

# JOB PERFORMANCE MEASURE (JPM)

SITE:	PRAIRIE ISLAND		
JPM TITLE:	DETERMINE IMPACT OF FIRE OUTSIDE THE CONTROL ROOM		
JPM NUMBER:	ADMIN-14	REV. 2	
RELATED PRA INFORMATION:	FIRE IN 715' AUXILIAR	( BUILDING	
TASK NUMBERS / TASK TITLE(S):	CRO 000 067 999 000		
K/A NUMBERS:	2.4.27		
APPLICABLE METHOD C	OF TESTING:		
	Discussion:	Simulate/walkthrough:	X Perform:
EVALUATION LOCATION	I: In-Plant:	Control Roon	n:
	Simulator:	X Other:	
	Lab:		
Time for Completio	n: <u>20</u> Minutes	Time Critica	al: <u>NO</u>
Alternate Path:	NO		
TASK APPLICABILITY:	SRO: X RO:	X NLO	
Additional site-specific sig	natures may be added as	desired.	
Developed by:	Bill Markha	am	03/14/07
	Develope		Date
Validated by:	Travis Our Validator		5/8/07 Date
	(See JPM Validation Check		
Approved by:			
	Training Supe	rvisor	Date

ADMIN-14, DETERMINE IMPACT OF FIRE OUTSIDE THE CONTROL ROOM, REV. 2

JPM Number:	ADMIN-14		
JPM Title:	DETERMINE IMPACT OF FIRE OUT		
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.

ADMIN-14, DETERMINE IMPACT OF FIRE OUTSIDE THE CONTROL ROOM, REV. 2

#### 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:**

- A fire is occurring in a cable tray in the Unit 1 Auxiliary Building 715'. (Fire Zone 19/Fire Area 59)
- The Unit 1 Reactor has just been tripped per Shift Supervisor direction.
- Fire fighting efforts are underway per F5.
- The Unit 1 LPEO is carrying out the actions of C47022-0611, Fire Detection Panel 121 Fire Alarm.
- You are an extra operator in the control room.

## **INITIATING CUES (IF APPLICABLE):**

• To determine the impact of the fire, the Unit 1 LPEO has directed you to PERFORM the actions of F5 Appendix D, for Fire Zone 19 (Fire Area 59), for Unit 1.

ADMIN-14, DETERMINE IMPACT OF FIRE OUTSIDE THE CONTROL ROOM, REV. 2

#### JPM PERFORMANCE INFORMATION

Required Materials:	F5 Appendix D
General References:	F5 Appendix D
Task Standards:	Make recommendations to Unit 1 SS IAW Unit 1 Area 59 instructions.

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)	Refer to F5 Appendix D, Step 2.1: When a fire is detected in a detection zone, refer to the zone and fire area description, affected equipment and alternative strategies. Using the information provided, determine the best course of action for a given fire.
Standard:	F5 Appendix D Step 2.1 referenced and examinee turns to Fire Zone 19, Fire area 59.
Evaluator Note:	Examinee may NOT read step 2.1 and go directly to Zone 19, Section 59. This is acceptable.
Evaluator Cue:	When asked, state "I am the Unit 1 SS, make your recommendations to me."
Performance: Comments:	

ADMIN-14, DETERMINE IMPACT OF FIRE OUTSIDE THE CONTROL ROOM, REV. 2			
Performance Step: Critical Y (SEQ-1)	Unit 1 Fire Area 59, Step A. Check failure of Turbine Stop Valves to Auto Close (CV-31182 and CV-31183).		
Standard:	Examinee should check the Turbine Stop Valves closed. When informed that they did not close, examinee should perform the RNO column and inform you that the Unit 1 turbine needs to be manually tripped from the Control Room.		
Evaluator Cue:	When asked, inform the examinee that the Turbine Stop Valves did NOT close. When the examinee tells you that the turbine needs to be tripped, inform the examinee that the turbine has been tripped from the Control Room panel push button.		
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌		
Comments:			

Performance Step:	Unit 1 Fire Area 59, Step B
Critical Y (SEQ-1)	Close MV-32195, 1 PRZR PORV ISOL A MV Close MV-32196, 1 PRZR PORV ISOL B MV Open BKR 112L-22 at MCC 1LA1-B3 Open BKR 122L-21 at MCC 1LA2-C3. Deenergize PNL 191 by opening breaker 18 at PNL 11.
Standard:	Deenergize PNL 162 by opening breaker 18 at PNL 16. Recommendation made to the Unit 1 SS to close BOTH PZR PORV Isolation Valves and turn off their breakers, and to deenergize PNL 191 and PNL 162.
Evaluator Cue:	Inform the examinee that these actions will be taken.
Performance: Comments:	SATISFACTORY 🗌 UNSATISFACTORY 🗌

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ADMIN-14, DETERMINE IMPACT OF FIRE OUTSIDE THE CONTROL ROOM, REV. 2				
Performance Step: Critical Y (SEQ-1)	From Zone 19, Unit 1 – Fire Area 59, Step C. Check RCS Pressure NOT decreasing in an uncontrolled manner.			
Standard:	Determine RCS pressure IS decreasing in an uncontrolled manner and recommend STOPPING 11 RCP and 12 RCP.			
Evaluator Cue:	When asked, inform the examinee that RCS pressure IS decreasing in an uncontrolled manner.			
	When asked, acknowledge the request to STOP 11 and 12 RCP and inform the examinee that these actions will be taken.			
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗍			
Comments:				

Terminating Cues: F5 Appendix D, Zone 19, Unit 1 – Steps A, B, and C complete. This JPM is complete.

Stop Time:

# TURNOVER SHEET

# **INITIAL CONDITIONS:**

- A fire is occurring in a cable tray in the Unit 1 Auxiliary Building 715'. (Fire Zone 19/Fire Area 59)
- The Unit 1 Reactor has just been tripped per Shift Supervisor direction.
- Fire fighting efforts are underway per F5.
- The Unit 1 LPEO is carrying out the actions of C47022-0611, Fire Detection Panel 121 Fire Alarm.
- You are an extra operator in the control room.

# **INITIATING CUES (IF APPLICABLE):**

• To determine the impact of the fire, the Unit 1 LPEO has directed you to PERFORM the actions of F5 Appendix D, for Fire Zone 19/Fire Area 59), for Unit 1.

# **ATTACHMENT 1**

# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

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

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date

Committed to Nuclear Excellence	JOB PERFORMA	NCE MEASU	IRE (JPM)		
SITE:	PRAIRIE ISLAND				
JPM TITLE:	TAKE ACTIONS FOR A	FIRE DETEC	CTOR OUT OF	SERVICE	
JPM NUMBER:	ADMIN-7S	REV.	5		
RELATED PRA INFORMATION:	NONE				
TASK NUMBERS / TASK TITLE(S):	CRO 086 ATI 007				
K/A NUMBERS:	2.1.20				
APPLICABLE METHOD O	F TESTING:				
EVALUATION LOCATION	Discussion:	Simulate/w	alkthrough: [ Control Room: Other:	Perform:	X
Time for Completion	n: <u>20</u> Minutes		Time Critical:	NO	
Alternate Path:	NO				
TASK APPLICABILITY: Additional site-specific sign	SRO: RO: RO:				7
Developed by:	Bill Markh			03/14/07	_
Volidated bur	Develope			Date	
Validated by:	Travis Ou Validator	•		05/08/07 Date	-
Approved by:	See JPM Validation Check		ent 1)		
	Training Supe	rvisor		Date	

Retention: Life of Plant Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ADMIN-7S, TAKE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5

JPM Number:	Admin-7S		
JPM Title:	Take Compensatory Actions	s for a Fire Detector out	t of Service
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.

ADMIN-7S, TAKE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, 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:**

• You are the Unit 1 Lead.

## **INITIATING CUES (IF APPLICABLE):**

• 47022-0611, FIRE DETECTION PANEL FP121 FIRE ALARM was just received. Respond to the alarm.

ADMIN-7S, TAKE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5

#### JPM PERFORMANCE INFORMATION

Required Materials:	None
General References:	C47022-0611, ARP, Fire Detection Panel Alarm C31, Fire Protection & Detection Systems F5 Appendix K, Fire Detection and Protection Systems
Task Standards:	Fire Protection Support Group notified. A Fire Watch MUST be directed to the area within 1 hour of detector failure.
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 Regualification Program Examinations.

NOTE	Steps to take a fire detector OOS are in 3 procedures. There is some overlap of steps, example- calling the Fire Protection group, placing the zone in bypass, establishing a Fire Watch. These may be done in any logical order.
Performance Step: Critical Y (SEQ-1)	ARP 47022-0611 Step 1. <b>Determine</b> the affected Zone in alarm by observing the fire detection panels <b>FP121</b> thru <b>FP126</b> in the control room.
Standard:	Examinee determines Zone 1 is in alarm.
Performance:	
Comments:	

	E ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5
Performance Step: Critical (SEQ-1)	ARP 47022-0611 Step 2. <b>Announce</b> over the plant page: "Turbine Building Operator, we have a fire alarm, call the Control Room"
Standard:	Examinee makes announcement over plant page system for the Turbine Building Operator.
Evaluator Cue:	As the Turbine Building Operator, inform the examinee: "I will investigate the fire alarm."
Performance:	
Comments:	
Performance Step: Critical (SEQ-1)	ARP 47022-0611 Step 3. IF additional symptoms of a High Energy Line Break are present, THEN refer to F9, HIGH ENERGY LINE BREAK/ LEAK.
-	
Critical (SEQ-1)	present, <u>THEN</u> refer to F9, HIGH ENERGY LINE BREAK/ LEAK. Examinee determines that a High Energy Line Break do NOT exist from an absence of Control Board alarms and/or from contacting the Turbine Building
Critical (SEQ-1)	present, <u>THEN</u> refer to F9, HIGH ENERGY LINE BREAK/ LEAK. Examinee determines that a High Energy Line Break do NOT exist from an absence of Control Board alarms and/or from contacting the Turbine Building Operator. If contacted as the Turbine Building Operator, state that you do NOT
Critical (SEQ-1)	present, <u>THEN</u> refer to F9, HIGH ENERGY LINE BREAK/ LEAK. Examinee determines that a High Energy Line Break do NOT exist from an absence of Control Board alarms and/or from contacting the Turbine Building Operator. If contacted as the Turbine Building Operator, state that you do NOT

Performance Step: Critical Y (SEQ-1)	ARP 47022-0611 Step 4. <u>WHEN</u> the Turbine Building Operator(s) call in, <u>THEN</u> <b>inform</b> them of the affected area(s) of the plant including the zone numbers.
Standard:	Examinee informs Turbine Building Operator of the alarm in Zone 1.
Evaluator Cue:	As the Turbine Building Operator, inform the examinee: "There is no fire, but Electricians who are working in the 11 Battery Room accidentally broke one ion fire detector."
Performance: Comments:	

ADMIN-7S, TAKE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5	
Performance Step: Critical (SEQ-1)	ARP 47022-0611 Step 5. IF a malfunctioning detector causes the alarm, <u>OR</u> the alarm is valid, but there is no fire, <u>THEN</u> <b>go</b> to subsequent ACTIONS Step 2.
Standard:	Examinee goes to Subsequent Actions Step 2 of ARP 47022-0611.
Performance: Comments:	

Performance Step: Critical Y (SEQ-2)	ARP 47022-0611 Subsequent Actions Step 2. <u>IF</u> the alarm is caused by a malfunctioning detector, <u>OR</u> the alarm is valid, but there is no fire, <u>THEN</u> : A. <b>Notify</b> the Fire Protection Support Group (x4959)
Standard:	Examinee informs Fire Protection Support Group of detector failure.
Evaluator Note:	Do not allow the Examinee to make the call to 4959.
Evaluator Cue:	As the Fire Protection Support Group acknowledge the detector failure and inform the examinee that you will investigate and write a Work Order.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	

Performance Step: Critical (SEQ-2)	<ul> <li>ARP 47022-0611 Section 2, Step 2 <u>IF</u> the alarm is caused by a malfunctioning detector, <u>OR</u> the alarm is valid, but there is no fire, <u>THEN</u>:</li> <li>B. <b>Bypass</b> the affected zone(s) alarm per C31, FIRE PROTECTION AND DETECTION SYSTEMS.</li> </ul>
Standard:	Examinee goes to C31 section 5.26.1
Performance: Comments:	SATISFACTORY 🗌 UNSATISFACTORY 🗌

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ADMIN-7S, TA	KE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5
Performance Step: Critical (SEQ-2)	<ul> <li>C31 section 5.26.1</li> <li>A. Notify the Fire Protection Support Group of the Zone being removed from service (x4959)</li> </ul>
Standard:	If the Fire Protection Group has NOT been notified, THEN notifies the Fire Protection Group and informs them of the detector being taken out of service.
Evaluator Cue:	As the Fire Protection Group, acknowledge the bypassing of Zone 1 due to the broken detector.
Performance: Comments:	
Performance Step: Critical (SEQ-2)	<ul> <li>C31 section 5.26.1</li> <li>B. Refer to F5 Appendix K, Section 4.1, Fire Detection and Instrumentation, for compensatory requirements.</li> </ul>
Standard:	This is a SS step, no actions required.
Evaluator Note:	This is a SS step
Evaluator Cue:	Inform the student that you will perform this step.
Performance: Comments:	

Performance Step: Critical Y (SEQ-3)	<ul><li>C31 section 5.26.1</li><li>C. For the affected Zone, Lift the cover and place the toggle switch in the UP position.</li></ul>
Standard:	Examinee lifts the cover and places the toggle switch in the UP position for Zone 1.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

ADMIN-7S, TAKE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5	
Performance Step: Critical (SEQ-3)	C31 section 5.26.1 D. <b>Place</b> a yellow "ZONE IN B-P" tag on the toggle switch for the affected zone.
Standard:	Examinee places a yellow "ZONE IN B-P" tag on the toggle switch for Zone 1.
Performance:	
Comments:	
Performance Step: Critical (SEQ-3)	C31 section 5.26.1 E. <b>Log</b> the bypassed zone in the appropriate Reactor Log and Turnover Log.
Standard:	Examinee mentions to evaluator that logging is required for the zone in bypass in both the Reactor Log and the Turnover Log.
Evaluator Cue:	Inform the examinee that the other operator will address logging.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	
Performance Step: Critical Y (SEQ-4)	<ul><li>ARP 47022:0611 Subsequent Actions, Step 2.c</li><li>C. Reset the Fire Detection Panel.</li></ul>
Standard:	If not already done in C31, examinee places Zone 1 in bypass and resets fire panel
Evaluator Note:	Examinee resets the Fire Detection Panel and clears alarm 47022:0611.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	

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ADMIN-7S, TAK	E ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5
Performance Step: Critical (SEQ-4)	<ul> <li>ARP 47022:-0611 Subsequent Actions, Step 3., <u>IF</u> it is necessary to place a zone in bypass due to a malfunctioning detector or other circuit problems, <u>OR</u> a valid alarm with no fire, <u>AND</u> the zone is safety related per F5 Appendix K, table 1, <u>THEN</u> <b>perform</b> the following:</li> <li>Log the affected zone out of service in the appropriate R.O. Log.</li> <li>Update The Shift Turnover Log.</li> </ul>
Standard:	If not already done the logs will be updated
Evaluator Cue:	The other operator will address the logging.
Performance: Comments:	

Performance Step: Critical (SEQ-4)	<ul> <li>C47022:-0611- Subsequent Actions, Step 3, continued.</li> <li>Establish fire watch requirements per section 4.1, Fire Detection Instrumentation, <u>AND</u> 4.8, Penetration Fire Barriers, of F5 APPENDIX K.</li> </ul>
Standard:	Examinee informs SS to establish a fire watch
Evaluator Cue:	Inform the examinee that the Fire Watch will be set.
Performance:	
Comments:	

Terminating Cues: When the Fire Watch is established for Zone 1. This JPM is complete.

Stop Time:

ADMIN-7S, TAKE ACTIONS FOR A FIRE DETECTOR OUT OF SERVICE, REV. 5

# JPM SETUP INFORMATION

### Instructor Actions Prior to JPM Administration:

o This JPM may be conducted at any stable IC and may be done in parallel with other JPM's.

### Simulator Setup:

Insert the following

Relative Order	Туре	Code	Severity/ Value	Event Trigger	TITLE
1	Remote Function	CH121	1		Fire Alarm Zone 1

# **TURNOVER SHEET**

# **INITIAL CONDITIONS:**

• You are the Unit 1 Lead.

# INITIATING CUES (IF APPLICABLE):

• 47022-0611, FIRE DETECTION PANEL FP121 FIRE ALARM was just received. Respond to the alarm.

### **ATTACHMENT 1**

### JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

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

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date



# JOB PERFORMANCE MEASURE (JPM)

SITE:	PRAIRIE ISLAND	
JPM TITLE:	PERFORM REACTOR COOLANT SYS	STEM LEAKAGE INVESTIGATION
JPM NUMBER:	ADMIN-40 REV.	0
RELATED PRA INFORMATION:	NONE	
TASK NUMBERS / TASK TITLE(S):	CRO 002 999 00 00 000	
K/A NUMBERS:	2.2.12	
APPLICABLE METHOD C	OF TESTING:	
	Discussion: Simulate/wa	Ikthrough: X Perform:
EVALUATION LOCATION	I: In-Plant:	Control Room:
	Simulator: X	Other: X
	Lab:	
Time for Completio	n:20 Minutes	Time Critical: NO
Alternate Path:	NO	
TASK APPLICABILITY:	SRO: X RO: X NL	0
Additional site-specific sig	natures may be added as desired.	
Developed by:	Bill Markham	03/7/07
	Developer	Date
Validated by:	Travis Ouret	05/09/07
	Validator	Date
	(See JPM Validation Checklist, Attachmer	nu 1)
Approved by:		
	Training Supervisor	Date

ADMIN-40, PERFORM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0

JPM Number:	ADMIN-40	
JPM Title:	PERFORM REACTOR COOLANT SYSTEM LEAK	
Examinee:	Evaluato	or:
Job Title:	Dat	te:
Start Time	Finish Tin	ne
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.

ADMIN-40, PERFORM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0

#### 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:**

- You are a Reactor Operator on the Relief Crew.
- SP1001AA, Daily Reactor Coolant System Leakage Test has just been completed.
- Unidentified Leakage is 0.70 gpm.

### INITIATING CUES (IF APPLICABLE):

• The Shift Supervisor directs you to complete SP1001AAA, Reactor Coolant System Leakage Investigation.

ADMIN-40, PERFORM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0

### JPM PERFORMANCE INFORMATION

Required Materials:	SP1001AAA, Reactor Coolant System Leakage Investigation ERCS computer Calculator
	Unit 1 Tank Book
General References:	SP1001AAA, Reactor Coolant System Leakage Investigation, with 0.70 entered as RCS Unidentified Leakage from SP1001AA.
Task Standards:	Determine that 11 Letdown Heat Exchanger drain valve leaking is the cause of the elevated leak rate.

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 Regualification Program Examinations.

Performance Step: Critical (SEQ-1)	STEP 7.1.1 – Manually pump RCDT down to 12%.
Standard:	Level is at 12%.
Evaluator Cue:	When level indication is located, then inform examinee that the RCDT was just pumped down to 12%.
Performance:	
Comments:	

ADMIN-40, PERFORM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0

Performance Step: Critical (SEQ-1)	<ul> <li>Step 7.1.2 Perform initial recording</li> <li>Record initial RCDT level using ERCS (1L0150A).</li> <li>Time initial RCDT level reading recorded.</li> </ul>
Standard:	Examinee locates ERCS RCDT level and records level as 12% and records 54 gallons (50-60 gallons is the acceptable range) and the current time.
Evaluator Cue:	When student locates initial RCDT level on ERCS, inform them that level is 12%
Performance: Comments:	SATISFACTORY  UNSATISFACTORY
Performance Step: Critical (SEQ-1)	Step 7.2.1 If PRT level is greater than 72% then reduce level to less than 72%.

Standard:	Student should use ERCS indication at this time to determine level is 69%.
Evaluator Note:	Student should perform sections 7.1, 7.2, and 7.3 in parallel as per the note on the top of page 5 of 16.
Evaluator Cue:	If the examinee is not continuing after beginning section 7.1, then inform the examinee to continue with sections 7.2 and 7.3 per the note. Inform examinee that level in the PRT was just determined to be at 69%.
Performance: Comments:	

Performance Step: Critical (SEQ-1)	<ul> <li>Perform initial recording per step 7.2.2:</li> <li>Record initial PRT level using ERCS (1L0485A).</li> <li>Time initial PRT level reading recorded.</li> </ul>	
Standard:	Examinee locates PRT ERCS level indication and records level and the time.	
Evaluator Cue:	When PRT level indication is located, inform examinee that PRT level is 69% and using the Unit 1 Tank Book, records 4450 gallons. (4400-4500 is the acceptable range)	
Performance:		
Comments:		
Performance Step: Critical (SEQ-1)	Step 7.3.1, If NAST level is greater than 12%, then reduce level to 12%.	
Standard:	Examinee should locate ERCS NAST level at this time and determine level to	

Evaluator Cue:	When NAST level is located, inform examinee than NAST level is 12%.

Performance:	SATISFACTORY	UNSATISFACTORY	
Performance:	SATISFACTORY	] UNSATISFACTORY	[

be 12%.

Comments:

Performance Step: Critical (SEQ-1)	<ul> <li>Perform initial recording per step 7.3.2</li> <li>Record initial NAST level using ERCS point 1L3003A or call for local indication (LIC-1019A/B)</li> <li>Time initial NAST level was recorded.</li> </ul>
Standard:	Examinee locates ERCS indication and records 12% and the time.
Evaluator Cue:	When NAST indication is located, inform examinee that NAST level is 12%.
Performance: Comments:	

Performance Step: Critical (SEQ-1)	Step 7.1.3 and Step 7.3.3 Monitor RCDT and NAST level rise until one of the following occurs: One (1) hour period or level has increased to 45%.	
Standard:	Examinee initials for one (1) hour period has elapsed.	
Evaluator Cue:	Inform the examinee that 1 hour has elapsed.	
Performance:		
Comments:		

Performance Step: Critical (SEQ-1)	Perform final recording for steps 7.1.4 and 7.3.4.
Standard:	Examinee records final values (RCDT 13% and NAST 28%) and records the elapsed time as 60 minutes in each case.
Evaluator Note:	Steps 7.1.3 and 7.1.4 require the examinee to monitor the level rise in the RCDT and the NAST for 1 hour or until level reaches a certain value. The PRT requires 2 hours and will not be recorded at this time.
Evaluator Cue:	When the examinee has initialed step 7.1.3 inform them that the final readings are: RCDT level = 13% NAST level = 28%
Performance: Comments:	

ADMIN-40, PERFORM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0			
Performance Step:	Determine leakage rates into the RCDT for steps 7.1.4.		
Critical Y (SEQ-2)	Determine leakage rates into the KODT for Steps 7.1.4.		
Standard:	Examinee determines the following leakage rates into the tanks:		
	RCDT = An increase from 12 to 13% is approximately 3 gallons or .05 gpm.		
	(accept 0.0 gpm to 0.08 gpm)		
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌		
Comments:			
Performance Step:	Step 7.1.5 – If Step 7.1.4 indicates greater than or equal to 0.1 gpm into the		
Critical (SEQ-3)	RCDT, THEN perform Table 1. Otherwise N/A this step.		
Standard:	Student N/A's this step.		
Performance:	SATISFACTORY 🗍 UNSATISFACTORY 🗍		
Comments:			
Performance Step: Critical (SEQ-3)	Step 7.1.6– Record RCDT identified leakage rate on cover page.		
Critical (SEQ-3)			
Standard:	Student records 0.0 – 0.08 gpm on the cover page.		
D (			
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌		
Comments:			
Comments:			
Performance Step:	Step 7.3.4 – Student records final level and then calculates leakage rate into		
	Step 7.3.4 – Student records final level and then calculates leakage rate into the NAST.		
Performance Step: Critical Y (SEQ-2)	the NAST.		
Performance Step:	•		
Performance Step: Critical Y (SEQ-2)	the NAST. Student determines that the NAST has the following change: An increase		
Performance Step: Critical Y (SEQ-2)	the NAST. Student determines that the NAST has the following change: An increase from 12 to 28% is 16% x 2.32 gals/% = 37.12 gallons / 60 minutes = .618 gpm.		
Performance Step: Critical Y (SEQ-2)	the NAST. Student determines that the NAST has the following change: An increase from 12 to 28% is 16% x 2.32 gals/% = 37.12 gallons / 60 minutes = .618 gpm.		

Comments:

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ADMIN-40, PERFORM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0			
Performance Step: Critical Y (SEQ-3)	Step 7.3.5 – If Step 7.3.4 indicates greater than or equal to 0.1 gpm into the NAST, THEN perform Table 3. Otherwise N/A this step.		
Standard:	Examinee determines that performance of Table 3 is required.		
Performance:			
Comments:	ents:		
Performance Step: Critical (SEQ-4)	Table 3 – Student calls the Auxiliary Building Operator to check items A and B.		
Standard:	Examinee contacts Auxiliary Building Operator to walkdown items A-B.		
Evaluator Cue:	Notify examinee as the Aux Building Operator that the Charging Pump drains are not leaking.		
Performance:			
Comments:			

RM REACTOR COOLANT SYSTEM LEAKAGE INVESTIGATION, REV. 0
Table 3 – Student calls the Auxiliary Building Operator to check items C-U
Examinee contacts Auxiliary Building Operator to walkdown items C-U. The 11 Letdown Heat Exchanger will be found with a drain valve open a half a turn which will be closed. NAST level will then be stable.
If asked, notify the examinee as the Shift Supervisor that the 11 Letdown Heat Exchanger was recently worked on. If asked to investigate the condition of the 11 Letdown Heat Exchanger, as the Aux Building Operator, notify the examinee that you found a drain valve to the NAST that was a half turn open and it
has now been closed. If asked about the trend of NAST level, inform the examinee that NAST level is now stable.
SATISFACTORY 🗌 UNSATISFACTORY 🗌

Terminating Cues:	When student has performed Table 3, and you have informed him that the 11 Letdown Heat Exchanger is the source of the leakage, the JPM is complete.

Stop Time:

# **TURNOVER SHEET**

### **INITIAL CONDITIONS:**

- You are a Reactor Operator on the Relief Crew.
- SP1001AA, Daily Reactor Coolant System Leakage Test has just been completed.
- Unidentified Leakage is 0.70 gpm.

### **INITIATING CUES (IF APPLICABLE):**

• The Shift Supervisor directs you to complete SP1001AAA, Reactor Coolant System Leakage Investigation.

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

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date



JOB PERFORMANCE MEASURE (JPM)

SITE:	PRAIRIE ISLAND		
JPM TITLE:	DETERMINE THE TIME OPERATIONS	TO BOILING DURING REDU	ICED INVENTORY
JPM NUMBER:	ADMIN-43	REV. 0	
RELATED PRA INFORMATION:	NONE		
TASK NUMBERS / TASK TITLE(S):	CRO 005 ATI 010		
K/A NUMBERS:	2.1.20		
APPLICABLE METHOD	OF TESTING:		
	Discussion:	Simulate/walkthrough:	Perform: X
EVALUATION LOCATIO	N: In-Plant:	Control Room:	
	Simulator:	Other:	X
	Lab:		
Time for Completi	on: <u>10</u> Minutes	Time Critical:	NO
Alternate Path:	NO		
TASK APPLICABILITY	SRO: X RO:	X NLO	
Additional site-specific si	gnatures may be added as	desired.	
Developed by:	Bill Markha	am	4/7/07
	Develope		Date
Validated by:	Travis Our		5/8/07
	Validator (See JPM Validation Check		Date
		·	
Approved by:			
	Training Supe	rvisor	Date

ADMIN-43, DETERMINE THE TIME TO BOILING DURING REDUCED INVENTORY OPERATIONS, REV. 0

JPM Number:	ADMIN-43		
JPM Title:	DETERMINE THE TIME TO E OPERATIONS	BOILING DURING RI	EDUCED INVENTORY
Examinee:		Evaluat	or:
Job Title:		Da	te:
Start Time		Finish Ti	me
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.

ADMIN-43, DETERMINE THE TIME TO BOILING DURING REDUCED INVENTORY OPERATIONS, REV. 0

### ..\_..

# 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:**

- It is November 19, 2006 at 1200.
- Unit 2 is in a refueling outage.
- During the shutdown, the Unit 2 Reactor was manually tripped on November 14 at 2000.
- Inventory Integrity is set.
- The crew is implementing 2C1.6, Shutdown Operations.
- Reactor Vessel level is 1 foot below the Reactor Vessel Flange.
- Maintenance has requested to have the personnel airlock open to move equipment. During the equipment movement, it will take 20 minutes to close the airlock.

### **INITIATING CUES (IF APPLICABLE):**

- The Unit 1 SS directs you to:
  - Determine a current Time To Boiling in accordance with step 5.2.3 of 2C1.6.
  - Determine if Maintenance will be allowed to move equipment in accordance with C19.10, Containment Airlock Door Control At Shutdown, Limitation 4.3.

ADMIN-43, DETERMINE THE TIME TO BOILING DURING REDUCED INVENTORY OPERATIONS,

REV. 0

### JPM PERFORMANCE INFORMATION

Required Materials:	2C1.6 Figure C1-32.
	C19.10
General References:	2C1.6
	Figure C1-32.
	C19.10
Task Standards:	Determine time to boiling. Do NOT allow maintenance to move equipment.

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 Regualification Program Examinations.

Performance Step: Critical Y (SEQ-1)	Perform Step 5.2.3 of 2C1.6 – Calculate the hours after trip required on Figure C1- 32.
Standard:	Hours after trip is calculated to be 112 hours.
Performance:	
Comments:	
Performance Step: Critical Y (SEQ-1)	Using Figure C1-32, determine the time to boiling.
	Using Figure C1-32, determine the time to boiling. Determines time to boiling to be 13 to 14 minutes.
Critical Y (SEQ-1)	

QF-1075-01 Rev. 1 (FP-T-SAT-75) Page 5 of 7	
ADMIN-43, DETERMINE TI	HE TIME TO BOILING DURING REDUCED INVENTORY OPERATIONS,
	REV. 0
Performance Step: Critical Y (SEQ-2)	Determine that Maintenance is NOT allowed to move equipment.
Standard:	Report that time to boiling is 13-14 minutes and airlock equipment closure is 20 minutes, thus Maintenance will NOT be allowed to move equipment
Evaluator Note:	C19.10, Limitation 4.3 provides the basis for this decision.
Performance:	
Comments:	
Terminating Cue:	When candidate informs the SS of the current time to boiling, and that
	Maintenance should not be allowed to move equipment. This JPM is complete.

Stop	Time:	
------	-------	--

# TURNOVER SHEET

### **INITIAL CONDITIONS:**

- It is November 19, 2006 at 1200.
- Unit 2 is in a refueling outage.
- During the shutdown, the Unit 2 Reactor was manually tripped on November 14 at 2000.
- Inventory Integrity is set.
- The crew is implementing 2C1.6, Shutdown Operations. Reactor Vessel level is 1 foot below the Reactor Vessel Flange.
- Maintenance has requested to have the personnel airlock open to move equipment. During the equipment movement, it will take 20 minutes to close the airlock.

## **INITIATING CUES (IF APPLICABLE):**

- The Unit 1 SS directs you to:
  - Determine a current Time To Boiling in accordance with step 5.2.3 of 2C1.6.
  - Determine if Maintenance will be allowed to move equipment in accordance with C19.10, Containment Airlock Door Control At Shutdown, Limitation 4.3.

# **ATTACHMENT 1**

## JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

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

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date



# JOB PERFORMANCE MEASURE (JPM)

SITE:	PRAIRIE ISLAND		
JPM TITLE:	AUTHORIZE EMERGEN	CY RADIATION EXPOSURE	
JPM NUMBER:	ADMIN-37	REV. 1	
RELATED PRA	NONE		
INFORMATION:	SS 344 023 03 03 000		
TASK NUMBERS / TASK TITLE(S):			
K/A NUMBERS:	2.3.4		
APPLICABLE METHOD	OF TESTING:		
	Discussion:	Simulate/walkthrough:	Perform: X
EVALUATION LOCATION	N: In-Plant:	Control Room:	
	Simulator:	Other:	X
	Lab:		
Time for Completion	on: <u>15</u> Minutes	Time Critical:	NO
Alternate Path:	NO		
TASK APPLICABILITY:	SRO: X RO:	NLO	
Additional site-specific sig	gnatures may be added as c	desired.	
Developed by:	Bill Markha	m	3/14/07
	Developer		Date
Validated by:	Travis Our	et	05/08/07
	Validator (See JPM Validation Checkl		Date
		isi, Allaunment I)	
Approved by:	Tasiaia a Orazon		Data
	Training Super	VISUI	Date

QF-1075-01 Rev. 1 (FP-T-SAT-75)

ADMIN-37, AUTHORIZE EMERGENCY RADIATION EXPOSURE, REV. 1

JPM Number:	ADMIN-37		
JPM Title:	AUTHORIZE EMERGENCY RADI	ATION EXPOSURE	
Examinee:		Evaluator:	
Job Title:		Date:	
Start Time		Finish Time	
PERFORMANCE	RESULTS: SA	NT:	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.

ADMIN-37, AUTHORIZE EMERGENCY RADIATION EXPOSURE, 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:**

- You are the Emergency Director.
- A Large Break LOCA is in progress in Unit 1.
- One operator and one Radiation Protection technician have volunteered to conduct a search and rescue operation for an operator who last called from the 695' level of Unit 2 containment.
- Dose rates in Containment range between 75 and 100 REM/hr.
- Each person is expected to receive a dose of 50 REM during the course of the rescue.
- The attached PINGP 600 is presented to you for approval.

#### **INITIATING CUES (IF APPLICABLE):**

 As Emergency Director, complete Part 1 of the PINGP 600, Emergency Exposure Authorization Form, for Mike Smith and John Jones in accordance with F3-12, Section 8.0. QF-1075-01 Rev. 1 (FP-T-SAT-75)

ADMIN-37, AUTHORIZE EMERGENCY RADIATION EXPOSURE, REV. 1

#### JPM PERFORMANCE INFORMATION

Required Materials:	PINGP 600, with the first 3 steps completed, for both Mike Smith and John Jones. Additionally, Page 2 is completed for each individual F3-12 Emergency Exposure Control F3-11, Search and Rescue
General References:	F3-12 Emergency Exposure Control
	F3-11 Search and Rescue
Task Standards:	Mike Smith is authorized to receive exposure, John Jones is NOT authorized to receive exposure.

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 Regualification Program Examinations.

Performance Step: Critical (SEQ-1)	Verify neither person is a woman capable of reproduction.
Standard:	Step 4.1 marked initialed. If desired, the examinee might make a note that both workers are male.
Evaluator Cue:	IF asked, reply "both are male."
Performance:	
Comments:	

Performance Step: Critical Y (SEQ-1)	Verify neither individual has received an emergency exposure before.
Standard:	Candidate determines Mike Smith has not had an emergency exposure and initials step 4.2 Candidate determines John Jones HAS HAD an emergency exposure and discontinues PINGP 600.
Evaluator Note:	IF Candidate determines John Jones CANNOT be authorized, it is acceptable to not continue with his PINGP 600.
Evaluator Cue:	IF asked who has had an emergency exposure in the past, as the Radiation Protection Manager state "Mike Smith has not had an emergency exposure, but John Jones received a 71 REM emergency dose in 1991." IF directed to find someone else, state "I will find another volunteer."
Performance: Comments:	

Performance Step: Critical (SEQ-1)	Verify dose rate in area is known/measurable.
Standard:	Refers to turnover sheet and determines that dose rates in containment are 75-100 Rem/hour and initials step 4.3.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	
Performance Step: Critical (SEQ-1)	Verify individual is a radiation worker or professional rescue person.
Standard:	Based on initial conditions, initials step 4.4.
Evaluator Cue:	IF asked, reply "Personnel are qualified radiation workers."
Derfermenten	
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

ADMIN-37, AUTHORIZE EMERGENCY RADIATION EXPOSURE, REV. 1

ADMIN-37, AUTHORIZE EMERGENCY RADIATION EXPOSURE, REV. 1		
Performance Step: Critical (SEQ-1)	Verify individual is broadly familiar with radiological consequences of exposure.	
Standard:	Initials step 4.5 based on page 2 of PINGP 600 is completed and signed.	
Evaluator Cue:	IF asked, reply "Personnel are familiar with the consequences of the exposure."	
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌	
Comments:		
Performance Step: Critical (SEQ-1)	Recognizes exposure not due to protection of property or medical/decontamination.	
Standard:	Refers to initial conditions and determines that this is a lifesaving mission and initials 4.6.	

Performance:	SATISFACTORY	UNSATISFACTORY

Comments:	

Performance Step: Critical Y (SEQ-1)	Determines expected dose is to save Human Life and verifies both are volunteers.
Standard:	Refers to initial conditions and statement on Page 2 they are volunteers. Checks 4.7, 4.7.1 and 4.7.3, marks 4.7.2 N/A or blank
Performance: Comments:	SATISFACTORY 🗌 UNSATISFACTORY 🗌

ADMIN-37, AUTHORIZE EMERGENCY RADIATION EXPOSURE, REV. 1

Performance Step: Critical (SEQ-1)	Determines Authorized Limit
Standard:	Determines that authorized limit is 50 rem per individual.
Evaluator Cue:	If asked, state that plant management has required that the authorized limit will be 50 rem per individual.
Performance: Comments:	

Performance Step: Critical Y (SEQ-1)	Authorizes emergency exposure for Mike Smith ONLY.
Standard:	PINGP 600 for Mike Smith is signed by the ED on Page 1.
Performance:	
Comments:	

Terminating Cues: When both PINGP 600's are returned to the evaluator. This JPM is Complete.

Stop Time:

# TURNOVER SHEET

#### **INITIAL CONDITIONS:**

- You are the Emergency Director.
- A Large Break LOCA is in progress in Unit 1.
- One operator and one Radiation Protection technician have volunteered to conduct a search and rescue operation for an operator who last called from the 695' level of Unit 2 containment.
- Dose rates in Containment range between 75 and 100 REM/hr.
- Each person is expected to receive a dose of 50 REM during the course of the rescue.
- The attached PINGP 600 is presented to you for approval.

## **INITIATING CUES (IF APPLICABLE):**

• As Emergency Director, complete Part 1 of the PINGP 600, Emergency Exposure Authorization Form, for Mike Smith and John Jones in accordance with F3-12, Section 8.0.

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

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date



# JOB PERFORMANCE MEASURE (JPM)

SITE:	PRAIRIE ISLAND		
JPM TITLE:	EMERGENCY CLASSIFICATION OF A SECURITY EVENT		
JPM NUMBER:	ADMIN-41	REV. 0	
RELATED PRA INFORMATION:	NONE		
TASK NUMBERS / TASK TITLE(S):	SS 344 023 03 03 000		
K/A NUMBERS:	2.4.41		
APPLICABLE METHOD	OF TESTING:		
	Discussion: Si	mulate/walkthrough:	Perform: X
EVALUATION LOCATION	I: In-Plant:	Control Room:	
	Simulator:	Other:	X
	Lab:		
Time for Completio	n: <u>15</u> Minutes	Time Critical:	YES
Alternate Path:	NO		
TASK APPLICABILITY: SRO: X RO: NLO			
Additional site-specific sig	natures may be added as desi	red.	
Developed by:	Bill Markham		3/7/07 Date
	Developer		Date
Validated by:	Travis Ouret		5/8/07
	Validator		Date
	(See JPM Validation Checklist,	Attachment 1)	
Approved by:			
	Training Superviso	pr	Date

JPM Number:	ADMIN-41
JPM Title:	EMERGENCY CLASSIFICATION OF A SECURITY EVENT
Examinee:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE F	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.

#### 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:**

- You are the Unit 2 Shift Supervisor
- Both Units are at 100% power.
- Security has just informed you that a hostile force has entered the plant and barricaded themselves in the Auxiliary Feedwater Pump room.

#### **INITIATING CUES (IF APPLICABLE):**

- You are directed to classify this event per F3-2, Classifications of Emergencies, <u>AND</u> deliver the completed PINGP 577 to the SEC for communication.
- This JPM is time critical.

NOTE: RECORD THE START TIME ON THE NEXT PAGE AS THE TIME WHEN THE STUDENT TELLS YOU HE IS READY TO BEGIN. AT THE BOTTOM OF STEP 1, RECORD THE TIME WHEN STEP 1 IS COMPLETE AND THE ELAPSED TIME. TO BE SATISFACTORY, THIS STEP MUST BE COMPLETED IN LESS THAN 15 MINUTES.

#### JPM PERFORMANCE INFORMATION

Required Materials:	F3-2, Classifications of Emergencies Classification Wall Chart Gum Labels for all examinees PINGP 577, Emergency Notification Report Form
General References:	Fixer 577, Emergency Notification Report Form F3-2, Classifications of Emergencies PINGP 577, Emergency Notification Report Form Classification Wall Chart
Task Standards:	Classify this event as a General Emergency (EAL HG1.1) Issue PARS to EVACUATE a 5 mile radius. Provide PINGP 577 to the SEC for communication.

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) NOTE: The Critical Steps are to classify as General Emergency, and to Evacuate all sectors out to 5 miles.	<ul> <li>Fills out PINGP 577 as follows:</li> <li>Circle 1. [A] Initial Report</li> <li>Circle 2. [B] Drill/Exercise</li> <li>[C] Prairie Island Nuclear Generating Plant is PRE-CIRCLED.</li> <li>Circle 4. [D] General Emergency</li> <li>5.[A] Fill in the proper date, time and EAL HG1.1</li> <li>Circle 6. [A] None</li> <li>Circle 7. [A] Not Applicable</li> <li>Complete 8. From 258 degrees.</li> <li>Complete 8. Downwind Sectors CIRCLE ALL LETTERS</li> <li>Complete 9. miles/hr: 2</li> <li>Complete 9. Stability Class F</li> <li>10[B] - Complete EVACUATE ALL SECTORS OUT TO 2 MILES</li> <li>10[B] - Complete EVACUATE ALL SECTORS OUT TO 5 MILES.</li> <li>Circle Subareas 2, 5N, 5E, 5S, 5W.</li> <li>Complete 11. EAL HG1.1 with sticker.</li> <li>Complete approval signature.</li> </ul>
Standard:	Form is properly completed as indicated above.
Evaluator Note:	The time critical portion of this JPM begins when the examinee reviews the turnover information and tells the examiner that he is ready to begin. The student has 15 minutes to correctly classify and recommend PARs.
Evaluator Note:	On 5. Time, the examinee may fill in much of the information prior to completing the time. If the examinee makes a statement that he is declaring EAL HG1.1, this should be the time that is written on 5. Otherwise, the student may write the time down at any time after they are sure of the correct classification.
Evaluator Cue:	When asked, Wind Direction is 258°, 2 miles/hr. When asked, Stability Class is F
Performance:	
Comments:	TIME WHEN THIS STEP IS COMPLETE TOTAL ELAPSED TIME

EMERGENCY CLASSIFICATION OF A SECURITY EVENT, REV. 0				
Performance Step: Critical (SEQ-2)	Deliver the completed PINGP 577 to the SEC for communication.			
Standard:	The SEC has obtained the form and will make communications to state and local authorities within 15 minutes.			
Evaluator Note:	The SEC has 15 minutes from the time written on PINGP 577 Number 5 to make notifications to state and local authorities. The examinee should provide the form to the SEC within 15 minutes of the time stated on the PINGP 577.			
Performance: Comments:				

Terminating Cues: When the event is classified and the form is given to the SEC for communication. This JPM is complete.

Stop Time:

# **TURNOVER SHEET**

#### **INITIAL CONDITIONS:**

- You are the Unit 2 Shift Supervisor
- Both Units are at 100% power.
- Security has just informed you that a hostile force has entered the plant and barricaded themselves in the Auxiliary Feedwater Pump room.

## INITIATING CUES (IF APPLICABLE):

- You are directed to classify this event per F3-2, Classifications of Emergencies, <u>AND</u> deliver the completed PINGP 577 to the SEC for communication.
- This JPM is time critical.

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

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date

Committed to Nuclear Excellence	JOB PERFORMA	NCE MEASURE (JPM)	
SITE:	PRAIRIE ISLAND		
JPM TITLE:	ASSESS SHIFT STAFFI	NG LEVELS	
JPM NUMBER:	ADMIN-42	REV. 0	
RELATED PRA INFORMATION:	NONE		
TASK NUMBERS / TASK TITLE(S):	SS 343 ATI 009		
K/A NUMBERS:	2.1.4		
APPLICABLE METHOD C	OF TESTING:		
	Discussion:	Simulate/walkthrough:	Perform: X
EVALUATION LOCATION	I: In-Plant:	Control Room:	
	Simulator:	Other:	X
	Lab:		
Time for Completion	n: <u>10</u> Minutes	Time Critical	: <u>NO</u>
Alternate Path:	NO		
TASK APPLICABILITY:	SRO: X RO:	NLO	
Additional site-specific sign	natures may be added as	desired.	
Developed by:	Bill Markh	am	03/27/07
	Develope	r	Date
Validated by:	Travis Ou	ret	05/08/07
	Validator See JPM Validation Check		Date
Approved by:	Training Supe	rvisor	Date
L		· · · •	

Retention: Life of Plant Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM Number:	ADMIN-42		
JPM Title:	ASSESS SHIFT STAFFING LEVELS		
Examinee:		Evaluator:	
Job Title:		Date:	
Start Time		Finish Time	
PERFORMANCE I	RESULTS: SAT:		UNSAT:

#### 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.

#### 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:

- You are the Unit 2 Shift Supervisor.
- Unit 1 and 2 are both at 100% power.
- It is Saturday at 2300.
- Currently on site, there are
  - 2 Shift Supervisors.
  - 4 Licensed Reactor Operators
  - 8 Non-licensed Operators
  - 1 Shift Technical Advisor
  - 1 Shift Manager
  - 1 Shift Chemist
- The Unit 1 Shift Supervisor receives a phone call from the State Police stating that his wife has been in a car accident and is being transported by ambulance to the Fairview Red Wing Hospital.
- The Unit 1 Shift Supervisor requests permission to immediately leave the site to be with his children at the hospital.

#### **INITIATING CUES (IF APPLICABLE):**

- Determine the following using SWI O-2, Shift Organization, Operation, and Turnover:
  - o Can the Unit 1 Shift Supervisor immediately leave the site?
  - o If so, what actions must be taken?

#### JPM PERFORMANCE INFORMATION

<b>Required Materials:</b>	SWI O-2, Shift Organization, Operation, and Turnover
General References:	SWI O-2, Shift Organization, Operation, and Turnover
Task Standards:	Student has determined that the Unit 1 Shift Supervisor may leave the site for this emergency. The student shall comply with the requirements of Table 1, and Note 1.
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)	Determine that the Unit 1 Shift Supervisor can leave the site immediately.		
Standard:	Examinee determines that the Unit 1 Shift Supervisor may leave the site using the guidance of Table 1, Minimum Shift Staffing, and Note 1, on page 26.		
Performance: Comments:	SATISFACTORY UNSATISFACTORY		

Performance Step: Critical Y (SEQ-1)	Determine that Minimum Shift Staffing falls below the requirements of Table 1, for both units in Modes 1,2,3,4.		
Standard:	Student determines that 2 Licensed Senior Operators are required for both units in Modes 1,2,3,4.		
Performance:	SATISFACTORY UNSATISFACTORY		
Comments:			

Performance Step: Critical Y (SEQ-1)	Determine that the crew may be less than the minimum requirements of Table 1 for a period of time not to exceed two hours provided immediate action is taken to restore the shift crew composition to within the minimum requirements specified.		
Standard:	Examinee determines that the crew is less than the minimum requirements and that immediate action needs to be taken to restore crew composition.		
Performance: Comments:	SATISFACTORY UNSATISFACTORY		
allo	en the Unit 2 Shift Supervisor has correctly assessed the situation and wed the Unit 1 Shift Supervisor to immediately leave site, immediately took ons to restore the crew composition, determined that this condition can exist		

for no more than 2 hours. This JPM is complete.

Stop Time:

# **TURNOVER SHEET**

#### **INITIAL CONDITIONS:**

- You are the Unit 2 Shift Supervisor.
- Unit 1 and 2 are both at 100% power.
- It is Saturday at 2300.
- Currently on site, there are
  - 2 Shift Supervisors.
  - 4 Licensed Reactor Operators
  - 8 Non-licensed Operators
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  - 1 Shift Manager
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- The Unit 1 Shift Supervisor receives a phone call from the State Police stating that his wife has been in a car accident and is being transported by ambulance to the Fairview Red Wing Hospital.
- The Unit 1 Shift Supervisor requests permission to immediately leave the site to be with his children at the hospital.

#### **INITIATING CUES (IF APPLICABLE):**

- Determine the following using SWI O-2, Shift Organization, Operation, and Turnover:
  - o Can the Unit 1 Shift Supervisor immediately leave the site?
  - o If so, what actions must be taken?

# **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			NO	N/A
1.	Are all items on the cover page filled in correctly?			
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12.	Are all references identified, current, and accurate?			
13.	Have all required cues (as anticipated) been identified for the evaluator to assist task completion?			

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
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date