<u> </u>											
Job Position				No.	No.		F	Revision			
RO				JP-OP-80	JP-OP-802-4101-446 2			2			
JPM Title							Duration	ion Page			
Complete	the l	Mode	4 Shiftly/Daily	Surveilland	es		15 minut	15 minutes* 1			1
									*2 times	Durati	on for ILO Exams
Examinee:								SRO / RO			
Evoluator											
JPM Type:			Normal / A	Alternate Pa	ath /	Time	Critical	Start 7	Time		
Evaluation	Meth	nod:	Perform /	Walkthroug	nh / D	Discus	s	Stop T	ime		
Location:			Plant / Sin	ulator / C			-	Total Time:			
Location.			Flant / <b>Sin</b>				Total				
[											
	-		PE	RFORMANC	EEV	ALUA	TION SUMMA	RY			1
Element	S	U	Comment	Element	S	U	Comment	Eleme	ent S	U	Comment
1.											
* 2.											
* 3.											
* 4.											
5.											

OPERATOR FUNDAMENTALS OBSERVATION							
Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.							
OperatorMeets allOpportunity forDoes not meetCommFundamentalExpectationsImprovementExpectationsNumb							
Monitoring							
Control							
Conservatism							
Teamwork							
Knowledge							

# **OVERALL EVALUATOR COMMENTS:**

Evaluator Signature / Date: \_\_\_\_\_

JPM Title

No.:
Revision:
Page 2

# **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

No.:	
Revision:	
Page 3	

#### **JPM Information**

#### System:

JPM Title

N/A

#### Task:

02A0006027 - Perform Control Room Mode 4 Surveillances

References: Required (R) / Available (A)

24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances (R)

#### Tools and Equipment Required:

None

#### Initial Conditions:

- You are an extra LNO on shift.
- The plant is in MODE 4.
- The LNO assigned to perform the Mode 4 Shiftly Surveillances had to leave the site due to a family emergency before completing the procedure.

#### Initiating Cue(s):

The CRS directs you to complete the applicable portions of 24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances. You are ONLY responsible for Steps 4-8.

#### Terminating Cue(s):

The completed package is submitted for CRS review.

#### Task Standard:

24.000.02 Surveillances are complete, and UNSAT conditions have been identified.

# Licensed Operator Exam Information (Required for NRC Exams Only)

Safety Function:

N/A

# **K/A Reference:** (from NUREG 1123)

K/A SYSTEM: Generic

# K/A STATEMENT:

2.1.18 Ability to make accurate, clear and concise logs, records, status boards and reports.

2.2.44 Ability to interpret control room indications to verify the status and operation of a system, and understand how operator actions and directives affect plant and system conditions.

# Maintenance Rule Safety Classification:

N/A

#### Maintenance Rule Risk Significant? (Yes or No)

N/A

JPM Title	No.:
	Revision:
	Page 4

# **PERFORMANCE EVALUATION**

Start Tin	ne		
	ELEMENT		STANDARD
CUE:	Provide examinee with Cue Sheet and in	comple	ete 24.000.02 surveillances.
1.	[4.0] Reactor Vessel Flange Temperature	1.	Records temperature from B21-R007 and initials step.
CUE:	As CRS, acknowledge report from exam	inee.	
* 2.	[5.0] Circulating Water Reservoir Decant Radioactivity Annunciator 3D57 is NOT illuminated	* 2.	Observes that annunciator is illuminated, indicates that step is UNSAT, reports to CRS, and initiates an investigation IAW with alarm response procedure.
CUE:	As CRS, acknowledge report from exam	inee.	
* 3.	[6.0] Residual Heat Removal (RHR)Shutdown Cooling – Cold Shutdown	* 3.	Identifies that F003B has no indication and that Div 2 MOV Overload annunciator is in alarm.
	Two RHR subsystems OPERABLE. One RHR or RR Pump operating and		Indicates step UNSAT. Enters comment in remarks section with reference to step.
	Reactor Vessel Level from Flood Up Range Indicator.		Verifies one RHR pump is running with flow through the RHR HX Bypass valve (F048).
			Records RPV Water Level from Flood Up Range Indicator
CUE:	As CRS, acknowledge report from exam	inee.	
* 4.	[7.0] Source Range Monitoring (SRM)	* 4.	Records SRM channel readings.
	Instrumentation. Records data for each SRM channel. Verifies that each channel indicates $\ge 3.0$ cps and < 1E5 cps. Performs CHANNEL CHECK.		Recognizes that SRM channel B is reading significantly lower than the other channels. Identifies that detector is not fully inserted.
5.	[8.0] Condensate Storage Tank Level	5.	Prints and signs name, inserts initials,
	Determines from initial conditions that step is N/A		completion date and time, and marks appropriate completion status.
			Submits to CRS for review and approval
CUE:	When 24.000.02, step 8.0 is completed, tell the examinee that is sufficient for this JPM.		
CUE:	i erminate JPM when examinee submits	comple	sted package for CRS review

\_\_\_\_\_ SATISFACTORY

\_\_\_\_\_ UNSATISFACTORY

Stop Time

\* Critical Step

JPM Title	No.:
	Revision:
	Page 5

#### Evaluator Notes:

### ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

# FAILURE TO WEAR ALL PPE REQUIRED FOR TASK PERFORMANCE WILL RESULT IN FAILURE OF THIS JPM.

#### Generic Notes and Cues:

CMC switches will turn RED and amperage will increase when the switch is rotated to the start position started. The current should initially be five to seven times the normal running amps with the ammeter flashing. As counter EMF is developed, the amperage will lower to the normal running amperage and the ammeter will no longer flash. CMC switches will turn GREEN when the pumps are stopped and amperage will decrease to zero.

Remotely operated valve position is determined with open and close indicating lights. A RED light only would indicate that the valve is open. A GREEN light only would indicate that the valve is closed. Dual indication would indicate that the valve is in some intermediate position.

#### System Specific Notes and Cues:

None

#### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### Critical Steps:

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title		No.: Revision: Page 6
	FOLLOW-UP DOCUMENTATION Q	UESTIONS
Reason for fo	bllow-up question(s):	
Question:		
	Reference:	
Response:		
Question:		
Response:	Reference	

JPM Title	No.:
	Revision:
	Page 7

# Simulator Setup

# IC#:

IC-2

# Malfunctions:

Number	Title	Value	Delay	Ramp
C97MF0383	03D057 CW DECANT LINE RAD MON TROUBLE	FAILED-ON	0	0

# Remote Functions:

Number	Title	Value	Delay	Ramp
N/A				

# **Override Functions:**

Number	Title	Value	Delay	Ramp
H_P602_A037_2	RHR HX B OUTLET CLOSE LIGHT	0	0	0
H_P602_A038_2	RHR HX B OUTLET OPEN LIGHT	0	0	0
EAAEPOSBBAR263641TCC	RHR PP C CNTRL PWR OFF	TRUE	0	0
EAAEPOSBBAR448388TCC	RHR PP C FLASHER PWR OFF	TRUE	0	0
EAAGPOSBBAR612737TCC	RHR PP D CNTRL PWR OFF	TRUE	0	0
EAAGPOSBBAR592154TCC	RHR PP D FLASHER PWR OFF	TRUE	0	0

# **Special Instructions:**

- 1. Initialize the simulator to IC2 (Cold Shutdown MOL), and place in RUN.
- 2. Place the Reactor MODE switch in SHUTDOWN.
- 3. Withdraw SRM B until count rate is just above 100 cps.
- 4. Remove power from RHR pumps C and D.
- 5. Throttle closed RHR B HX Outlet valve until reactor is heating up at a very slow but visible rate, then insert an "overload" trip on the valve breaker.
- 6. Actuate annunciator 3D57, CIRC H2O SYS DECANT LINE RADN MONITOR TROUBLE.
- 7. Provide the examinee a copy of 24.000.02 Attachment 4 with sections 4.0 8.0 not completed.

# Cue Sheet: (JP-OP-802-4101-446)

# **Initial Conditions:**

- You are an extra LNO on shift.
- The plant is in MODE 4.
- The LNO assigned to perform the Mode 4 Shiftly Surveillances had to leave the site due to a family emergency before completing the procedure.

# Initiating Cue(s):

The CRS directs you to complete the applicable portions of 24.000.02, Mode 4 Shiftly, Daily, and Weekly Surveillances. You are ONLY responsible for Steps 4-8.

Job Position	No.		Revision
RO	JP-OP-802-4	4101-452	0
JPM Title	Duration	Page	
Identify the Isolation Boundaries	20 minutes	S*	1
		*2 times Du	ration for ILO Exams
Examinee:		SRO / RO	
Evaluator:			

JPM Type:	Normal / Alternate Path / Time Critical
Evaluation Method:	Perform / Walkthrough / Discuss
Location:	Plant / Simulator / Classroom

Start Time \_\_\_\_\_ Stop Time \_\_\_\_\_ Total Time: \_\_\_\_\_

	PERFORMANCE EVALUATION SUMMARY										
Element	S	U	Comment	Element	S	U	Comment	Element	S	U	Comment
* 1.											
* 2.											
* 3.											
4.											

OPERATOR FUNDAMENTALS OBSERVATION					
Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.					
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number	
Monitoring					
Control					
Conservatism					
Teamwork					
Knowledge					

**OVERALL EVALUATOR COMMENTS:** 

Evaluator Signature / Date:

JPM Title
Identify the Isolation Boundaries

# **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

JPM Title	No.: JP-OP-802-4101-452
Identify the Isolation Boundaries	Revision: 0
	Page 3

# **JPM Information**

System:

N/A

#### Task:

20993 Perform Protective tagging as the Shift Foreman (Determines the limits of protection necessary and proper tag locations required to protect all aspects of the work).

#### **References:** Required (R) / Available (A)

MOP12, Tagging and Protective Barrier System (R)

23.120, Stator Water Cooling (A)

M-5717-4, Generator Stator Winding Cooling System Functional Operating Sketch (A)

#### Tools and Equipment Required:

Mechanical Piping Diagram

#### Initial Conditions:

- You are the Control Room LNO.
- A leak has been discovered on the pipe between:
  - N3000-F074A, STATOR WATER COOLING UPPER HEAT EXCHANGER VENT VALVE
  - N3033-B027, STATOR WATER COOLING UPPER HEAT EXCHANGER
- The E-Tagging system is not available.

#### Initiating Cue(s):

The Shift Manager has directed you to determine the proper tag locations required to stop the leak and manually complete a SAFETY TAGGING RECORD.

#### Terminating Cue(s):

The examinee provides the component isolation boundaries.

#### Task Standard:

The component isolation boundaries are identified per MOP12.

# Licensed Operator Exam Information (required for NRC exams)

#### Safety Function:

N/A

#### K/A Reference: (from NUREG 1123)

K/A SYSTEM: Generic/Equipment Control

K/A STATEMENT: 2.2.13 Knowledge of tagging and clearance procedures (4.1/4.3) ......4.1 / 4.3

# Maintenance Rule Safety Classification:

N/A

# Maintenance Rule Risk Significant? (Yes or No)

N/A

.IPM Title	No : JP-OP-802-4101-452
Identify the Isolation Boundaries	Revision: 0
	Page 4

# PERFORMANCE EVALUATION

	STANDARD
CUE: Provide the examinee with a blank Safet requested, provide copy of MOP12 and/o NOTE: The examinee is not being graded on co boundaries and tag locations are identif out the form, direct examinee to fill out t	y Tagging Record to document his findings. If or ODE-19. mpletion of the form, only that the required ied. If the examinee asks for information to fill he tagging boundaries first.
NOTE: If hard copies of the mechanical/electric may be used to access the drawings (M-	al drawings are unavailable, a Fermi computer 5717-4) as needed.
<ul> <li>* 1. Using the associated mechanical drawing, identify the mechanical isolation boundaries.</li> </ul>	<ul> <li>* 1. Identifies the following mechanical isolation boundaries that should be Closed and RED TAGGED.:</li> <li>N3000-F073A</li> <li>N3000-F072A</li> </ul>
<ul> <li>* 2. Using the associated mechanical drawing, identify the mechanical vent points boundaries.</li> </ul>	* 2. Identifies the vent Valve N3000-F074A should be <b>Open</b> and the RED TAG is optional based on the leak being a vent point and the high likelihood that the valve will need removed to work.
<ul> <li>* 3. Using the associated mechanical drawing, identify the mechanical drain points boundaries</li> </ul>	* <b>3</b> . Identifies the Drain Valve N3000-F075A should be <b>Open</b> and RED TAGGED.
4. Using the associated mechanical drawing, identify the mechanical isolation boundaries.	<ol> <li>Identifies the Drain Valve N3000-F075A should be Closed and RED TAGGED. (optional)</li> </ol>
5. Fills out STR	4. Fills out STR per identified isolations, vent and drain.
CUE: The JPM may be terminated when the example.	ninee provides the STR.
SATISFACTORY	UNSATISFACTORY

Stop Time

\* Critical Step

JPM Title	No.: JP-OP-802-4101-452
Identify the Isolation Boundaries	Revision: 0
	Page 5

#### **Evaluator Notes:**

# ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

#### **Generic Notes and Cues:**

None

#### System Specific Notes and Cues:

None

#### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title Identify the Isolation Boundaries		No.: JP-OP-802-4101-452 Revision: 0 Page 6	
FOLLOW-UP DOCUMENTATION QUESTIONS			
Reason for fo	llow-up question(s):		
Question:			
	Reference:		
Response:			
Question:			
	Reference		
Response:			

JPM Title	No.: JP-OP-802-4101-452
Identify the Isolation Boundaries	Revision: 0
	Page 7

# Simulator Setup

IC#:

<u>Malfunctions:</u> Number	Title	Value	Delay	Ramp
<u>Remote Functions:</u> Number	Title	Value	Delay	Ramp
<u>Override Functions:</u> Number	Title	Value	Delay	Ramp

**Special Instructions:** 

# Cue Sheet: (JP-OP-802-4101-452)

# **Initial Conditions:**

- You are the Control Room LNO.
- A leak has been discovered on the pipe between:
  - N3000-F074A, STATOR WATER COOLING UPPER HEAT EXCHANGER VENT VALVE
  - N3033-B027, STATOR WATER COOLING UPPER HEAT EXCHANGER
- The E-Tagging system is not available.

# Initiating Cue(s):

The Shift Manager has directed you to determine the proper tag locations required to stop the leak and drain the affected parts of the system. Use this information to manually complete a SAFETY TAGGING RECORD.

Job Position				No.	No.		F	Revision		
SRO / RO				JP-OP-80	2-4101-4	416		5		
						Duration Page				
e Dos	se and	d complete a F	RED card			20 minutes*			1	
								*2 times	Durati	on for II O Exams
							000	/ 50	Durau	
							_SRO	/ RO		
		Normal / /	Alternate Pa	ath /	Time	Critical	Start 7	Time		
Meth	od.	Perform /	Walkthroug	чh / Г	)iscus	s	Stop 7	Time		
mou	100.			g., _	10000	0				
		Plant / Sin	nulator / Cla	assro	bom		lotal	i ime:		
		PE	RFORMANC	E EV	ALUA	TION SUMMA	RY			
S	U	Comment	Element	S	U	Comment	Eleme	ent S	U	Comment
	on Dos Meth S	on Dose and Method: SU SU A A A A A A A A A A A A A	on Dose and complete a F Normal / / Method: Perform / Plant / Sin PE S U Comment S U Comment A D D D D D D D D D D D D D D D	on Dose and complete a RED card Normal / Alternate Particular Method: Perform / Walkthroug Plant / Simulator / Cla PERFORMANC S U Comment Element S U Comment Element D D D D D D D D D D D D D D D D D D D	on Dose and complete a RED card Normal / Alternate Path / Method: Perform / Walkthrough / D Plant / Simulator / Classro PERFORMANCE EV S U Comment Element S S U Comment Element S D	on Dose and complete a RED card Normal / Alternate Path / Time ( Method: Perform / Walkthrough / Discuss Plant / Simulator / Classroom PERFORMANCE EVALUA S U Comment Element S U S U Comment S U S U S S S S S S S S S S S S S S S S S S	on JP-OP-80: Duration 20 minut 20 minut Normal / Alternate Path / Time Critical Method: Perform / Walkthrough / Discuss Plant / Simulator / Classroom PERFORMANCE EVALUATION SUMMA S U Comment Element S U Comment S U Comment S U Comment S U Com	on	On         No.         JP-OP-802-4101-416           Duration         Page         20 minutes*         *2 times           *2 times         \$SRO / RO         *2 times         *2 times           Method:         Perform / Walkthrough / Discuss         Start Time         Stop Time           Plant / Simulator / Classroom         Total Time:            S         U         Comment         Element         S         U         Comment         Element         S         I         Comment         Element         S         I         Comment         Element         S         I <td>On         No.         JP-OP-802-4101-416         F           Dose and complete a RED card         Duration         Page         *2 times Duration           *2 times Duration         SRO / RO         SRO / RO         SRO / RO           Method:         Perform / Walkthrough / Discuss         Stop Time        </td>	On         No.         JP-OP-802-4101-416         F           Dose and complete a RED card         Duration         Page         *2 times Duration           *2 times Duration         SRO / RO         SRO / RO         SRO / RO           Method:         Perform / Walkthrough / Discuss         Stop Time

OPERATOR FUNDAMENTALS OBSERVATION					
Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.					
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number	
Monitoring					
Control					
Conservatism					
Teamwork					
Knowledge					

# **OVERALL EVALUATOR COMMENTS:**

Evaluator Signature / Date: \_\_\_\_\_

JPM Title

No.:
Revision:
Page 2

# **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

JPM Title	No.:
	Revision:
	Page 3

#### JPM Information

#### System:

N/A

#### Task:

02SFSSS001 Perform supervisory safety monitoring of work activates.

#### **References:** Required (R) / Available (A)

MRP04, "ACCESSING AND WORKING IN THE RADIOLOGICALLY RESTRICTED AREA (RRA)" (R) "Training Only" Survey Map for RWCU room (R)

#### Tools and Equipment Required:

Blank Red trip ticket (RED card)

#### **Initial Conditions:**

- You are the Patrol NSO.
- The Shift is attempting to restore the N RWCU Pump after a seal replacement.
- G33F013A, North RWCU Pump Discharge Isolation Valve will not open.

#### Initiating Cue(s):

- You must enter the RWCU pump room to perform an investigation of valve G33F013A, North RWCU Pump Discharge Isolation Valve and open the valve.
- The estimated time necessary to perform the work is 6 minutes. The job duration is too short to install additional engineering controls to reduce dose.
- The situation is NOT an emergency but there is no other on-shift person with lower dose, knowledge, and expertise to perform the inspection.
- RP reports your accumulated dose for the year is 753 mR.
- Prepare for a RP Brief for the entry by reviewing the Survey Map and High Rad RWP for entry into the N RWCU Pump room. Discuss your expected dose and RWP requirements with your RP tech.

# Terminating Cue(s):

End JPM when RED card complete.

# Task Standard:

RED card is prepared per expectations in MRP04.

JPM Title	No.:
	Revision:
	Page 4

# Licensed Operator Exam Information (Required for NRC Exams Only)

Safety Function:

N/A

K/A Reference: (from NUREG 1123)

K/A SYSTEM: GENERIC 2.3 – Radiation Control

K/A STATEMENT:

2.3.4 Knowledge of radiation exposure limits under normal or emergency conditions. 3.2 / 3.7

# Maintenance Rule Safety Classification:

N/A

# Maintenance Rule Risk Significant? (Yes or No)

N/A

JPM Title	No.:
	Revision:
	Page 5

# PERFORMANCE EVALUATION

Start Tir	ne	
	ELEMENT	STANDARD
CUE:	Provide Examinee with CUE SHEET and	copy of survey map of N. RWCU pump room.
* 1.	Determine radiation dose in work area.	* 1. Determines radiation level in the area of the valve is 6 Rem/hr.
NOTE	: Fermi Admin Guideline = 1 REM/yr TEDE	Ē
* 2.	Calculate dose to determine if dose extension is necessary.	* 2. (a) Dose = 6/60 hr * 6 Rem/hr = 600 mrem. 600 mrem + 753 mrem = 1353 mrem or <b>1.353 Rem</b>
		Dose = 6/60 hr * 4.8 Rem/hr = 480 mrem. 480 mrem + 753 mrem = 1353 mrem or <b>1.233 Rem</b>
		(b) Determine Extension is required.
CUE:	If ask about exceeding administrative lin new dose limit of 1500, RP will provide e	nit act as Radiation Protection to recommend a extension paperwork at brief.
3.	Review requirements and discusses with RP tech Dose for entry in N. RWCU room	<ul> <li>3. Reviews:</li> <li>Checks Fermi 2 Administrative Dose Guideline</li> <li>Checks TEDE</li> <li>Accumulated Dose: 753 mrem</li> <li>Current Guideline Limit: 1,000 mrem/yr</li> <li>Review RWP 17001</li> <li>Requested Dose Level: 1500 mrem.</li> </ul>
CUE:	As Radiation Protection direct examinee	to complete a RED card based on discussion.
4.	Complete RED card.	4. Enters correct information.
		NOTE: Example card provided. *items must be filled in.
		NOTE: Other items maybe provided as CUE of asked for by the examinee.
CUE:	End JPM when RED card complete.	
	SATISFACTORY	UNSATISFACTORY

SATISFACTORY

Stop Time

\* Critical Step

JPM Title	No.:
	Revision:
	Page 6

#### Evaluator Notes:

# ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

# FAILURE TO WEAR ALL PPE REQUIRED FOR TASK PERFORMANCE WILL RESULT IN FAILURE OF THIS JPM.

#### Generic Notes and Cues:

CMC switches will turn RED and amperage will increase when the switch is rotated to the start position started. The current should initially be five to seven times the normal running amps with the ammeter flashing. As counter EMF is developed, the amperage will lower to the normal running amperage and the ammeter will no longer flash. CMC switches will turn GREEN when the pumps are stopped and amperage will decrease to zero.

- Ex.: Pump start: "Switch has been rotated to the start position, red light is lit, green light is out, amperage initially pegs out high, and is now indicating 25 amps."
  - Pump stop: "Switch has been rotated to the stop position, green light is lit, red light is out, amperage indicates 0 amps."

Remotely operated valve position is determined with open and close indicating lights. A RED light only would indicate that the valve is open. A GREEN light only would indicate that the valve is closed. Dual indication would indicate that the valve is in some intermediate position.

Manual valves are checked in the closed direction (MOP02 and MOP05). Valve stem position may aid in valve position determination, but cannot be used as Independent Verification (MOP02).

- Ex.: Verify valve closed: "Valve handwheel indicates no valve movement in the clockwise direction."
  - Verify valve open: "Valve handwheel has been rotated slightly in the clockwise direction and returned to the original positions."
  - Closing a valve: "Valve handwheel has been rotated in the fully clockwise direction until no additional valve movement. Valve stem is down."
  - Opening a valve: "Valve handwheel has been rotated in the fully counterclockwise direction until no additional valve movement, valve stem is out."

#### System Specific Notes and Cues:

#### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee. Notify Examinee if time compression will be used for activities performed outside of the Control Room. Notify Examinee if JPM is Time Critical (only if JPM is **NOT** Alternate Path).

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title	No.: Revision: Page 7
FOLLOW-UP DOCUMENTATION Q	UESTIONS
Reason for follow-up question(s):	
Question:	
Reference.	
Response:	
Question:	
Reference	
Response:	

JPM Title	No.:
	Revision:
	Page 8

# Simulator Setup

IC#:

Malfunctions:				
Number	Title	Value	Delay	Ramp
Remote Functions:				
Number	Title	Value	Delay	Ramp
Override Functions:				
Number	Title	Value	Delay	Ramp

**Special Instructions:** 

# Cue Sheet: (JP-OP-802-4101-416)

# **Initial Conditions:**

- You are the Patrol NSO.
- The Shift is trying to restore the N RWCU Pump after a seal replacement.
- G33F013A, North RWCU Pump Discharge Isolation Valve will not open.

# Initiating Cue(s):

- You must enter the RWCU pump room to perform an investigation of valve G33F013A, North RWCU Pump Discharge Isolation Valve and open the valve. This investigation will put you in contact with the pump casing.
- The estimated time necessary to perform the work is 6 minutes. The job duration is too short to install additional engineering controls to reduce dose.
- The situation is NOT an emergency but there is no other on-shift person with lower dose, knowledge, and expertise to perform the inspection.
- RP reports your accumulated dose for the year is 753 mR.
- Prepare for a RP Brief for the entry by reviewing the Survey Map and High Rad RWP for entry into the N RWCU Pump room. Discuss your expected dose and RWP requirements with your RP tech.

Job Positi	ion						No.				R	levision
RO/SRO							JP-OP-80	2-4101-4	431			1
JPM Title							Duration		Page	Э		
Thermal L	_imit	Verifi	cation (MAPRA	AT)			15 minu	tes*	_		1	
			•				•		*2 tim	nes E	Duratio	on for ILO Exams
Examinee.								SRO	/ RO			
Examinee.								_ 0110	, 110			
Evaluator.												
			Normal /	Altornato P	oth /	Timo	Critical	Start 7	Timo			
51 W Type.					aur <i>i</i>	N	Childan					
Evaluation	Metr	nod:	Perform /	Walkthroug	gh / L	JISCUS	S	Stop I	ime_			
Location:			Plant / Sin	nulator / <b>Cla</b>	assro	oom		Total <sup>-</sup>	Time:			
			PE	RFORMANC	E EV	ALUA	TION SUMMA	RY				
Element	S	U	Comment	Element	S	U	Comment	Eleme	ent	S	U	Comment
1.												
* 2.												
3.												
* 4.												
* 5.												
* 6.												
7.												
* 8.			SRO Only									
			-									
L	1			1	1							

	OPERATOR	FUNDAMENTALS OBSER	RVATION		
Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.					
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number	
Monitoring					
Control					
Conservatism					
Teamwork					
Knowledge					

# **OVERALL EVALUATOR COMMENTS:**

Evaluator Signature / Date: \_\_\_\_\_

JPM Title

No.:
Revision:
Page 2

# **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

No.:	
Revision:	
Page 3	

#### **JPM Information**

#### System:

JPM Title

B1100 & J1100 – Core and Fuel

#### Task:

8068 - Perform core performance parameter check

**References:** Required (R) / Available (A)

24.000.02, Shiftly, Daily and Weekly Required Surveillances, Attachment 2 (pg 19 of 24) (R)

#### Tools and Equipment Required:

3DM Edit Printout (attached)

#### Initial Conditions:

- Today is Sunday \_\_\_\_\_ (insert previous Sunday's date).
- You are the Patrol NLO.
- The plant is operating steady state at 100% rated thermal power, and has been at 100% power for greater than one week.

#### Initiating Cue(s):

- The CRS directs you to complete Step 16 of 24.000.02, Attachment 2, Core Thermal Limit Verification.
- The STA has indicated that 3DM limits are reflective of the status of the MSR and BPVs.
- There has been no TAU change.

#### Terminating Cue(s):

Surveillance is complete, and Tech Spec and limiting time identified (SRO only).

#### Task Standard:

Perform Core Thermal Limit verification in accordance with 24.000.02 Attachment 2 (Step 16), and identify Tech Spec LCO 3.2.1 not met – one hour time limit (SRO only).

#### Licensed Operator Exam Information (required for NRC exams)

Safety Function:

N/A

#### K/A Reference: (from NUREG 1123)

K/A SYSTEM: 293009 - Core Thermal Limits

#### K/A STATEMENT: Generic

#### Maintenance Rule Safety Classification:

N/A

# Maintenance Rule Risk Significant? (Yes or No)

N/A

JPM Title
-----------

# PERFORMANCE EVALUATION

Start Time								
	ELEMENT		STANDARD					
CUE:	Provide examinee with Cue Sheet.							
	Provide examinee copy of 24.000.02 Att. 2, and the 3D Monicore Edit (attached). Inform the examinee this is the latest 3DM Edit.							
1.	[16.b.2)a)] Verify LPRMs are not failed (except for Bypassed LPRMs) and no other sensors are failed which affect the Heat Balance	1.	Verifies there are no failed LPRMs or other sensors shown on the 3DM edit					
CUE:	As STA, inform candidate the flow basis performed on the Jet Pump 11-28 Loop A	was inp A flow ir	out manually due to maintenance being nstrument, CM edit is still valid.					
* 2.	[16.b.2)b)] Verify Flow basis is "MEAS."	* 2.	Recognizes Flow basis is "OPER." Consults with STA / SNE before continuing.					
3.	[16.b.2)c)] If failed sensors exist (other than Bypassed or PANACEA-rejected LPRMs) or the flow basis is not "MEAS," consult with the STA/SNE for appropriate action before continuing.	3.	Identifies no other failed sensors exist on the 3DM edit.					
* 4.	[16.b.3)] Place a check in items a and b when the review is satisfactory or when discrepancies are resolved and logged by the STA/SNE.	* 4.	Checks blocks "a" and "b". The review is satisfactory.					
* 5.	[16.b.4)] Record Calculated Date and Time (items c and d) of the Core Monitor Periodic Log and verify complete in last 24 hours.	* 5.	Records Date and Time and verifies complete within the last 24 hours					
CUE:	As CRS acknowledge report of Tech Spe	ec.						
* 6.	[16.b.5)] Record the listed parameters (items e – h) as they appear on the Core Monitor Periodic Log.	* 6.	Records Reactor Power and Thermal Limit values. Identifies that <b>MAPRAT is</b> <b>1.008</b> . Notifies CRS that TS is not met.					
NOTE:	Examinee may state that this non-compl	iance sl	hould be noted in the Comments Section					
7.	Step signature	7.	Does <b>NOT</b> initial or sign since Acceptance Criteria is <b>NOT</b> met.					
* 8.	Review Tech Specs (SRO Only)	* 8.	Identifies TS 3.2.1 APLHGR Condition A.1, Restore within 2 hours ( <b>SRO Only</b> ).					
CUE:	End JPM when surveillance is complete, an only).	d Tech	Spec and limiting time identified (SRO					

\_\_ SATISFACTORY

\_\_ UNSATISFACTORY

Stop Time

\* Critical Step

JPM Title	

#### Evaluator Notes:

### ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

#### **Generic Notes and Cues:**

None

#### System Specific Notes and Cues:

None

#### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title		No.: Revision: Page 6
	FOLLOW-UP DOCUMENTATION Q	UESTIONS
Reason for fo	bllow-up question(s):	
Question:		
	Reference:	
Response:		
Question:		
Response:	Reference	

JPM Title	No.:
	Revision:
	Page 7

# Simulator Setup

IC#:

N/A

Malfunctions:				
Number	Title	Value	Delay	Ramp
N/A				
Remote Functions:				
Number	Title	Value	Delay	Ramp
N/A				
<b>Override Functions:</b>				
Number	Title	Value	Delay	Ramp
N/A				
Special Instructions:				
N/A				

# Cue Sheet: (JP-OP-802-4101-431)

# **Initial Conditions:**

- Today is Sunday \_\_\_\_\_. (previous Sunday's date)
- You are the Patrol NLO.
- The plant is operating steady state at 100% rated thermal power, and has been at 100% power for greater than one week.

# Initiating Cue(s):

- The CRS directs you to complete Step 16 of 24.000.02, Att. 2, Core Thermal Limit Verification.
- The STA has indicated that 3DM limits are reflective of the status of the MSR and BPVs.
- There has been no TAU change.

CORE PAP POWER POWER FLOW FPADPR SUBC	RAMETERS MWT MWE MLB/HR BTU/LB	3430 1134. 92.266 0.905 21.97	FERMI C 3DM/P11 PERIODIO AUTOMA CALC RE Keff	YCLE 18 C LOG TIC SULTS	1.0026	SEQUEN Today 08 Today 08 CASE ID RESTAR LPRM SH	CE NO 11 :00 CALCUL :01 PRINTE FMLD1050 T FMLD1050 IAPE – FUL	_ATED D 0609105759 060909575 L CORE	9 9
PR CORE CYCLE MCPR	PSIa MWD/sT MWD/sT	1040.78 23998.7 3997.3 1.628	XE WORT XE/RATE AVE VF	<sup>-</sup> H % D 0.469	-2.33LOAI 1.02	D LINE SUM CORE PO CORE FL LOAD LIN	MARY DWER .OW NE	100.09 92.39 104.99	% % %
CORRECT OPTIONS:	ION FACTO ARTS	R: MFLCPR 2 LOC	= 1.000 PS ON	MFLP MANU	D= 1.000 JAL FLOW		AT= 1.000 _IM= 1.350		
MFLCPR 0.829 0.826 0.814 0.812 0.805 0.803 0.796 0.790 0.786 0.785	LOC 29-10 9-30 29-14 13-30 27-12 11-28 27-10 9-28 25-10 9-26	MFLPD 0.985 0.975 0.955 0.867 0.862 0.861 0.861 0.861 0.854 0.854 0.854 0.849	LOC 51-34- 4 33-10- 5 51-32- 4 51-20- 5 53-32- 5 41-10- 5 53-34- 4 37-10- 5 51-24- 5	G LOCA MAF 1. 0. 0. 0. 0. 0. 0. 0. 0. 0.	PRAT L 008 51 975 33 925 51 900 41 747 51 747 37 743 51 742 53 734 31 727 47	DN-SYMMET -OC 1-34- 4 3-10- 5 1-20- 5 1-10- 5 1-32- 4 7-10- 5 1-24- 5 3-30- 5 1- 8- 5 7-20- 5	RIC) PCRAT 1.011 1.006 1.006 1.006 1.005 1.005 1.004 1.004 1.004 1.003 1.003	LOC 9-42- 5 9-34- 5 13-42- 5 11-40- 5 7-32- 5 27-52- 3 7-40- 5 13-32- 4 19- 5- 4 23-52- 4	
L 55 51 L	2 C=MF	LCPR D=MI	FLPD M=MA	PRAT P	=PCRAT	*=MULTIPLE	E CORE A NOTCH 00 02 04 06 08 10	VE AXIAL REL PW 0.110 0.244 0.582 0.780 0.835 0.902 0.927	LOC 25 24 23 22 21 20 19
47 43 L	Ρ	06	06	6			12 14 16	0.934 0.953 1.015	18 17 16
39 35 L 31 27	06	10	10 10	)	06 M		18 20 22 24 26 28	1.049 1.103 1.152 1.190 1.203 1.219	15 14 13 12 11
23 19 L 15 11	06	06	10 06 C	6	06		30 32 34 36 38	1.269 1.312 1.335 1.405 1.449	09 08 07 06 05
L 07 03 02 06 CORF AV/	L L 10 14 ERAGE RA	L 18 22 26 DIAL POWE	L 30 34 38 R DISTRIBUT	L 3 42 4	L 46 50 5	L 54 58	40 42 44 46	1.382 1.280 1.008 0.362	04 03 02 01
RING # REL PW	1.	1 2 123 1.25	3 9 1.138	4	5 1.123	6 1.261	7 1.087 0.	8 .497	

FFRMI	CYCI	F 18	INS	TRUMEN		GS/STAT	US	SEQUENCE NO 11	Page 2
	0101		CA	LIBRAT	ED LPRM F	READING	iS	Today 08:00 CALCULATED	
57 D C B A		20.0 23.8 26.0 23.3	26.5 32.2 38.8 41.5	26.3 31.1 40.0 39.0	22.3 29.2 35.3 37.5			CASE ID FMLD1050609105 LPRM SHAPE - FULL COF	759 RE
49 D C B A	20.7 25.8 28.9 27.4P	27.9 40.6 49.3 58.9	30.1 40.7 49.8 56.9	30.3 38.7 53.9 63.8	29.7 39.6 50.6 62.1	24.7 25.8 43.7 52.3		FAILED SENSORS LPRM (0 SIGNALS F LPRM (0 PANACEA OTHER SENSORS (0 SUB RODS NONE	AILED) REJECTED) 0 TOTAL )
41 D C B A	26.2 35.9 46.8 64.8	29.7 39.5 48.9 55.0	31.9 42.4 53.2 53.7	34.2 40.5 52.8 52.7	30.2 40.2 53.2 60.6	28.8 38.7 50.5 63.4	22.5 30.2 36.6 39.4		
33 D C B A	28.1 40.2 50.7 69.7	32.0 42.8 53.7 56.9	35.9 41.1 50.4 50.7	34.5 42.5 50.3 58.9	35.5 41.8 53.4 53.7	31.4M 43.3 55.0 43.4	25.3 36.3 43.2 41.0	T = T I P RUN RECOMN C = MFLCPR LOCATIO M = MAPRAT LOCATIO D = MFLPD LOCATION P = PCRAT LOCATION * - MULTIPLE LIMIT	/ENDED )N IN I N
25 D C B A	28.4 39.1 51.1 66.0	31.7 43.0 53.1 51.2	34.7 44.6 56.7 56.4	35.4 40.9 52.0 50.8	31.3 41.5 52.9 57.7	28.9 38.8 51.1 51.2	25.6 32.6 39.5 44.1		
17 D C B A	22.1 31.2 40.1 51.7	30.7 41.7 53.4 61.6	31.8C 43.7 54.3 49.6	32.9 44.0 54.6 54.8	29.4 38.4 49.4 58.5	26.9 39.3 49.8 61.5	19.4 23.7 26.0 24.6		
09 D C B A		23.6 39.3 42.4 51.6	28.9 39.6 50.6 64.7	29.5 41.6 51.4 66.3	26.8 38.6 47.6 63.0	21.1 25.5 28.8 28.0			
	08	16	24	32	40	48	56		
CORE CORE LOAD	CORE S POWER FLOW LINE	UMMARY 100 % 92.3 % 104.9 %		CALC S OPER S FLOW B	SUB FLOW SUB FLOW BASIS	94.1 92.3 OPEF	% % &	DP MEAS PSI DP CALC PSI FEEDWTR FLOW MLB/HR	13.681 18.836 14.81
					APRM CALI	BRATION	۱		
		READ AGAF APRM	ING I - %CTP	1 99.9 1.001 -0.1	2 99.9 1.001 -0.1	3 99.8 1.002 -0.2	4 99.9 1.001 -0.1		
		TIP R	UNS RE		NDED				

STRINGS : NONE

Job Dooiti	<u></u>						No				Dovision
	on										revision 2
							JP-0P-802-4101-440			3	
	- 14					N 4	Duration	*	Page		4
Review th		JDE 5	Shiftiy/Dally a	Surveillance	es (P	IVI I )	30 minu	ies"	*		1
									°2 time	es Dura	ation for ILO Exams
Examinee:						SRO					
Evaluator:											
JPM Type:			Normal / /	Alternate Pa	ath <b>/</b> '	Time (	Critical	Start 7	Time		
Evaluation	Meth	nod:	Perform /	Walkthroug	gh / E	Discus	S	Stop 7	Time		
Location:			Plant / Sin	nulator / Cla	assro	oom		Total <sup>-</sup>	Time:		
			PE	RFORMANC	E EV		TION SUMMA	RY			
Element	S	U	Comment	Element	S	U	Comment	Eleme	ent S	S U	Comment
1.											
* 2.											
3											
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4.											
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								1			
								+			

	OPERATOR FUNDAMENTALS OBSERVATION							
Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.								
Operator Fundamental	Operator FundamentalMeets all ExpectationsOpportunity for ImprovementDoes not meet 							
Monitoring								
Control								
Conservatism								
Teamwork								
Knowledge								

**OVERALL EVALUATOR COMMENTS:** 

PASS	FAIL
------	------

Evaluator Signature / Date:

\_\_\_\_\_

JPM Title

No.:		
Revision:		
Page 2		

# **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

No.:	
Revision:	

#### JPM Information

#### System:

JPM Title

N/A

#### Task:

78652 - Perform Control Room - Mode 5 Surveillances

#### References: Required (R) / Available (A)

Marked up copy of completed 24.000.03, Mode 5 Shiftly, Daily, and Weekly Surveillances (R)-ATTACHMENT 1 with the following errors:

- Step 7.0 SRM Channels B and D (guadrants adjacent to where core alts are being ٠ performed) readings recorded as < 3.0 cps, signal-to-noise ratio steps not completed, and channel check marked as SAT
- Step 8.0 Marked SAT
- All other marked N/A partial surveillance, and

Map of the core showing the current fuel loading status.(R)

Completed 24.000.01, Attachment 37 packages for SRM B and D.(R)

Copy of 24.000.03, Enclosure B, Secondary Containment Differential Pressure Correction Tables.(R)

#### Tools and Equipment Required:

None

#### Initial Conditions:

- You are the on shift CRS. •
- The plant is in MODE 5 .
- SRM D is INOP
- Core Alterations were in progress when B SRM was declared INOP.
- Core Alterations were stopped.
- All TS & TRM requirements have been met for B & D SRM INOP.
- D SRM has undergone repairs and has been returned to service AND Declared OPERABLE.
- B SRM is INOP and undergone repairs and has been returned to service.
- Plans are to continue Core Alterations when B SRM is OPERABLE

#### Initiating Cue(s):

Review the completed PMT for B SRM, a partial surveillance of 24.000.03, MODE 5 Shiftily, Daily, and Weekly Surveillances, and determine:

- (1) Does B SRM meet acceptance criteria?
- (2) Are SRM instrumentation requirements met to continue Core Alterations?

#### Terminating Cue(s):

Terminate JPM when examinee reports that review is complete.

#### Task Standard:

For successful completion, the examinee must identify acceptance criteria and operability requirements

Page 3

JPM Title	No.:
	Revision:
	Page 4

# Licensed Operator Exam Information (Required for NRC Exams Only)

Safety Function:

N/A

K/A Reference: (from NUREG 1123)

K/A SYSTEM: Generic

K/A STATEMENT:

2.1.40 Knowledge refueling administrative requirements......2.8 / 3.9

# Maintenance Rule Safety Classification:

N/A

# Maintenance Rule Risk Significant? (Yes or No)

N/A

JPM Title

#### PERFORMANCE EVALUATION

Start Time \_\_\_\_\_

ELEMENT	STANDARD
CUE: Provide the examinee with Cue Sheet and	I marked up copy of 24.000.03, Attachment 1.
<ol> <li>Review Step 7.0 of the surveillance package for acceptability, accuracy and completeness.</li> </ol>	<ol> <li>Identifies that signal-to-noise ratio needs to be determined for SRM Channels B and D (quadrants adjacent to where core alts are being performed).</li> </ol>
CUE: Provide the examinee with marked up co and D if requested.	py of 24.000.01 Attachment 37 for both SRM B
* <b>2.</b> Recognize need to perform 24.000.01 Attachment 37 for both SRM B and D.	* 2. Based on data provided in completed 24.000.01, recognizes that SRM B is not operable (quadrant adjacent to where core alts are being performed)
CUE: As Shift Manager, acknowledge report fro	om examinee.
<ol> <li>SRM B does not meet operability requirements</li> </ol>	<ol> <li>Informs SM that SRM B does not meet operability requirements</li> </ol>
CUE: If required, repeat step 2 of task "Are SR Core Alterations?".	M instrumentation requirements met to continue
* 4. Review Step 8.0 of the surveillance package for acceptability, accuracy and completeness.	* 4. Based on data provided in completed 24.000.01, recognizes that SRM D (quadrant adjacent to where core alts are being performed) is operable and that acceptance criteria are in fact satisfied.
CUE: As Shift Manager, acknowledge report fro	om examinee.
5. Determines fuel moves are in quadrant with SRM C. SRM D (quadrant adjacent to where core alts are being performed) is operable and that acceptance criteria are in fact satisfied.	<ol> <li>Informs Shift Manager SRM D (quadrant adjacent to where core alts are being performed) is operable and SRM C (quadrant where core alts are being performed)is operable and that acceptance criteria are in fact satisfied.</li> </ol>
CUE: When 24.000.03, step 8.0 is completed, te	II the examinee that is sufficient for this JPM.
SATISFACTORY	UNSATISFACTORY

\_\_\_\_\_ UNSATISFACTORY

Stop Time

\* Critical Step

JPM Title	No.:
	Revision:
	Page 6

#### Evaluator Notes:

### ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

# FAILURE TO WEAR ALL PPE REQUIRED FOR TASK PERFORMANCE WILL RESULT IN FAILURE OF THIS JPM.

#### **Generic Notes and Cues:**

None

#### System Specific Notes and Cues:

None

### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title	No.: Revision: Page 7				
FOLLOW-UP DOCUMENTATION QUESTIONS					
Reason for follow-up question(s):					
Question:					
Reference.					
Response:					
Question:					
Reference					
Response:					

JPM Title	No.:
	Revision:
	Page 8

# Simulator Setup

IC#:

Malfunctions:				
Number	Title	Value	Delay	Ramp
Remote Functions:				
Number	Title	Value	Delay	Ramp
Override Functions:				
Number	Title	Value	Delay	Ramp

**Special Instructions:** 

# Cue Sheet: (JP-OP-802-4101-440)

# **Initial Conditions:**

- You are the on shift CRS.
- The plant is in MODE 5
- SRM D is INOP
- Core Alterations were in progress when B SRM was declared INOP.
- Core Alterations were stopped.
- All TS & TRM requirements have been met for B & D SRM INOP.
- D SRM has undergone repairs and has been returned to service AND Declared OPERABLE.
- B SRM is INOP and undergone repairs and has been returned to service.
- Plans are to continue Core Alterations when B SRM is OPERABLE

# Initiating Cue(s):

Review the completed PMT for B SRM, a partial surveillance of 24.000.03, MODE 5 Shiftily, Daily, and Weekly Surveillances, and determine:

- (1) Does B SRM meet acceptance criteria?
- (2) Are SRM instrumentation requirements met to continue Core Alterations?

JPM Title Evaluate a Te						No. JP-OP-802-4101-420			R	evision 2
Evaluate a Te						Duration Page				
	mpora	ry Change No	/ Change Notice			20 minutes*			1	l
								*2 times	Duratio	on for ILO Exam
Examinee:							SRO			
Evaluator:										
JPM Type:		Normal / /	Alternate Pa	ath /	Time (	Critical	Start 7	Time		
Evaluation Method:		Perform /	orm / Walkthrough / Discuss			Stop T	ime			
Location:	n: Plant / Simulator / Classroom		.ocation: Plant / Sim		Total <sup>-</sup>	Time:				
		PE	RFORMANC	E EV		TION SUMMA	RY			
Element S	U	Comment	Element	S	U	Comment	Eleme	ent S	U	Comment
1.										
* 2.										
* 3.										

OPERATOR FUNDAMENTALS OBSERVATION					
Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.					
OperatorMeets allOpportunity forDoes not meetCommentFundamentalExpectationsImprovementExpectationsNumber					
Monitoring					
Control					
Conservatism					
Teamwork					
Knowledge					

# **OVERALL EVALUATOR COMMENTS:**

PASS FAIL
-----------

Evaluator Signature / Date: \_\_\_\_\_

JPM Title

No.:
Revision:
Page 2

# **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

01 101 1100	JPM	Title
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#### **JPM Information**

#### System:

N/A

#### Task:

01A0001112 - Perform and Approve a TCN

#### **References:** Required (R) / Available (A)

#### MGA04 (A) MLS APP B (A)

#### Tools and Equipment Required:

None

#### Initial Conditions:

- You are an extra SRO assigned to the shift.
- A reactor startup is in progress.
- Reactor pressure is 175 psig and stable.
- All prerequisites are met to begin 24.202.02, HPCI flow rate test at 165 psig reactor steam pressure.
- The HPCI system engineer has briefed the SM on four minor changes he needs incorporated into the test prior to implementation. He has explained that these changes pertain to setpoints on the E41-F011 flow test valve controller and should not affect the outcome of the surveillance. He also states that the changes must be made since the controller was calibrated for new values during the outage. The Temporary Procedure Change has been written.

# Initiating Cue(s):

The CRS directs you to review the Temporary Change Notice in accordance with MGA 04, and sign the TCN as the SRO reviewer.

#### Terminating Cue(s):

Terminate JPM when TCN review is complete.

#### Task Standard:

Review a Temporary Change Notice in accordance with MGA04.

# Licensed Operator Exam Information (Required for NRC Exams Only)

#### Safety Function:

N/A

#### K/A Reference: (from NUREG 1123)

K/A SYSTEM: Generic

#### K/A STATEMENT:

2.2.5 Knowledge of the process for making design or operating changes to the facility ......2.2 / 3.2

# Maintenance Rule Safety Classification:

N/A

# Maintenance Rule Risk Significant? (Yes or No)

N/A

JPM Title

#### PERFORMANCE EVALUATION

Start Time \_\_\_\_\_

	ELEMENT		STANDARD				
CUE:	Provide examinee Cue Sheet and TCN for review.						
1.	Review Temporary Change in accordance with MGA04 " Temporary Change Notices"	1. F	<ul> <li>Reviews TCN :</li> <li>Technically correct</li> <li>No change of intent</li> <li>Complies with tech specs</li> </ul>				
* 2.	Review Applicability Determination and proposed procedure changes	* 2.	Determines revision will actually change acceptance criteria and setpoints.				
* 3.	Determine whether or not the TCN should be signed due to change of intent.	* 3.	Notifies SM of the inability to sign as SRO as revision changes acceptance criteria				
CUE:	As Shift Manager, acknowledge report.						
CUE:	Terminate JPM when TCN review is com	olete.					

\_\_\_\_\_ SATISFACTORY

\_\_\_\_\_ UNSATISFACTORY

Stop Time

\* Critical Step

JPM Title	No.:
	Revision:
	Page 5

#### Evaluator Notes:

### ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

# FAILURE TO WEAR ALL PPE REQUIRED FOR TASK PERFORMANCE WILL RESULT IN FAILURE OF THIS JPM.

#### **Generic Notes and Cues:**

None

#### System Specific Notes and Cues:

None

### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title		No.: Revision: Page 6				
	FOLLOW-UP DOCUMENTATION QUESTIONS					
Reason for fo	bllow-up question(s):					
Question:						
	Reference:					
Response:						
Question:						
Response:	Reference					

JPM Title	No.:
	Revision:
	Page 7

# Simulator Setup

IC#:

Malfunctions:				
Number	Title	Value	Delay	Ramp
Remote Functions:				
Number	Title	Value	Delay	Ramp
Override Functions:				
Number	Title	Value	Delay	Ramp

**Special Instructions:** 

# Cue Sheet: (JP-OP-802-4101-420)

# **Initial Conditions:**

- You are an extra SRO assigned to the shift.
- A reactor startup is in progress.
- Reactor pressure is 175 psig and stable.
- All prerequisites are met to begin 24.202.02, HPCI flow rate test at 165 psig reactor steam pressure.
- The HPCI system engineer has briefed the SM on four minor changes he needs incorporated into the test prior to implementation. He has explained that these changes pertain to setpoints on the E41-F011 flow test valve controller and should not affect the outcome of the surveillance. He also states that the changes must be made since the controller was calibrated for new values during the outage. The Temporary Procedure Change has been written.

# Initiating Cue(s):

The CRS directs you to review the Temporary Change Notice in accordance with MGA04, and sign the TCN as the SRO reviewer.

Lab Deatt							NI					
	BO/SRO						INO. IP-OP-802-4101-435			R	evision 6	
IPM Title	IPM Title						Duration	Duration Bago			0	
Notify Hos	Notify Hospital for Contaminated Injured Worker 20 m						20 minut	es*	i agi	C	1	l
									*2 tim	nes D	uratic	on for ILO Exams
Examinee:								SRO	/ RO /	/ NO	)	
Evaluator:												
JPM Type:			Normal / A	Alternate Pa	ath / <sup>-</sup>	Time C	ritical	Start T	Time _			
Evaluation	Meth	nod:	Perform /	Walkthroug	gh / C	Discuss	5	Stop T	ime_			
Location:	Location: Plant / Simulator / Classroom						Total Time:					
			PE	RFORMANC	E EV	ALUAT	ION SUMMA	RY				
Element	S	U	Comment	Element	S	U	Comment	Eleme	ent	S	U	Comment
* 1.												
2.												
* 3.												
4.												
* 5.												
6.												
* 7.			(SRO only)									

# OPERATOR FUNDAMENTALS OBSERVATION

Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation.

Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number
Monitoring				
Control				
Conservatism				
Teamwork				
Knowledge				

#### **OVERALL EVALUATOR COMMENTS:**

FAIL PASS

Evaluator Signature / Date:

JPM Title

### **JPM Observation Criteria**

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

J	Pl	M	Т	itl	e

#### JPM Information

#### System:

N/A

Task:

74001 - Request offsite ambulance/paramedic, fire, or hospital support

**References:** Required (R) / Available (A)

EP-225, Radiological Medical Emergencies (R)

Form EP-290005, Hospital Support Request Form (R)

Form EP-290004, Ambulance/Paramedic Support Request Form (R)

Form EP-290006, Secondary Alarm Station Report (R)

General Regulatory Reporting Requirements List (GRRR List) (R)

# **Tools and Equipment Required:**

RERP Forms (above)

# **Initial Conditions:**

- You are the Control Room NLO.
- The plant is in a planned refueling outage.
- Radiation Protection, First Responder, and Site Nurse have responded to a medical emergency in the Reactor Water Cleanup (RWCU) Pump Room A.
- The first responder reports there is a contaminated injured man and is in urgent need of an ambulance and a paramedic.
- The injured man has a compound fracture of the right upper leg and has lost a large amount of blood.
- Radiation Protection has informed the Control Room that actions in Step 5.2.7 of EP-225, Radiological Medical Emergencies, are necessary for a contaminated injured man.
- Point Aux Peaux access is closed.

# Initiating Cue(s):

The SM directs you to request offsite assistance in accordance with EP-225, Radiological Medical Emergencies, and EP-290, Emergency Notifications.

# Terminating Cue(s):

Forms EP-290004, EP-290005, and EP-290006 complete and phone calls made. (RO / SRO) 8-hour reporting requirement is determined. (SRO)

# Task Standard:

Request for ambulance and hospital support is made in accordance with EP-225, Radiological Medical Emergencies. SRO identifies 10CFR50.72 reporting requirements.

JPM Title	No.:
	Revision:
	Page 4

# Licensed Operator Exam Information (required for NRC exams)

### Safety Function:

N/A

K/A Reference: (from NUREG 1123)

K/A SYSTEM: Generic

### K/A STATEMENT:

#### Maintenance Rule Safety Classification:

N/A

#### Maintenance Rule Risk Significant? (Yes or No)

No

JPM	Title
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# PERFORMANCE EVALUATION

Start Time					
ELEMENT	STANDARD				
CUE: Provide examinee with CUE S	heet.				
NOTE: When the candidate goes to W Support Request Form, hand	/eb Arms to retrieve the EP-290004, Ambulance/Paramedic him the blank copy.				
* 1. Complete Form EP-290004, Ambulance/Paramedic Support Request Form. * 1. Form EP-290004 is completed correctly.					
CUE: Inform the examinee to simula	te the phone call.				
CUE: For Step 9 of Form EP-290004 4 people will be arriving.	, inform the examinee that 2 vehicles with a total of				
<ol> <li>Complete Phone call to Frenchtown Rescue Squad.</li> </ol>	Township2. Phone call is complete.				
NOTE: Completion of forms EP-29000	05 & EP-290006 may be performed in any order.				
CUE: When the candidate goes to W Request, hand him the blank of	/eb Arms to retrieve the Form EP-290005, Hospital Support copy.				
CUE: Transport the injured person t	o the primary hospital.				
* <b>3</b> . Complete Form EP-290005, Hospita Request Form.	I Support <b>* 3</b> . Form EP-290005 is completed correctly.				
CUE: Inform the examinee to simula	te the phone call to the primary hospital.				
<ol> <li>Complete phone call to Mercy Memory Hospital.</li> </ol>	orial 4. Phone call is complete.				
CUE: When the candidate goes to W Station Report, hand him the b	/eb Arms to retrieve the Form EP-290006, Secondary Alarm blank copy.				
CUE: For Item 2 on Secondary Alarn and 2 people with the fire depa	CUE: For Item 2 on Secondary Alarm Station Report, there are 2 people with the ambulance and 2 people with the fire department rescue vehicle.				
CUE: For Item 5 on Secondary Alarn dock ramp door.	n Station Report, the location is Warehouse A loading				
* 5. Complete Form EP-290006, Second Station Report.	ary Alarm <b>* 5</b> . Form EP-290006 is completed correctly.				
CUE: Inform the examinee to simula	CUE: Inform the examinee to simulate the phone call.				
6. Complete phone call to Secondary A Station.	<ul><li>6. Complete phone call to Secondary Alarm Station.</li><li>4. Phone call is complete.</li></ul>				
RO portion concludes here.					

\* Critical Step

JPM Title	No.:
	Revision:
	Page 6

	ELEMENT	STANDARD			
CUE:	CUE: As CRS identify the appropriate reporting requirement. (SRO only).				
* <b>7</b> . Re	Review GRRR List. * 6. Identifies 8-hour reporting.				
CUE:	CUE: Terminate JPM when forms have been filled out, phone calls have been made, and GRRR List reviewed (SRO only).				

\_\_\_\_\_ SATISFACTORY \_\_\_\_\_ UNSATISFACTORY

Stop Time \_\_\_\_\_ \* Critical Step

JPM Title	No.:
	Revision:
	Page 7

#### **Evaluator Notes:**

ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

#### **Generic Notes and Cues:**

None

#### System Specific Notes and Cues:

N/A

#### **Task Performance and Cues:**

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

JPM Title		No.: Revision: Page 8
	FOLLOW-UP DOCUMENTATION Q	UESTIONS
Reason for fo	ollow-up question(s):	
Question:		
	Reference:	
Response:		
Question:		
	Reference	
Response:		

JPM Title	No.:
	Revision:
	Page 9

# Simulator Setup

IC#:

N/A

Malfunctions:				
Number	Title	Value	Delay	Ramp
N/A				
Remote Functions:				
Number	Title	Value	Delay	Ramp
N/A				
Override Functions:				
Number	Title	Value	Delay	Ramp
N/A				
Special Instructions:				

N/A

# Cue Sheet: (JP-OP-802-4101-435)

# **Initial Conditions:**

- You are the Control Room NLO.
- The plant is in a planned refueling outage.
- Radiation Protection, First Responder, and Site Nurse have responded to a medical emergency in the Reactor Water Cleanup (RWCU) Pump Room A.
- The first responder reports there is a contaminated injured man and is in urgent need of an ambulance and a paramedic.
- The injured man has a compound fracture of the right upper leg and has lost a large amount of blood.
- Radiation Protection has informed the Control Room that actions in Step 5.2.7 of EP-225, Radiological Medical Emergencies, are necessary for a contaminated injured man.
- Point Aux Peaux access is closed.

# Initiating Cue(s):

The SM directs you to request offsite assistance in accordance with EP-225, Radiological Medical Emergencies, and EP-290, Emergency Notifications.

Job Positi SRO	ion						No. JP-OP-80	2-4101-	443		R	evision 2
JPM Title	PM Title D			Duration Page								
Activate E	COS	S using	g a Phone				15 minu	tes*			1	
									*2 tim	ies D	uratic	on for ILO Exams
Examinee:								SRO	SRO			
Evaluator:												
JPM Type:			Normal / /	Alternate Pa	ath /	Time C	ritical	Start 7	Time _			
Evaluation	Meth	nod:	Perform /	Walkthroug	gh / E	Discuss		Stop 7	Time _			
Location:			Plant / Sin	nulator / Cla	assro	oom		Total	Time:			
			PE	RFORMANC	E EV	ALUAT	ION SUMMA	RY				
Element	S	U	Comment	Element	S	U	Comment	Eleme	ent	S	U	Comment
1.												
* 2.												
* 3.												
* 4.												
* 5.												
* 6.												
7.												
8.												
			ODE									

#### OPERATOR FUNDAMENTALS OBSERVATION Monitor operator fundamentals during the JPM set. Rate each area based on the criteria by placing a checkmark in the appropriate column. Indicate the comment number associated with the observation. **Opportunity for** Does not meet Comment Operator Meets all **Fundamental** Expectations Improvement Expectations Number Monitoring Control Conservatism Teamwork Knowledge

**OVERALL EVALUATOR COMMENTS:** 

\_\_\_\_ PASS \_\_\_\_\_ FAIL

Evaluator Signature / Date:

JPM Title	No.:
	Revision
	Page 2

# JPM Observation Criteria

Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations
Monitoring	Equipment status monitored at proper frequency, using multiple means if available. Understood which indications were critical.	Some monitoring was performed but undue focus on task or lack of system knowledge prevented ideal monitoring.	Did not recognize key equipment status indicators, too much focus on single indications and ignored total system status.
Control	Task preview used to prepare for job. Aware of control bands and maintained them. Configuration control maintained.	Adequate control of system maintained throughout task but some improvements could be made such as better manual control or greater depth of knowledge for anticipating system response.	No anticipation of results of actions. Unaware or control bands or not able to maintain them. Lack of knowledge of how to control system parameters.
Conservatism	Low threshold for identification of problems. Questioning attitude. Uses "stop when unsure" if needed. Sensitive to nuclear safety.	Some opportunities existed to question before proceeding, High focus on task completion without consideration for other system affects.	Proceeds even when unsure with unanswered questions. High threshold for problem conditions.
Teamwork	Routinely communicates system status changes to the team. Communicates actions before taking them.	Communicated most status and actions. Some improvement would be warranted.	Routinely takes action without informing the team.
Knowledge	Able to anticipate system response based on solid system knowledge. Good working knowledge of generic fundamentals to predict and monitor system response.	Plant, system, or generic fundamental knowledge has some gaps.	Unable to predict system response, unsure of generic fundamentals concepts related to plant operation. Only relied on procedure for operating knowledge.

JPM Title	No.:
	Revision
	Page 3

# **JPM Information**

#### System:

N/A

# Task:

9664 - Activate the Emergency Call Out System

**References:** Required (R) / Available (A)

EP-290, Emergency Notifications ECOS Activation (R)

#### **Tools and Equipment Required:**

Dummy telephone (not connected to phone line)

#### **Initial Conditions:**

- You are the Work Control Supervisor.
- It is back shift on a Saturday night.
- A Site Area Emergency (SS1) has been declared, and you have reported to the Main Control Room as requested by the Shift Manager.
- Initial notifications to County, State, and Ontario Provence have been completed.
- ECOS cannot be activated via the DCC Website.

# Initiating Cue(s):

The Shift Manager has directed you to activate ECOS using a phone in accordance with Enclosure E, of EP-290, Emergency Notifications.

# Terminating Cue(s):

The SAP Employee Number has been entered, and ECOS has been activated.

#### Task Standard:

ECOS is activated using a phone in accordance with Enclosure E, of EP-290, Emergency Notifications.

# Licensed Operator Exam Information (required for NRC exams)

#### Safety Function:

N/A

K/A Reference: (from NUREG 1123)

# K/A SYSTEM: Generic

# K/A STATEMENT:

2.4.43 Knowledge of emergency communications systems and techniques ------ 3.2 / 3.8

#### Maintenance Rule Safety Classification:

N/A

#### Maintenance Rule Risk Significant? (Yes or No)

N/A

JPM Title	No.:
	Revision
	Page 4
	•

# PERFORMANCE EVALUATION

Start Time					
	ELEMENT	STANDARD			
CUE: Pro for	Provide the examinee with the Cue Sheet. A copy of EP-290 should be made available for the examinee's use.				
1.[3.1.1] Numbe classifie	Have ready the applicable Scenario ID or from Table 1-1 for the corresponding cation.	<ol> <li>Obtains Scenario ID Number 3 from Table 1-1 of EP-290, Enclosure E.</li> </ol>			
NOTE: En:	sure the phone used for this JPM is not c	onnected to an actual phone line.			
CUE: After po	CUE: After a few seconds, announce "Welcome. Enter your User ID Number, followed by the pound sign."				
* <b>2</b> . [3.1.2] phone (615) 9	Call the Remote Scenario Activation number (800) 380-0407 or 86-3719.	* <b>2.</b> Dials (800) 380-0407 or (615) 986-3719.			
* <b>3</b> . [3.1.3] "65235	At the prompt for User ID, enter ", then press #.	* <b>3.</b> Enters 65235 followed by #.			
CUE: Afte	er a few seconds, announce "Enter your	Security PIN, followed by the pound sign."			
Wh	nen asked, the confidential Security PIN is	s <b>1234</b> .			
* <b>4</b> . [3.1.4] the con	At the prompt for Security PIN, enter fidential PIN number, then press #.	* <b>4</b> . Enters the 1234 followed by #.			
CUE: After sig	er a few seconds, announce "Enter the S Jn."	Scenario ID Number followed by the pound			
* <b>5</b> . [3.1.5] associa then pr	At the prompt for Scenario ID, enter the ated Scenario ID from Table 1-1, and ress #.	* 5. Enters 3 followed by #.			
CUE: Afte	er a few seconds, announce:				
"Li pa	sten to the following Options then pre d:	ss the appropriate number on the phone key			
Pre	ess 1 to listen to the current scenario i	nessage.			
Or to	Press 2 to re-record the scenario mes record and verify your message.	sage. The system will give instructions on how			
Or bui	Or Press 3 to start the scenario. When you hear the response, "The scenario is building", exit the program by pressing #.				
Or	Press 4 to return to the main menu."				
CUE: If C Are em	Option 1 (above) is selected, announce "T ea Emergency. Respond to the followi hergency response facility if you succe	The Emergency Director has declared a Site ng questions and immediately report to your essfully fill your position."			

JPM Title	No.:
	Revision
	Page 5

ELEMENT		STANDARD		
* 6. [3.1.6] Press the appropriate number on the phone key pad.		* <b>6</b> . Presses 3.		
CUE: After a few seconds, a	After a few seconds, announce "The Scenario is building."			
<ol> <li>[3.1.6] When the system re scenario is building," exit the pressing the # sign.</li> </ol>	eports that "the he program by	7. Presses # and hangs up the phone.		
CUE: After a few seconds, a	After a few seconds, announce "The Shift Manager's phone is ringing."			
When the examinee answers the phone, announce "Enter the last five digits of your SAP Employee Number followed by the pound sign."				
8. [4.2] Answer the call, and when prompted for the last five digits of your SAP Employee Number, enter 11111, then press #.		8. Enters 11111 followed by #.		
CUE: After a few seconds, a	After a few seconds, announce "ECOS has been activated."			
CUE: End JPM when the SA	End JPM when the SAP Employee Number has been entered, and ECOS has been activated.			

\_\_\_\_\_ SATISFACTORY

\_\_\_\_\_ UNSATISFACTORY

Stop Time

\* Critical Step

JPM Title	No.:
	Revision
	Page 6

#### **Evaluator Notes:**

# ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED AT ALL TIMES.

#### **Generic Notes and Cues:**

None

#### System Specific Notes and Cues:

None

#### Task Performance and Cues:

The Elements of this JPM are step by step in accordance with the procedure. The Standard is that the procedure is performed as written. The Cues are as listed above for indication or as each step is completed the appropriate information is reported to the examinee.

#### **Critical Steps:**

Critical Tasks are identified by asterisk (\*) and **bolded** steps on the cover sheet. Verify that the latest revision of the procedure is used and critical tasks are correctly identified.

# FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s): Question: Reference: Response: Question: Reference Response:

JPM Title	No.:
	Revision
	Page 8

# Simulator Setup

IC#:

N/A

Malfunctions:				
Number	Title	Value	Delay	Ramp
N/A				
Remote Functions:				
Number	Title	Value	Delay	Ramp
N/A				
Override Functions:				
Number	Title	Value	Delav	Ramp
N/A				•
Special Instructions:				
N/A				

# Cue Sheet: (JP-OP-802-4101-443)

# **Initial Conditions:**

- You are the Work Control Supervisor.
- It is back shift on a Saturday night.
- A Site Area Emergency (SS1) has been declared, and you have reported to the Main Control Room as requested by the Shift Manager.
- Initial notifications to County, State, and Ontario Provence have been completed.
- ECOS cannot be activated via the DCC Website.

# Initiating Cue(s):

The Shift Manager has directed you to Activate ECOS using a phone in accordance with Enclosure E of EP-290, Emergency Notifications.