MSIV isolation is required. • IF required, THEN CLOSE MSIVs and bypass valves
Standard:	Determines that B Train MSIV has failed to CLOSE. CLOSES B Train MSIV and verifies that A Train MSIV is closed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Containment instrument air valves (CV-31740 and CV-31741) – CLOSED <ul style="list-style-type: none"> • IF containment pressure >17psig, THEN Close instrument air valves
Standard:	Verifies CV-31740 and CV-31741 are CLOSED.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Verify SI Flow
Standard:	Checks RCS pressure < 2100psig and verifies SI flow
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Verify RHR Flow
Standard:	Checks RCS pressure < 150psig and verifies RHR flow
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3

Performance Step: Critical Y (SEQ-1)	Check Containment Pressure has remained below 23psig. <ul style="list-style-type: none"> • IF not, THEN verify CS actuated.
Standard:	Actuates containment spray by turning CS-46002 and CS-46003 to ACTUATE simultaneously. Verifies pumps start and valves align properly.
Evaluator Note:	IF the CS system was actuated earlier, THEN the critical step is satisfied.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When the candidate actuates Containment Spray, closes the B Train MSIV, and closes MV-32115, inform the candidate that, "this JPM is complete." IF NOT, terminate the JPM when Attachment L is reported to be complete.

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 was operating at 100% power with no equipment out of service.
- Unit 1 has just experienced a large break LOCA.
- 1E-0, Reactor Trip or Safety Injection, is in progress.

INITIATING CUES (IF APPLICABLE):

- The Unit 1 SS directs you to perform Attachment L.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

EO-31SF-3, CONTAINMENT SPRAY AND MSIV ACTUATION FAILURES, REV. 3

Simulator Setup

Instructions:

- Setup the simulator to IC-10 per normal checklist.
- Place the simulator in RUN.
- Enter the Large Break LOCA (**Relative Order 1, Trigger 1**).
- Wait ~ 30 seconds, AND THEN trip the RCP's.
- WHEN the CI lights are all LIT (with exceptions), THEN **acknowledge** alarms and **place** the simulator in FREEZE.
- Close the A Train MSIV.
- Close the IA Containment Isolation Valves.
- Provide the examinee with the turnover information.
- Verify recorders are ON
- WHEN the examinee is ready to begin, THEN **place** the simulator in RUN.
- **When the Candidate actuates Containment Spray, then DELETE CS04, (Relative Order 2)**

<i>Relative Order</i>	<i>Type</i>	<i>Code</i>	<i>Severity or Value</i>	<i>Timing</i>	<i>Event Trigger</i>	<i>Description</i>
1	Malfunction	RC07A	100		1	Cold Leg LOCA
1	Malfunction	CS04			1	Failure of SI to CS signal to actuate
	Malfunction	RP06			1	Failure of MSIV's to isolate.
2	Malfunction	CS04	DELETE			Failure of SI to CS signal to actuate

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

EG-15S, RESTORE POWER TO BUS 15 FOLLOWING A REACTOR TRIP, REV. 1**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**INITIAL CONDITIONS:**

- Unit 1 has had a Reactor Trip.
- You are the Extra Reactor Operator.
- The immediate actions of 1E-0, Reactor Trip or Safety Injection have just been completed.

INITIATING CUES (IF APPLICABLE):

The SS directs you to restore power to bus 15 and 480V Buses 111 and 112 per 1C20.5 AOP1, REENERGIZING 4.16KV BUS 15, beginning with step 2.4.5.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

EG-15S, RESTORE POWER TO BUS 15 FOLLOWING A REACTOR TRIP, REV. 1

JPM PERFORMANCE INFORMATION

Required Materials: 1C20.5 AOP1
 1E-0
 General References: 1C20.5 AOP1
 1E-0
 Task Standards: Bus 15 and Buses 111 and 112 are reenergized from CT 11 source per 1C20.5 AOP1

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical Y (SEQ-1)	2.4.5 Place CS-46932 BUS 15 VOLTAGE RESTORATION SEL SW, in “MANUAL.”
Standard:	CS-46932 is in MANUAL
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	2.4.6 Refer to 1C20.5 for lockout resetting requirements.
Standard:	By absence of alarms, Bus 15 is determined NOT to be locked out.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EG-15S, RESTORE POWER TO BUS 15 FOLLOWING A REACTOR TRIP, REV. 1

Performance Step: Critical Y (SEQ-2)	2.4.8 Check the following source voltages and use the first acceptable supply in the order listed: 1RY, CT11.
Standard:	The examinee determines that 1RY is deenergized, and CT11 should be used. The examinee should then go to Step 2.4.10.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-3)	2.4.10A Place CS-46951, BKR 15-3 MAN/AUTO CLOSURE SEL SW, in MANUAL.
Standard:	CS-46951 in MANUAL.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-3)	2.4.10.B Place CS-46948, BKR 15-2 MAN/AUTO CLOSURE SEL SW, in MANUAL.
Standard:	CS-46948 in MANUAL.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-3)	2.4.10.C Place CS-46909, BKR 15-7 MAN/AUTO CLOSURE SEL SW, in MANUAL.
Standard:	CS-46909 in MANUAL.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EG-15S, RESTORE POWER TO BUS 15 FOLLOWING A REACTOR TRIP, REV. 1

Performance Step: Critical Y (SEQ-3)	2.4.10.D Place the following control switches in PULLOUT.
Standard:	CS-46036, 11 CC PUMP in PULLOUT CS-46008, 11 CNTMT SPRAY PUMP in PULLOUT CS-46178, 11 SI PUMP in PULLOUT CS-46184, 11 RHR PUMP in PULLOUT CS-46905, BKR 15-6 BUS 15 FEED TO 112M XFMR in PULLOUT CS-46956, BKR 15-11 BUS 15 FEED TO 111M XFMR in PULLOUT
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-3)	2.4.10.E Place CS-46906, BUS 15 SYNCHROSCOPE SEL SW, to the "CT11" position.
Standard:	CS-46906 in the "CT11" position.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-4)	2.4.10.F Place CS-46955, BKR 15-7 BUS 15 SOURCE FROM BUS CT11, to CLOSE.
Standard:	CS-46955 is closed.
Evaluator Note:	This step energized Bus 15.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EG-15S, RESTORE POWER TO BUS 15 FOLLOWING A REACTOR TRIP, REV. 1

Performance Step: Critical	2.4.10.G Verify 4091801, BUS 15 4160 VOLTS, indicates between 4000-4400 volts.
Standard:	Bus 15 is determined to be between 4000-4400 volts.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	2.4.10.H Place CS-46906, BUS 15 SYNCHROSCOPE SWL SW, to OFF
Standard:	CS-46906 is in OFF.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	2.4.10.I IF 480V Buses 111 and 112 are energized from 11A Alt Transformer, THEN restore 480V Buses 111 and 112 to Bus 15 per 1C20.6.
Standard:	480V Buses are deenergized. The student should N/A this step.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	2.4.10.J IF 480V buses 111 and 112 are NOT energized then: Verify BKR 111A and BKR 112A are OPEN.
Standard:	BKR 111A and 112A are OPEN.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

EG-15S, RESTORE POWER TO BUS 15 FOLLOWING A REACTOR TRIP, REV. 1

Performance Step: Critical	2.4.10.J, continued: Verify BKR 111M and BKR 112M are CLOSED.
Standard:	BKR 111M and 112M are CLOSED
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-5)	2.4.10.J, continued: Using CS-46905, close BKR 15-6, BUS 15 FEED to 112M XFMR.
Standard:	BKR 15-6 is CLOSED.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-5)	2.4.10.J, continued: Using CS-46956, close BKR 15-11, BUS 15 FEED to 111M XFMR.
Standard:	BRK 15-11 is CLOSED.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: Bus 15 and Buses 111 and 112 are reenergized PER 1C20.5 AOP1. This JPM is complete.

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 has had a Reactor Trip.
- You are the Extra Reactor Operator.
- The immediate actions of 1E-0, Reactor Trip or Safety Injection have just been completed.

INITIATING CUES (IF APPLICABLE):

- The SS directs you to restore power to bus 15 and 480V Buses 111 and 112 per 1C20.5 AOP1, REENERGIZING 4.16KV BUS 15, beginning with step 2.4.5.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

SIMULATOR SETUP

- **Reset Simulator to IC-10**
- **Trip the Reactor**
- **Insert MALF ED18, Fault in 1R Transformer**
- **Insert MALF DG01A, Loss of D1 Diesel Generator**
- **Insert DI-46909A – AUTO – OFF – CT 11 AUTO SWITCH POSITION.**
- **Sign off the simulator copy of 1C20.5 AOP1 steps 2.4.1 – 2.4.4.**
- **Freeze simulator until turnover is complete.**

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

	JOB PERFORMANCE MEASURE (JPM)
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SITE: PRAIRIE ISLAND

JPM TITLE: PRESSURE INSTRUMENT PT-485 FAILS LOW

JPM NUMBER: RD-5S REV. 1

RELATED PRA INFORMATION: NONE

TASK NUMBERS / TASK TITLE(S): CRO 045 ATI 005

K/A NUMBERS: 2.1.23

APPLICABLE METHOD OF TESTING:

Discussion: Simulate/walkthrough: Perform:

EVALUATION LOCATION: In-Plant: Control Room:
 Simulator: Other:
 Lab:

Time for Completion: 10 Minutes Time Critical: NO

Alternate Path: NO

TASK APPLICABILITY: SRO: RO: NLO

Additional site-specific signatures may be added as desired.

Developed by:	Bill Markham	07/11/07
	Developer	Date
Validated by:	Bill Markham	07/11/07
	Validator (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	Travis Ouret	07/12/07
	Training Supervisor	Date

RD-5S, PRESSURE INSTRUMENT PT-485 FAILS LOW, REV. 1**JPM BRIEFING/TURNOVER**

Use NUREG-1021, Appendix E, for JPM briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- No equipment is out of service.
- You are the Reactor Operator.

INITIATING CUES:

- Respond to alarms on C and D panels.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

RD-5S, PRESSURE INSTRUMENT PT-485 FAILS LOW, REV. 1

JPM PERFORMANCE INFORMATION

Required Materials: 1C51.2, Instrument Failure Guide

General References: 1C51.2, Instrument Failure Guide

Task Standards: Place Rod Control in "MANUAL" and respond per 1C51.2, for PT-485 fails low.

Start Time: _____

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical Y (SEQ-1)	Respond to PT-485 failing low by: <ul style="list-style-type: none"> • Diagnosing failure using one or more of the following: <ul style="list-style-type: none"> ○ 1PI-485 at 0 psig ○ 47014-0306, AUTO ROD WITHDRAWAL BLOCKED, lit ○ Control rods stepping in. ○ 47013-0305, AUCTIONEERED TAVG-TREF DEVIATION, lit ○ 47011-0405, FW CONTROL SYSTEM TROUBLE, lit
Standard:	Diagnose PT-485 failing LOW, and as a plant stabilizing action, place Rod Control in MANUAL to stop rod motion.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

RD-5S, PRESSURE INSTRUMENT PT-485 FAILS LOW, REV. 1

Performance Step: Critical	47013-0305 - AUCTIONEERED TAVG-TREF DEVIATION
Standard:	If due to channel failure, refer to C51.2, Instrument Failure Guide. Examinee will go to 1C51.2.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-1)	1C51.2, Step 1: Place rod control in MANUAL and control Tave at value appropriate for power level.
Standard:	Rod Control should have already been placed in MANUAL as a plant stabilizing action. Tave should be controlled at the appropriate value for the current power level. 100% power is 560°F
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-2)	1C51.2, Step 2: Place one steam dump interlock bypass switch to "OFF"
Standard:	One steam dump interlock bypass switch is in "OFF"
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-2)	Step 3: Place steam dump in Steam Pressure mode and verify valves closed.
Standard:	Steam dumps are in steam pressure mode with all valves closed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

RD-5S, PRESSURE INSTRUMENT PT-485 FAILS LOW, REV. 1

Performance Step: Critical Y (SEQ-3)	Step 4: Verify zero output on steam dump controller.
Standard:	Zero output is verified on steam dump controller.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-4)	Step 5: Return steam dump interlock bypass switch to ON.
Standard:	Switch is placed in ON. The student should verify by check of valve position and demand that steam dump is back in automatic with valves closed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Step 6: Verify SG level control operating properly in automatic.
Standard:	SG level control is verified to operating properly in automatic.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: After student has placed Rod Control in Manual and shifted steam dumps to the Steam Pressure mode, this JPM is complete.

Stop Time: _____

RD-5S, PRESSURE INSTRUMENT PT-485 FAILS LOW, REV. 1

SIMULATOR SETUP

- Reset to IC-10.
- Insert SYS OVRD RX226 to 0% on Relative Order 1, Trigger 1.
- When examinee takes the duty, insert Trigger 1.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- No equipment is out of service.
- You are the Reactor Operator.

INITIATING CUES:

- Respond to alarms on C and D panels.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM, REV. 5

JPM Number: RM-3SF-1

JPM Title: START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM, REV. 5

JPM BRIEFING/TURNOVER

Use NUREG-1021, Appendix E, for JPM Briefing.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- Both units are at 100% power.
- Fuel sipping was occurring in the SFP.
- A fuel element was dropped.
- The portable radiation monitor is alarming (VAMP)
- The SFP has been evacuated.
- The SFP Supervisor has just notified the Control Room.

INITIATING CUES (IF APPLICABLE):

- You are directed to start the SFP Special Ventilation System from the Control Room per D5.1 AOP1, Step 2.4.2.C

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM, REV. 5

JPM PERFORMANCE INFORMATION

Required Materials: Simulator, Jumper Cable

General References: D5.1 AOP1

Task Standards: Spent Fuel Pool Special Ventilation System (Both Trains) started from the Control Room.

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Step 2.4.2.C Verify proper actuation of SFP Special Ventilation.
Critical

Standard: Examinee shall verify SFP Special Ventilation is NOT in service.

Performance: SATISFACTORY UNSATISFACTORY

Comments: _____

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM,
REV. 5

Performance Step: Critical	Step 2.4.2.C.1a IF the SFP Special Ventilation is not running, then actuate 121 SFPSVS from the Train A rad monitor rack by performing the following: Install a trip cable between the test jack on R-25 to the current trip test input jack located near the bottom of the rack.
Standard:	Cable is installed between the test jack on R-25 to the current trip test input jack located near bottom of the rack.
Evaluator Note:	47022-0208, RAD MONITOR DOWNSCALE FAILURE ALARM, will alarm. This is expected.
Evaluator Cue:	Inform the examinee that another operator will respond to the alarm
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Step 2.4.2.C.1.(b) Raise the R-25 test signal by turning the current trip test input adjustment clockwise until the R-25 ESF EQUIP ALARM is received.
Standard:	Examinee will determine that the 121 SFPSVS did NOT start. The examinee should continue with the procedure and then start the 122 SFPSVS.
Evaluator Note:	The red LED will NOT light and the 121 SFPSVS will NOT start. R-25 Indication will not change with test knob operation.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Verify 121 SFPSVS is running.
Standard:	121 SFPSVS is determined NOT to be running.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM,
REV. 5

Performance Step: Critical	Reduce the R-25 test signal by turning the current trip test input adjustment knob counterclockwise to obtain a low value.
Standard:	Test signal is reduced to a low level.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Remove the trip cable
Standard:	Trip cable is removed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Depress the ESF EQUIP push-button on R-25 and verify that both the ESF EQUIP and HI ALARM LED's are extinguished.
Standard:	Push button is depressed and both LED's are extinguished.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM, REV. 5

Performance Step: Critical Y (SEQ-1)	Actuate 122 SFPSVS from the Train B Radiation Monitor rack by performing the following: Install a trip cable between the test jack on R-31 to the current trip test input jack located near the bottom of the rack.
Standard:	Trip cable is installed between the test jack on R-31 to the current trip test input jack located near the bottom of the rack.
Evaluator Note:	This step and the next step will actuate 122 SFPSVS. 47022-0208, RAD MONITOR DOWNSCALE FAILURE ALARM, will alarm. This is an expected alarm.
Evaluator Cue:	Inform the examinee that another operator will respond to the alarm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical Y (SEQ-2)	Raise the R-31 test signal by turning the current trip test input adjustment knob clockwise until the R-31 ESF EQUIP ALARM is received.
Standard:	Test signal is raised. 47022-0108, HI RAD TRAIN B, alarms. This is an expected alarm.
Evaluator Cue:	Inform the examinee that another operator will respond to the alarm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Verify that 122 SFPSVS is running.
Standard:	Examinee verifies that 122 SPENT FUEL SPECIAL AND IN SVC PRG EXHST FAN, is running.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM, REV. 5

Performance Step: Critical	Reduce the R-31 test signal by turning the current trip test input adjustment knob counterclockwise to obtain a low value.
Standard:	The test input adjustment knob on R-31 is turned counterclockwise to obtain a low value.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Remove the trip cable.
Standard:	Trip cable is removed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: Critical	Depress the ESF EQUIP/RESET pushbutton on R-31 and verify that both the ESF EQUIP and HI ALARM LED's are extinguished.
Standard:	Push button is depressed and both LED's are extinguished.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When 122 SFPSVS is running. This JPM is complete.

Stop Time: _____

**RM-3SF-1, START SPENT FUEL POOL SPECIAL VENTILATION SYSTEM FROM THE CONTROL ROOM,
REV. 5**

SIMULATOR SETUP

- Initialize the Simulator to IC-10 and place in freeze.
- Insert the malfunctions to cause 121 SFPSVS not to actuate.
- Ensure that both R-25 and R-31 current trip test input knobs are fully counterclockwise.
- Insert Analog Input A1-RACK 11 – TRIP TEST with a value of 0.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- Both units are at 100% power.
- Fuel sipping was occurring in the SFP.
- A fuel element was dropped.
- The portable radiation monitor is alarming (VAMP)
- The SFP has been evacuated.
- The SFP Supervisor has just notified the Control Room.

INITIATING CUES (IF APPLICABLE):

- You are directed to start the SFP Special Ventilation System from the Control Room per D5.1 AOP1, Step 2.4.2.C

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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11. Have all special tools and equipment needed to perform the task been identified?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	

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Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

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