

JOB PERFORMANCE MEASURE

Job Position SRO / RO	No. JP-OP-802-3006-401	Revision 1
JPM Title Perform Torus Water Average Temperature Calculation	Duration 8 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / Simulator / **Classroom** 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:

_____ PASS _____ FAIL

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Perform Torus Water Average Temperature Calculation	No.: JP-OP-802-3006-401 Revision: 1 Page 2
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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.

JOB PERFORMANCE MEASURE

JPM Title Perform Torus Water Average Temperature Calculation	No.: JP-OP-802-3006-401 Revision: 1 Page 3
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JPM Information

System:

T5000 – Primary Containment Monitoring System

Task:

52016 - Calculate Torus Water Average Temperature

References: Required (R) / Available (A)

29.ESP.01, Supplemental Information, Section 15, Torus Water Temperature Calculation (R)

Tools and Equipment Required:

Calculator

Initial Conditions:

- You are an extra person on shift.
- Primary Containment Control EOP has been entered due to Drywell temperature of 147°F.
- Point T23N004 is INOP

Initiating Cue(s):

The CRS directs you to calculate Torus Water Average Temperature in accordance with 29.ESP.01.

Terminating Cue(s):

Torus Water temperature has been determined by calculation.

Task Standard:

Perform Torus Water Average Temperature Calculation in accordance with 29.ESP.01, Section 15.0.

Licensed Operator Exam Information (required for NRC exams)

Safety Function/Category:

10 - Emergency Plant Evolutions

K/A Reference: (from NUREG 1123)

K/A SYSTEM: 295026 - Suppression Pool High Water Temperature

K/A STATEMENT:

- 2.1.45 Ability to identify and interpret diverse indications to validate the response of another indication.....4.3/4.3
- EA2. Ability to determine and/or interpret the following as they apply to Suppression Pool High Water Temperature:
- EA2.01 Suppression Pool Water temperature4.1 / 4.2

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title Perform Torus Water Average Temperature Calculation	No.: JP-OP-802-3006-401 Revision: 1 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Provide examinee with Cue Sheet.	
NOTE: If asked No SRV(s) have actuated and Torus Water level is 0 inches.	
* 1. [15.0 CAUTION] Determine if Torus water level is less than -11 inches.	* 1. Determines Torus water level.
* 2. [15.0 NOTE (1/2)] Determine if an SRV has actuated and point 4 is INOP	* 2. Determines that an SRV has NOT actuated and point 4 is INOP.
CUE: When asked for the instrument point readings, provide the examinee with the Data Sheet.	
* 3. Determine T23-R800, Torus Water Temperature Recorder, instrument point readings.	* 3. T23-R800 instrument point readings determined.
* 4. Calculate Average Torus Water Temperature.	* 4. Calculates Average Torus Water Temperature using NOTE 1. (78.96°F)
CUE: End JPM when Torus Water temperature has been determined by calculation.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* Critical Step

JOB PERFORMANCE MEASURE

JPM Title
Perform Torus Water Average Temperature Calculation

No.: JP-OP-802-3006-401

Revision: 1

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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.

JOB PERFORMANCE MEASURE

JPM Title Perform Torus Water Average Temperature Calculation	No.: JP-OP-802-3006-401 Revision: 1 Page 6
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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title Perform Torus Water Average Temperature Calculation	No.: JP-OP-802-3006-401 Revision: 1 Page 7
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Simulator Setup

IC#:

N/A

Malfunctions:

Number	Title	Value	Delay	Ramp
N/A				

Remote Functions:

Number	Title	Value	Delay	Ramp
N/A				

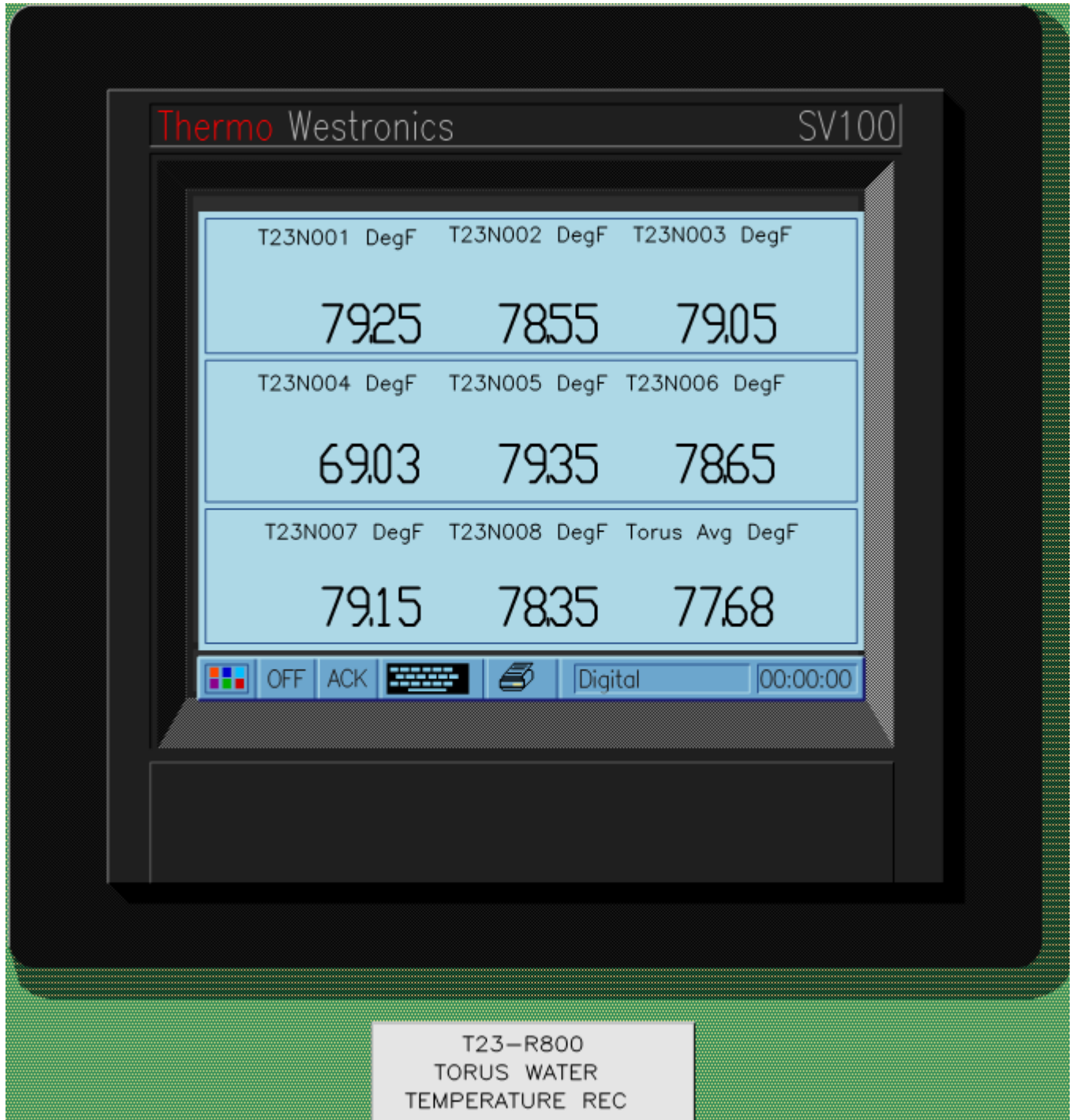
Override Functions:

Number	Title	Value	Delay	Ramp
N/A				

Special Instructions:

N/A

Data Sheet: (JP-OP-802-3006-401)



**T23-R800, Torus Water Temperature Recorder,
Instrument Point Readings**

15.0 TORUS WATER AVERAGE TEMPERATURE CALCULATION**CAUTION**

With Torus Water Level less than -11 inches, Torus Water temperature must be obtained from T50-R800A/B, Div 1/2 PC Air And Water Temperatures Rec (H11-P601/P602), Points 11 and 12.

NOTE (1): If an instrument point is inoperable and an SRV has not actuated, the inoperable instrument point must be replaced with the highest reading temperature of the operable instrument points.

NOTE (2): If an instrument point is inoperable and an SRV has actuated, for a period of 48 hours following the SRV actuation, the inoperable instrument point must be replaced with the highest reading temperature of the operable instrument points plus 45°F.

TORUS WATER AVERAGE TEMPERATURE CALCULATION
Instrument: T23-R800, Torus Water Temperature Rec (H11-P601)
Instrument Points (if available): 1, 2, 3, 4, 5, 6, 7, 8
Calculation: $\frac{(1) + (2) + (3) + (4) + (5) + (6) + (7) + (8)}{8} = \text{_____ } ^\circ\text{F Average}$

END OF SECTION

Per NOTE (1) point 4 is INOP so value will be 79.35 vice 69.03 (bolded)

$$(79.25+78.55+79.05+\mathbf{79.35}+79.35+78.65+79.15+78.35) / 8 = 78.96$$

Cue Sheet: (JP-OP-802-3006-401)

Initial Conditions:

- You are an extra person on shift.
- Primary Containment Control EOP has been entered due to Drywell temperature of 147°F.
- Point T23N004 is INOP

Initiating Cue(s):

The CRS directs you to calculate Torus Water Average Temperature in accordance with 29.ESP.01.

Cue Sheet: (JP-OP-802-3006-401)

Initial Conditions:

- You are an extra person on shift.
- Primary Containment Control EOP has been entered due to Drywell temperature of 147°F.
- Point T23N004 is INOP

Initiating Cue(s):

The CRS directs you to calculate Torus Water Average Temperature in accordance with 29.ESP.01.

Data Sheet: (JP-OP-802-3006-401)



**T23-R800, Torus Water Temperature Recorder,
Instrument Point Readings**

**JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY**

**Emergency Support
Procedure**

**29.ESP.01
Revision 19
Page 1**

Reference Use

SUPPLEMENTAL INFORMATION

Revision Summary

- 1) Revised Caution 1 per TSR 37473.
- 2) Corrected TOC per CARD 14-24943.
- 3) Updated Enclosure A per CARD 14-23265.
- 4) Updated 17.1 based on EPGs/SAGs rev 3 bases.

Attachments - None

Enclosures

- | | | |
|---|--------|--|
| A | 091515 | Terminate and Prevent Flowchart (Copy located at H11-P601) |
| B | 052404 | FSQ-1 through FSQ-8 Flowchart (Copy located at H11-P603) |

<i>Information and Procedures</i>							
DTC	DSN	Revision	Date Issued	DCR #	File #	IP Code:	Recipient
TPNPP	29.ESP.01	19	12/8/15	15-0608	1703.02	I	

FOR TRAINING USE ONLY

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15.0 TORUS WATER AVERAGE TEMPERATURE CALCULATION

CAUTION

With Torus Water Level less than -11 inches, Torus Water temperature must be obtained from T50-R800A/B, Div 1/2 PC Air And Water Temperatures Rec (H11-P601/P602), Points 11 and 12.

NOTE (1): If an instrument point is inoperable and an SRV has not actuated, the inoperable instrument point must be replaced with the highest reading temperature of the operable instrument points.

NOTE (2): If an instrument point is inoperable and an SRV has actuated, for a period of 48 hours following the SRV actuation, the inoperable instrument point must be replaced with the highest reading temperature of the operable instrument points plus 45°F.

TORUS WATER AVERAGE TEMPERATURE CALCULATION
Instrument: T23-R800, Torus Water Temperature Rec (H11-P601)
Instrument Points (if available): 1, 2, 3, 4, 5, 6, 7, 8
Calculation: $\frac{(1) + (2) + (3) + (4) + (5) + (6) + (7) + (8)}{8} = \text{_____ } ^\circ\text{F Average}$

END OF SECTION

JOB PERFORMANCE MEASURE

Job Position RO	No. JP-OP-802-4101-418	Revision 3
JPM Title Identify isolations for Main Lube Oil Cooler Cleaning.	Duration 10 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____
 Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____
 Location: Plant / Simulator / **Classroom** Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	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.				
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number
Monitoring				
Control				
Conservatism				
Teamwork				
Knowledge				

OVERALL EVALUATOR COMMENTS:

_____ **PASS** _____ **FAIL**

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Identify isolations for Main Lube Oil Cooler Cleaning.	No.: JP-OP-802-4101-418 Revision: 3 Page 2
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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.

JOB PERFORMANCE MEASURE

JPM Title Identify isolations for Main Lube Oil Cooler Cleaning.	No.: JP-OP-802-4101-418 Revision: 3 Page 3
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JPM Information

System:

NA

Task:

04A0003031 - Review a Safety Tagging Record (STR)

References: Required (R) / Available (A)

MOP12, Tagging and Protective Barrier System (R)
M-5726, GSW System Functional Operating Sketch (A)

Tools and Equipment Required:

None

Initial Conditions:

- The GSW side of the lower Main Lube Oil Cooler must be cleaned.
- The cooler has been removed from service in accordance with 23.131, General Service Water System, and now must be isolated for cleaning.
- For the purposes of this JPM electronic tagging and previous clearances for this task are not available.

Initiating Cue(s):

- Using the provided blank CUE sheet and in accordance MOP12, Tagging and Protective Barrier System, list desired valve positions that will provide protection for the above listed work.

Terminating Cue(s):

Examinee presents list that provides adequate protection for the work

Task Standard:

Review Safety Tagging Record (STR) for in accordance with MOP 12

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:

- 2.1 Conduct of Operations
2.1.41 Ability to obtain and interpret station electrical and mechanical drawings. 3.5 / 3.9
- 2.2 Equipment Control
2.2.13 Knowledge of tagging and clearance procedures. ----- 4.1 / 4.3

Maintenance Rule Safety Classification:

NA

Maintenance Rule Risk Significant? (Yes or No)

NA

JOB PERFORMANCE MEASURE

JPM Title Identify isolations for Main Lube Oil Cooler Cleaning.	No.: JP-OP-802-4101-418 Revision: 3 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Present the candidate with the Cue Sheet, then the Blank Safety Tagging Record.	
1. Locate and refer to drawing M-5726 and/or 23.131.	1. Locates and refers to correct drawing or procedure.
* 2. Reviews technical material and identifies valves that must be SHUT	* 2. Determines following valves must be SHUT: P4100F067B P4100F068B
* 3. Reviews technical material and identifies valves that must be OPEN	* 3. Determines following valves must be OPEN: N3000F365 N3000F852 N3000F364 N3000F377
CUE: End JPM when examinee presents list that provides adequate protection for the work.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* Critical Step

JOB PERFORMANCE MEASURE

JPM Title Identify isolations for Main Lube Oil Cooler Cleaning.	No.: JP-OP-802-4101-418 Revision: 3 Page 5
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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.

JOB PERFORMANCE MEASURE

JPM Title
Identify isolations for Main Lube Oil Cooler Cleaning.

No.: JP-OP-802-4101-418

Revision: 3

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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title Identify isolations for Main Lube Oil Cooler Cleaning.	No.: JP-OP-802-4101-418 Revision: 3 Page 7
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Simulator Setup

IC#:

NA

Malfunctions:

Number	Title	Value	Delay	Ramp
NA				

Remote Functions:

Number	Title	Value	Delay	Ramp
NA				

Override Functions:

Number	Title	Value	Delay	Ramp
NA				

Special Instructions:

NA

Cue Sheet: (JP-OP-802-4101-418)**Initial Conditions:**

- The GSW side of the lower Main Lube Oil Cooler must be cleaned.
- The cooler has been removed from service in accordance with 23.131, General Service Water System, and now must be isolated for cleaning.
- For the purposes of this JPM electronic tagging and previous clearances for this task are not available.

Initiating Cue(s):

- In accordance MOP12, Tagging and Protective Barrier System, list desired valve positions that will provide protection for the above listed work.

EXT PIS	DESIRED POSITION	TAG TYPE

Cue Sheet: (JP-OP-802-4101-418)**Initial Conditions:**

- The GSW side of the lower Main Lube Oil Cooler must be cleaned.
- The cooler has been removed from service in accordance with 23.131, General Service Water System, and now must be isolated for cleaning.
- For the purposes of this JPM electronic tagging and previous clearances for this task are not available.

Initiating Cue(s):

- In accordance MOP12, Tagging and Protective Barrier System, list desired valve positions that will provide protection for the above listed work.

EXT PIS	DESIRED POSITION	TAG TYPE

JOB PERFORMANCE MEASURE

Job Position SRO / RO	No. JP-OP-802-4101-421	Revision 2
JPM Title Verify Offsite Electrical Lineup	Duration 10 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: _____ SRO / RO

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / **Simulator** / Classroom Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	S	U	Comment
1.				*11.							
* 2.				*12.							
* 3.				13.							
* 4.				14.							
* 5.											
* 6.											
7.											
* 8.											
* 9.											
*10.											

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:

_____ PASS _____ FAIL

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 2
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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.

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 3
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JPM Information

System:

S2000/S4000 – 120/345KV Switchyards

Task:

57520 - Perform Control Room - Mode 1, 2, 3 Surveillances

References: Required (R) / Available (A)

24.000.01, Situational Surveillances/LCO Action Tracking, Attachment 28b (R)

Tools and Equipment Required:

Marked up 24.000.01, Attachments 28a & 28b

Initial Conditions:

- You are the CRNSO.
- The current time is 0500.
- EDG-11 was declared INOP at 0455.
- The CRS has entered LCO 3.8.1 Action A.

Initiating Cue(s):

The CRS directs you to perform 24.000.01, Attachment 28b.

Terminating Cue(s):

24.000.01 Attachment 28b is completed.

Task Standard:

24.000.01, Attachment 28b, is completed correctly.

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:

2.1.29 Knowledge of how to conduct system lineups, such as valves, breakers, switches, etc.
(CFR 41.10 / 45.1 / 45.12)..... 4.1 / 4.0

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT		STANDARD	
CUE: Provide examinee with Cue Sheet and marked up 24.000.01 Attachments 28a & 28b.			
1.	[1.1.1] Record Bus 101 voltage.	1.	Records 120V Bus 101 voltage.
* 2.	[1.1.2] Verify indicated voltage is approximately 120 VAC.	* 2.	Records initials verifying voltage is ~120 VAC.
* 3.	[1.1.3] If indicated bus voltage is <116 VAC, notify the SM, otherwise NA.	* 3.	Records NA in the initials block.
CUE: If asked, inform examinee that Breaker GD was opened mid-shift at ITC's request.			
* 4.	[1.1.4] Verify one the following lineups is met: <ul style="list-style-type: none">For Shoal Line supplying, Breaker GD is CLOSED.For Radka Line supplying, Breaker GK and GH are CLOSED.For Swan Creek Line Supplying, Breakers GM and GH are CLOSED.	* 4.	Checks off the following boxes, and initials that at least one of the lineups is correct: <ul style="list-style-type: none">For Radka Line supplying, Breaker GK and GH are CLOSED.For Swan Creek Line Supplying, Breakers GM and GH are CLOSED.
* 5.	[1.1.5] Verify the following breakers are CLOSED: <ul style="list-style-type: none">TRANS 1 SEC POS A BKR CONTROLSS TRANS 64 PRI POS D BKR CONTROLBus 64B-B664C-C6	* 5.	Checks off each box and initials that breakers are CLOSED.
* 6.	[1.2] Verify steps 1.1.2, 1.1.4, and Step 1.1.5 were completed satisfactorily.	* 6.	Places a check mark next to step 1.2 and initials the Acceptance Criteria.
7.	[1.3.1] Record Bus 301 voltage.	7.	Records 120V Bus 301 voltage.
* 8.	[1.3.2] Verify indicated voltage is approximately 120 VAC.	* 8.	Records initials verifying voltage is ~120 VAC.
* 9.	[1.3.3] If indicated bus voltage is <118.1 VAC, notify the SM, otherwise NA	* 9.	Records NA in the initials block.

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 5
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ELEMENT	STANDARD
*10. [1.3.4] Verify one the following lineups is met: <ul style="list-style-type: none"> For BRTN 2 Line supplying, Breaker DF is CLOSED. For BRTN 2 Line supplying, Breakers DM, CM, and CF are CLOSED with Main Generator off line. For BRTN 3 Line, Breaker BM is CLOSED For BRTN 3 Line, Breakers BT, CM and CF are CLOSED with Main Generator off line. 	*10. Checks off the following boxes, and initials that at least one of the lineups is correct: <ul style="list-style-type: none"> For BRTN 2 Line supplying, Breaker DF is CLOSED. For BRTN 3 Line, Breaker BM is CLOSED
*11. [1.3.5] Breakers 65E-E6 and 65F-F6 are closed.	*11. Initials that Breakers 65E-E6 and 65F-F6 are closed.
*12. [1.4] Verify Step 1.3.2 and Step 1.3.4 and 1.3.5 were completed satisfactorily.	*12. Records initials the Acceptance Criteria block.
13. [1.5] Sign for completed and record Name, Initials and Signature	13. Records date and time of completion, and records Name, Initials and Signature.
14. Document on Attachment 28a that Action 2 was performed by recording Date, Time, Initials and ID number.	14. Records Date and Time performed, Initials and enters ID number on Attachment 28a, Action 2.
CUE: Terminate JPM when 24.000.01, Attachment 28b, is completed.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* **Critical Step**

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 6
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Evaluator Notes:

This JPM can be performed in the Simulator or the Control Room.

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.

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 7
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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title Verify Offsite Electrical Lineup	No.: JP-OP-802-4101-421 Revision: 2 Page 8
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Simulator Setup

IC#:

IC-20 or any full power IC.

Malfunctions:

Number	Title	Value	Delay	Ramp
N/A				

Remote Functions:

Number	Title	Value	Delay	Ramp
R30RF0009	EDG 11 Control Mode Switch	MPO	0	0

Override Functions:

Number	Title	Value	Delay	Ramp
N/A				

Special Instructions:

1. Initialize to desired IC, and place the simulator in **RUN**.
2. Open Shoal Line Breaker GD.
3. Insert the remote function listed above.
4. Silence and acknowledge all alarms, and place the simulator in **FREEZE**.

Cue Sheet: (JP-OP-802-4101-421)

Initial Conditions:

- You are the CRLNO.
- The current time is 0500.
- EDG-11 was declared INOP at 0455.
- The CRS has entered LCO 3.8.1 Action A.

Initiating Cue(s):

The CRS directs you to perform 24.000.01, Attachment 28b.

Cue Sheet: (JP-OP-802-4101-421)

Initial Conditions:

- You are the CRLNO.
- The current time is 0500.
- EDG-11 was declared INOP at 0455.
- The CRS has entered LCO 3.8.1 Action A.

Initiating Cue(s):

The CRS directs you to perform 24.000.01, Attachment 28b.

**JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY**

24.000.01
Attachment 28a, Page 1 of 2
052715

ONE OR BOTH EDGs IN A DIVISION INOPERABLE - MODE 1, 2, 3

CM

NOTE: Verify severe weather is not forecast for the immediate future or grid stress is not expected to be high for planned maintenance of the EDG.

The following information is current per
Tech Specs:

(CRS) Initial/ID JB/e55XXX

Tech Spec Article : LCO 3.8.1. Action A or B
Situation Requiring : One or Both EDGs in one of the required onsite AC electrical
LCO Actions : power divisions inoperable.
LCO No.: 18-762

Tech Spec Completion Time : 1) N/A.
2) Within 1 hr. and once per 8 hrs
3) Within 4 hrs. from discovery of an inoperable EDG(s)
concurrent with inoperability of redundant required features.
4) Once per 8 hrs.
5) Within 24 hrs.
6) Within 72 hrs. from discovery of an inoperable EDG
concurrent with CTG 11-1 not available.
7) N/A

Admin Completion Time : 1a) N/A 1b) Within 2 hrs. 2) Within 1 hr. and once per 7 hrs.
3) Within 3 hrs. 4) Once per 7 hrs. 5) 23 hrs.
6) Within 72 hrs. 7) Within 7 hrs. and once per 7 hrs

Action : 1a) Pre-planned evolution: a CRMP Assessment (MMR12) must be
performed prior to entering LCO 3.8.1 Action A or B.
1b) Unplanned evolution: after entering LCO 3.8.1 Action A or B.
a CRMP Assessment must be initiated in accordance with
MMR12, "Equipment Out of Service Risk Management"
2) Perform 24.000.01 Att. 28b (SR 3.8.1.1).
3) Declare required feature(s), supported by the inoperable EDG
inoperable when the redundant required feature(s) are inoperable.
4) Verify the status of CTG11-1 by completing Att 28C
5) Either, determine OPERABLE EDG(s) are not inoperable due to
common cause failure OR perform SR 3.8.1.2.
6) Restore availability of CTG11-1.
7) Verify no additional systems have been removed
from service while in the LCO Action Statement. If other
equipment becomes inoperable while in this action, a
CRMP must be reperformed in accordance with MMR12,
"Equipment Out of Service Risk Management," Assessment.

Start EDG(s) inoperable (date/time): Today / 0455

Stop EDG(s) inoperable (date/time): _____

**JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY**

24.000.01
Attachment 28a, Page 2 of 2
052715

ONE OR BOTH EDGS IN A DIVISION INOPERABLE - MODE 1, 2, 3

Action 1 CRMP						
Scheduled		Performed		Performer	CRLNO	CRS
Date	Time	Date	Time	Initial/ID	Initial/ID	Initial/ID
N/A	N/A					
Action 2 SR 3.8.1.1 (24.000.01 Att 28b)						
Today	0555					
Action 3 Redundant required features						
N/A	N/A					
Action 4 CTG 11-1 Operable (24.000.01 Att 28c)						
Today	1155					
Action 5 Common Cause						
Action 6 Restore Availability of CTG 11-1						
Action 7 CRMP						

Additional Tracking Log Sheet attached Yes ☐ No ☐

Acceptance Criteria : Required action has been performed within the Tech Spec Completion Time with acceptable results.

Acceptance Criteria Met: SM_____ ID_____ Date_____

DEMONSTRATING OPERABILITY OF AC SOURCES - MODE 1, 2, 3

1.0 AC Sources—Operating

1.1 For Bus 101 supplying SST64, perform the following (H11-P811);

1.1.1 Record Bus 101 voltage:

_____ V AC

1.1.2 Verify indicated voltage is approximately 120V AC.

INITIALS

1.1.3 If indicated bus voltage < 116V AC, notify the SM, otherwise NA.

INITIALS

1.1.4 Verify one of the following lineups is met:

For Shoal Line supplying, Breaker GD is CLOSED. ☐

For Radka Line supplying, Breakers GK and GH are CLOSED. ☐

For Swan Creek Line supplying, Breakers GM and GH are CLOSED. ☐

INITIALS

1.1.5 Verify the following breakers are CLOSED:

TRANS 1 SEC POS A BKR CONTROL ☐

SS TRANS 64 PRI POS D BKR CONTROL ☐

Bus 64B-B6 ☐

Bus 64C-C6 ☐

INITIALS

**JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY**

24.000.01
Attachment 28b, Page 2 of 3
081513

DEMONSTRATING OPERABILITY OF AC SOURCES - MODE 1, 2, 3

- 1.2 Verify Step 1.1.2, Step 1.1.4, **and** Step 1.1.5 were completed satisfactorily. ☐

ACCEPTANCE CRITERIA

INITIALS

- 1.3 Perform the following (H11-P811):

- 1.3.1 Record Bus 301 voltage.

_____ V AC

- 1.3.2 Verify indicated bus voltage is approximately 120V AC.

INITIALS

- 1.3.3 If indicated bus voltage < 118.1V AC, notify the SM; otherwise, NA.

INITIALS

- 1.3.4 Verify one of the following lineups is met:

For BRTN 2 Line supplying, Breaker DF is CLOSED. ☐

For BRTN 2 Line supplying, Breakers DM, CM,
and CF are CLOSED with Main Generator off line. ☐

For BRTN 3 Line, Breaker BM is CLOSED. ☐

For BRTN 3 Line, Breakers BT, CM and CF are CLOSED with
Main Generator off line. ☐

INITIALS

DEMONSTRATING OPERABILITY OF AC SOURCES - MODE 1, 2, 3

1.3.5 Breakers 65E-E6 and 65F-F6 are closed.

INITIALS

1.4 Verify Step 1.3.2 **and** Step 1.3.4 **and** 1.3.5 were completed satisfactorily.

ACCEPTANCE CRITERIA

INITIALS

1.5 Completed

DATE

TIME

Name	Initials	Signature
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

JOB PERFORMANCE MEASURE

Job Position SRO / RO	No. JP-OP-802-4101-435	Revision 4
JPM Title Notify Hospital for Contaminated Injured Worker	Duration 20 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / Simulator / **Classroom** Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	S	U	Comment
* 1.											
2.											
* 3.											
4.											
* 5.											
* 6.			(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:

_____ **PASS** _____ **FAIL**

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Notify Hospital for Contaminated Injured Worker	No.: JP-OP-802-4101-435 Revision: 4 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.

JOB PERFORMANCE MEASURE

JPM Title Notify Hospital for Contaminated Injured Worker	No.: JP-OP-802-4101-435 Revision: 4 Page 3
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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 CRLNO.
- 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.

JOB PERFORMANCE MEASURE

JPM Title Notify Hospital for Contaminated Injured Worker	No.: JP-OP-802-4101-435 Revision: 4 Page 4
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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:

2.3.14 Knowledge of radiation or contamination hazards that may arise during normal, abnormal, or emergency conditions or activities.3.4 / 3.8

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

No

JOB PERFORMANCE MEASURE

JPM Title Notify Hospital for Contaminated Injured Worker	No.: JP-OP-802-4101-435 Revision: 4 Page 5
--	--

PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Provide examinee with CUE Sheet.	
NOTE: When the candidate goes to Web Arms to retrieve the EP-290004, Ambulance/Paramedic Support Request Form, hand him the blank copy.	
NOTE: If asked the details of injured individual's radiological status and the Body Map (Attachment 1 of EP-225) are with patient and will go with the patient during transport to the hospital.	
* 1. Complete Form EP-290004, Ambulance/Paramedic Support Request Form.	* 1. Form EP-290004 is completed correctly.
CUE: Inform the examinee to simulate the phone call.	
CUE: For Step 9 of Form EP-290004, inform the examinee that 2 vehicles with a total of 4 people will be arriving.	
2. Complete Phone call to Frenchtown Township Rescue Squad.	2. Phone call is complete.
NOTE: Completion of forms EP-290005 & EP-290006 may be performed in any order.	
CUE: If the candidate goes to Web Arms to retrieve the Form EP-290005, Hospital Support Request, hand him the blank copy.	
CUE: Transport the injured person to the primary hospital.	
* 3. Complete Form EP-290005, Hospital Support Request Form.	* 3. Form EP-290005 is completed correctly.
CUE: Inform the examinee to simulate the phone call to the primary hospital.	
4. Complete phone call to ProMedica Monroe Hospital.	4. Phone call is complete.
CUE: When the candidate goes to Web Arms to retrieve the Form EP-290006, Secondary Alarm Station Report, hand him the blank copy.	
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 Alarm Station Report, the location is Warehouse A loading dock ramp door.	
CUE: Inform the examinee to simulate the phone call.	
* 5. Complete Form EP-290006, Secondary Alarm Station Report.	* 5. Form EP-290006 is completed correctly.
RO portion concludes here.	
CUE: As CRS identify the appropriate reporting requirement. (SRO only).	
* 6. Review GRRR List.	* 6. Identifies 8-hour reporting requirement in accordance with 50.72(b)(3)(xii).
CUE: Terminate JPM when forms have been filled out, phone calls have been made, and GRRR List reviewed (SRO only).	

JOB PERFORMANCE MEASURE

JPM Title Notify Hospital for Contaminated Injured Worker	No.: JP-OP-802-4101-435 Revision: 4 Page 6
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ELEMENT	STANDARD
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_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

*** Critical Step**

JOB PERFORMANCE MEASURE

JPM Title Notify Hospital for Contaminated Injured Worker	No.: JP-OP-802-4101-435 Revision: 4 Page 7
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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.

JOB PERFORMANCE MEASURE

JPM Title
Notify Hospital for Contaminated Injured Worker

No.: JP-OP-802-4101-435

Revision: 4

Page 8

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title
Notify Hospital for Contaminated Injured Worker

No.: JP-OP-802-4101-435

Revision: 4

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 CRLNO.
- 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 for 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 PERFORMANCE MEASURE
FOR TRAINING USE ONLY

SECONDARY ALARM STATION REPORT

Key

Secondary Alarm Station: Control Room – Security Direct Line or 6-5215

1. Support organization contacted:
- ☐ Fire/Paramedics
- ☒ Ambulance
- ☐ Other: _____
2. Number of vehicles reporting onsite: 2
3. Number of personnel reporting onsite: 4
4. Owner-controlled area access gate to be used:
- ☒ Fermi Drive (Primary)
- ☐ Point Aux Peaux (only use if Fermi Drive Gate is not accessible)
5. Location of emergency (If rescue/ambulance, where the vehicles should attend to the victim): RB AIRLOCK & DOWERS
6. Contact Name: OFFICER Date: Date Time: time
7. Complete Hospital Support Request Form (EP-290005) if transport to hospital is required.

**JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY**
AMBULANCE/PARAMEDIC SUPPORT REQUEST FORM

1. Select required medical response:

NOTE: Make one call only.

- For Life Threatening Medical Emergency Request Frenchtown Rescue and Ambulance 734-241-2727.
- For Non-Life Threatening Medical – (Ambulance Transport ONLY): 800-872-1111.

2. This is:

Name: Examinee Name
 Title: Fermi 2 Communicator (CRLND)
 Telephone Number: 734 586 4771

calling from Fermi 2. There are injured personnel onsite and your assistance is required immediately.

3. Number of injured personnel: 1

4. Injuries to personnel:

Compound fracture of upper right leg, blood loss

5. Number of contaminated or potentially contaminated personnel: 1

6. Use the Fermi Drive access gate.

NOTE: ProMedica Monroe Regional Hospital is the primary hospital. Use Beaumont Hospital – Trenton only if conditions prevent the use of ProMedica Monroe Regional Hospital.

7. Transport the victim(s) to: ☒ ProMedica Monroe Regional Hospital
☐ Beaumont Hospital – Trenton

8. Take the following precautions:

measures for treatment of potentially contaminated person

9. Relay the following information to the SAS operator using the Secondary Alarm Station Report (EP-290006).

- 9.1 Life Threatening Medical Emergency:

Vehicles expected: 1 Frenchtown Rescue, 1 Ambulance

Personnel expected: 2 Frenchtown, 2 Ambulance

- 9.2 Non-Life Threatening Medical (Ambulance Transport ONLY):

Vehicles expected: 1 Ambulance

Personnel expected: 2

10. Contact Name: Contact Date: date Time: time

11. Complete the Secondary Alarm Station Report Form (EP-290006).

12. Complete the Hospital Support Request Form (EP-290005).

13. Reference EP-225, "Radiological Medical Emergencies," for completing applicable immediate and follow-up actions.

JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY

HOSPITAL SUPPORT REQUEST FORM

NOTE: ProMedica Monroe Regional Hospital is the primary hospital. Beaumont Hospital – Trenton should only be used if conditions prevent the use of ProMedica Monroe Regional Hospital.

ProMedica Monroe Regional Hospital: 734-240-8404 (ask for Charge Nurse)

Beaumont Hospital – Trenton: 734-671-3134, 734-671-3881, or 734-362-6764

1. This is:
Name: Examiner Name
Title: Fermi 2 community ADV (CRLND)
Telephone Number: 734 586 4771

calling from Fermi 2. There are injured personnel onsite and the ambulance service has been contacted to transport the victims to you.

2. Number of injured personnel: 1
3. Injuries to personnel:

Compound fracture of upper right leg : Blood loss

4. Number of contaminated or potentially contaminated personnel: 1
5. Number of personnel suffering from excessive radiation exposure: 0
6. If there are contaminated or potentially contaminated personnel state the following:

“You are requested to implement your radiological emergency response plan.”

7. Contact Name: CONTACT Date: Date Time: time

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

Initial Conditions:

- You are the CRLNO.
- 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 for 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 PERFORMANCE MEASURE
FOR TRAINING USE ONLY
AMBULANCE/PARAMEDIC SUPPORT REQUEST FORM

1. Select required medical response:

NOTE: Make one call only.

- For Life Threatening Medical Emergency Request Frenchtown Rescue and Ambulance 734-241-2727.
- For Non-Life Threatening Medical – (Ambulance Transport ONLY): 800-872-1111.

2. This is:

Name: _____

Title: _____

Telephone Number: _____

calling from Fermi 2. There are injured personnel onsite and your assistance is required immediately.

3. Number of injured personnel: _____

4. Injuries to personnel:

5. Number of contaminated or potentially contaminated personnel: _____

6. Use the Fermi Drive access gate.

NOTE: ProMedica Monroe Regional Hospital is the primary hospital. Use Beaumont Hospital – Trenton only if conditions prevent the use of ProMedica Monroe Regional Hospital.

7. Transport the victim(s) to: ☐ ProMedica Monroe Regional Hospital
☐ Beaumont Hospital – Trenton

8. Take the following precautions:

9. Relay the following information to the SAS operator using the Secondary Alarm Station Report (EP-290006).

- 9.1 Life Threatening Medical Emergency:

Vehicles expected: 1 Frenchtown Rescue, 1 Ambulance

Personnel expected: 2 Frenchtown, 2 Ambulance

- 9.2 Non-Life Threatening Medical (Ambulance Transport ONLY):

Vehicles expected: 1 Ambulance

Personnel expected: 2

10. Contact Name: _____ Date: _____ Time: _____

11. Complete the Secondary Alarm Station Report Form (EP-290006).

12. Complete the Hospital Support Request Form (EP-290005).

13. Reference EP-225, "Radiological Medical Emergencies," for completing applicable immediate and follow-up actions.

**JOB PERFORMANCE MEASURE
FOR TRAINING USE ONLY
SECONDARY ALARM STATION REPORT**

Secondary Alarm Station: Control Room – Security Direct Line or 6-5215

1. Support organization contacted:

☐ Fire/Paramedics

☐ Ambulance

☐ Other: _____

2. Number of vehicles reporting onsite: _____

3. Number of personnel reporting onsite: _____

4. Owner-controlled area access gate to be used:

☐ Fermi Drive (Primary)

☐ Point Aux Peaux (only use if Fermi Drive Gate is not accessible)

5. Location of emergency (If rescue/ambulance, where the vehicles should attend to the victim): _____

6. Contact Name: _____ Date: _____ Time: _____

7. Complete Hospital Support Request Form (EP-290005) if transport to hospital is required.

JOB PERFORMANCE MEASURE

Job Position SRO	No. JP-OP-802-4101-102	Revision 2
JPM Title Evaluate Degraded Power Sources	Duration 15 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / Simulator / **Classroom** Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	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.				
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number
Monitoring				
Control				
Conservatism				
Teamwork				
Knowledge				

OVERALL EVALUATOR COMMENTS:

_____ **PASS** _____ **FAIL**

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Evaluate Degraded Power Sources	No.: JP-OP-802-4101-102 Revision: 2 Page 2
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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.

JOB PERFORMANCE MEASURE

JPM Title Evaluate Degraded Power Sources	No.: JP-OP-802-4101-102 Revision: 2 Page 3
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JPM Information

System:

N/A

Task:

76034 - Implement Technical Specification/Technical Requirements Manual actions

References: Required (R) / Available (A)

Tech Specs 3.8.1, AC Sources - Operating (R)

Tools and Equipment Required:

None

Initial Conditions:

- You are the CRS.
- Ten (10) minutes ago, ITC was performing troubleshooting activities when 345kV breakers BM & DF opened on fault. All attempts to reclose the breakers have failed.
- All other 345kV / 120kV breakers are in the normal position.
- No other plant equipment is out of service.

Initiating Cue(s):

The SM directs you to evaluate this malfunction for potential Tech Spec impact, and document below.

Terminating Cue(s):

Required actions listed under Tech Spec 3.8.1, Condition D, have been identified, and the LCO documented on the Cue Sheet.

Task Standard:

Required actions of Tech Spec 3.8.1, Condition D, have been identified, and the LCO documented on the Cue Sheet.

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:

2.2.36 Ability to analyze the effect of maintenance activities, such as degraded power sources, on the status of limiting conditions for operations. (CFR 41.10 / 43.2 / 45.13) 3.1 / 4.2

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title Evaluate Degraded Power Sources	No.: JP-OP-802-4101-102 Revision: 2 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Provide examinee with Cue Sheet.	
* 1. Review initial conditions to determine which LCO and Condition(s) apply to the malfunction.	* 1. Determines that, with the BM & DF breakers open, an offsite circuit must be declared inoperable (loss of main generator could lead to loss of offsite circuit). Determines that Tech Spec LCO 3.8.1 Condition D applies to one offsite circuit inoperable.
* 2. Review LCO 3.8.1, Action D.1 to determine its applicability.	* 2. Determines that SR 3.8.1 for operable offsite circuit must be completed.
3. Review LCO 3.8.1, Action D.2 to determine its applicability.	3. Determines that Action D.2 is NOT required.
* 4. Review LCO 3.8.1, Action D.3 to determine its applicability.	* 4. Determines that the offsite circuit must be restored to operable status within 72 hours .
5. Document the operability determination.	5. Operability determination documented on CUE Sheet.
CUE: Required actions listed under Tech Spec 3.8.1, Condition D, have been identified, and the LCO documented on the Cue Sheet.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* **Critical Step**

JOB PERFORMANCE MEASURE

JPM Title
Evaluate Degraded Power Sources

No.: JP-OP-802-4101-102

Revision: 2

Page 5

Evaluator Notes:

This JPM may be started at the CRS desk in the simulator.

**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.

JOB PERFORMANCE MEASURE

JPM Title
Evaluate Degraded Power Sources

No.: JP-OP-802-4101-102

Revision: 2

Page 6

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title
Evaluate Degraded Power Sources

No.: JP-OP-802-4101-102

Revision: 2

Page 7

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-802-4101-102)

Initial Conditions:

- You are the CRS.
- Ten (10) minutes ago, ITC was performing troubleshooting activities when 345kV breakers BM & DF opened on fault. All attempts to reclose the breakers have failed.
- All other 345kV / 120kV breakers are in the normal position.
- No other plant equipment is out of service.

Initiating Cue(s):

The SM directs you to evaluate this malfunction for potential Tech Spec impact, and document below.

TS	CONDITION	REQUIRED ACTION	COMPLETION TIME

JOB PERFORMANCE MEASURE
Cue Sheet: (JP-OP-802-4101-102)

Initial Conditions:

- You are the CRS.
- Ten (10) minutes ago, ITC was performing troubleshooting activities when 345kV breakers BM & DF opened on fault. All attempts to reclose the breakers have failed.
- All other 345kV / 120kV breakers are in the normal position.
- No other plant equipment is out of service.

Initiating Cue(s):

The SM directs you to evaluate this malfunction for potential Tech Spec impact, and document accordingly.

TS	CONDITION	REQUIRED ACTION	COMPLETION TIME

JOB PERFORMANCE MEASURE

Job Position SRO	No. JP-OP-802-4101-409	Revision 5
JPM Title Approve a Discharge Permit	Duration 10 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / Simulator / **Classroom** Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	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.				
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number
Monitoring				
Control				
Conservatism				
Teamwork				
Knowledge				

OVERALL EVALUATOR COMMENTS:

_____ PASS _____ FAIL

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Approve a Discharge Permit	No.: JP-OP-802-4101-409 Revision: 5 Page 2
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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.

JOB PERFORMANCE MEASURE

JPM Title Approve a Discharge Permit	No.: JP-OP-802-4101-409 Revision: 5 Page 3
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JPM Information

System:

N/A

Task:

78551 - Approve Effluent Pump Permit

References: Required (R) / Available (A)

MCE06 - Non-Radiological Environmental Protection (A)

MCE06005 - Discharge Permit (R)

Tools and Equipment Required:

None

Initial Conditions:

- You are a SRO in the tagging center.
- The CST/CRT dike has filled up with rainwater. A discharge permit has been initiated.
- Pumping will secure at 14:00 Friday.

Initiating Cue(s):

Approve the discharge permit.

Terminating Cue(s):

Discharge permit is approved (Part 4C signed and dated).

Task Standard:

Discharge permit is completed in accordance with MCE06.

Licensed Operator Exam Information (required for NRC exams)

Safety Function:

9 - Radioactivity Release

K/A Reference: (from NUREG 1123)

K/A SYSTEM: Generic

K/A STATEMENT:

2.3.6 Ability to approve release permits2.0 / 3.8

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title Approve a Discharge Permit	No.: JP-OP-802-4101-409 Revision: 5 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT		STANDARD	
CUE: Provide examinee with Cue Sheet and marked up MCE06005.			
CUE: The FIN team will be handling the pumping and it will secure at close of business on Friday of this week.			
* 1.	[5.1.13] Assign an expiration date to the discharge permit. 1. Discharge permits are intended for the duration of the task.	* 1.	Assigns an expiration date not to exceed the length of the task (Friday, close of business).
2.	[5.1.14] Determine any special precautions and limitations relating to the release.	2.	Determines there are no special precautions and limitations.
* 3.	[5.1.15] Sign and date Part 4C of the discharge permit to indicate approval.	* 3.	Signs and dates Part 4C.
CUE: Terminate JPM when discharge permit is approved (Part 4C signed and dated).			

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* **Critical Step**

JOB PERFORMANCE MEASURE

JPM Title Approve a Discharge Permit	No.: JP-OP-802-4101-409 Revision: 5 Page 5
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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.

JOB PERFORMANCE MEASURE

JPM Title
Approve a Discharge Permit

No.: JP-OP-802-4101-409

Revision: 5

Page 6

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title Approve a Discharge Permit	No.: JP-OP-802-4101-409 Revision: 5 Page 7
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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-802-4101-409)

Initial Conditions:

- You are a SRO in the tagging center.
- The CST/CRT dike has filled up with rainwater. A discharge permit has been initiated.
- Pumping will secure at 14:00 Friday.

Initiating Cue(s):

Approve the discharge permit.

Cue Sheet: (JP-OP-802-4101-409)

Initial Conditions:



- You are a SRO in the tagging center.
- The CST/CRT dike has filled up with rainwater. A discharge permit has been initiated.
- Pumping will secure at 14:00 Friday.

Initiating Cue(s):

Approve the discharge permit.

******TRAINING USE ONLY******

DISCHARGE PERMIT

PART 1: INITIATOR			
A) Name (Print) <i>Schwetty Palms</i>	B) Department <i>Operations</i>	C) Phone <i>6-XXXX</i>	D) Date <i>today</i>
E) Source of Water <i>CST / CRT Dike</i>			
F) Discharge to <i>Fermi 2 PA Storm Sewer</i>			
PART 2: RADIATION PROTECTION (General Supervisor, Radiological Engineering or designee)			
A) Water potentially contaminated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, complete actions required by MRP18 or other applicable controls.			
B) Applicable actions completed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NA			
C) Discharge Concurrence Sign 	Name (Print) <i>William Warren</i>		Date <i>today</i>
PART 3: ENVIRONMENTAL/CHEMISTRY			
A) Has water been processed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
B) What sampling is required to authorize discharge? <u><i>None</i></u>			
C) Outfall Affected: <u><i>002</i></u> Sanitary Sewer Path: <u><i>N/A</i></u>			
D) Special Outfall Observation Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain: _____			
E) Other Requirements: <i>None</i>			
F) Discharge Concurrence Sign 	Name (Print) <i>Orin Hatch</i>		Date <i>today</i>
PART 4: OPERATIONS/INITIATOR			
A) Permit Expiration Date:			
B) Special Precautions and Limitations			
C) Approved By SM Sign	Name (Print)		Date
D) Initiator Agreement Sign	Name (Print)		Date
E) Volume Discharged:			

JOB PERFORMANCE MEASURE

Job Position SRO	No. JP-OP-802-4101-419	Revision 4
JPM Title Perform a CRS Short Term Relief	Duration 20 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / **Simulator** / Classroom Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	S	U	Comment
* 1.											
* 2.											
* 3.											
4.											
* 5.											
* 6.											

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:

_____ **PASS** _____ **FAIL**

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 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.

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 Page 3
--	--

JPM Information

System:

N/A

Task:

76128 - Provide Short Term Relief

References: Required (R) / Available (A)

- MOP01, Conduct of Operations (R)
- MOP01003, CRS Shift Relief Checklist (R)

Tools and Equipment Required:

Unit Log for previous 24 hours
Urgent Required Reading Book (in simulator)
LCO book (in simulator)

Initial Conditions:

- You are an extra SRO assigned to the shift.
- You attended the shift turnover meeting this morning.
- Plant conditions are stable and as you see them.
- Your Qualifications have been verified.

Initiating Cue(s):

- The SM directs you to provide a Short Term Relief with the CRS.
- All prerequisites are complete.

Terminating Cue(s):

Short Term Relief has been completed in accordance with MOP1003.

Task Standard:

Conduct a CRS Short Term Relief in the Control Room in accordance with MOP1003

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:

2.1.3 Knowledge of shift or short-term relief turnover practices. (CFR 41.10/45.13) 3.7 / 3.9

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Provide examinee with Cue Sheet. If asked, provide the examinee with the CRS Shift Relief Checklist (attached).	
NOTE: Examiner is to perform as the CRS being relieved.	
CUE: When asked, provide the examinee with the Unit Log for the past 24 hours (attached).	
* 1. Review Unit Log and abnormal events that have occurred in the last 24 hours.	* 1. Reviews Unit Log, and initials MOP01003.
CUE: A few hours ago power was raised from 82% to 100%. Power had been reduced to perform Turbine Valve testing. The Reactor Building Rounds NO is monitoring and adjusting Recirc MG Set oil temperatures as necessary. HPCI was tagged out to perform corrective maintenance on the Aux Oil Pump, and HPCI has been restored to operable status.	
* 2. Review General Plant Status by discussing operating condition, special limitations, bands and ranges.	* 2. Reviews General Plant Status with CRS by discussing operating condition, special limitations, bands and ranges, and initials MOP01003.
CUE: If asked, there are no outstanding LCOs. (CORA not available on the computer. Use LCO Logbook)	
* 3. Review LCOs.	* 3. Reviews LCO log book or discusses with CRS, and initials MOP01003.
4. Read Urgent Required Reading.	4. Verifies no Urgent Required Reading present (red binder).
CUE: Alarm 1D34 is in due to a faulty conductivity cell E11-N001A. There has been a CARD written to address the problem. Conductivity is currently normal. (If asked, inform the candidate that a continuous sample point is in service. Alarm 4D78 is in due to a broken level switch N30-N095. There has been a CARD written to address the problem. The tank level is currently normal, and the Turbine Building Rounds NO is checking the level twice per shift.	
CUE: SM acknowledges report of the problem with HPCI, and directs the examinee to complete the turnover. The concern with HPCI will be addressed when turnover is complete.	
* 5. Walk down COPs, and discuss any off-normal condition, status of ESF equipment, reasons for lit annunciators, and IPCS alarms.	* 5. Walks down COPs, and discusses any off-normal condition, status of ESF equipment, reasons for lit annunciators, and IPCS alarms, and initials MOP01003. <ul style="list-style-type: none"> Asks reasons for alarms 1D34 & 4D78. Determines HPCI Aux Oil Pump CMC is improperly positioned and informs SM/CRS.

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 Page 5
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ELEMENT	STANDARD
CUE: Currently, there are no “non-triggered” situation surveillances required.	
* 6. Discuss “non-triggered” situational surveillance requirements.	* 6. Discusses “non-triggered” situational surveillance requirements, and initials MOP01003.
CUE: End JPM when the items noted by an asterisk on the Shift Relief Checklist are completed.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* **Critical Step**

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 Page 6
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Evaluator Notes:

This JPM should be started at the CRS Desk in the Simulator.

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.

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 Page 7
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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title Perform a CRS Short Term Relief	No.: JP-OP-802-4101-419 Revision: 4 Page 8
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Simulator Setup

IC#:

IC-20

Malfunctions:

Number	Title	Value	Delay	Ramp
C97MF0048	01D034 RHR HX Water Conductivity High	1	0	0
C97MF0709	04D078 Seal Oil Reservoir Tank Level Low	1	0	0

Remote Functions:

Number	Title	Value	Delay	Ramp
N/A				

Override Functions:

Number	Title	Value	Delay	Ramp
N/A				

Special Instructions:

1. Initialize the simulator and place in RUN.
2. Open and execute lesson JP4101-419.Isn, or insert the malfunctions listed above.
3. Place E4101-C005, HPCI Turbine Aux Oil Pump, CMC switch in OFF RESET.
4. Acknowledge all alarms, and ensure plant conditions are stable.
5. Ensure the following items are available:
 - CRS shift Relief Checklist - MOP01003
 - Previous 24 hours unit log (attached to JPM)
 - **Required reading books**
 - **LCO book**
 - **Urgent Required**

Cue Sheet: (JP-OP-802-4101-419)**Initial Conditions:**

- You are an extra SRO assigned to the shift.
- You attended the shift turnover meeting this morning.
- Plant conditions are stable and as you see them.
- Your Qualifications have been verified.

Initiating Cue(s):

- The SM directs you to provide a Short Term Relief with the CRS.
- All prerequisites are complete.

TRAINING USE ONLY

Fermi 2 Control Room Log

Date	Entry	User
Yesterday 07:02	G. Neco relieved R. Valor as CRNSO, T. Sword relieved R. Kitchen as P603, P. Crabbe relieved A. Nightlight as CRS, M. L. Hopwick relieved J. Konners as STA Mode: 1 Reactor Power: 82 % 2807MWt Recirc Speeds: A: 62 % B: 63 % Core Flow: 77 MLB/HR RPV Pressure: 1001 PSIG RPV Level: 197 IN Torus Temp: 79 DEGF Torus Level: -0.6 IN DW Temp: 129 DEGF DW Press: 0.4 PSIG Condenser Pressure: 1.07 PSIA Generator Output: 923 MWe	e52xxx
Yesterday 15:42	N3000 Added hydrogen to the generator IAW 23.122 section 11.0, Initial pressure 70 PSIG Final Pressure 75 PSIG	e51xxx
Yesterday 18:30	Rel - S.Floyd relieved J.Koch as Radwaste Operator Assigned. Also Fred Seever is U.I. for ROA	e50xxx
Yesterday 19:05	R. Valor relieved G. Neco as CRNSO, R. Kitchen relieved T. Sword as P603, A. Nightlight relieved P. Crabbe as CRS, J. Konners relieved M. L. Hopwick as STA Mode: 1 Reactor Power: 82 % 2808MWt Recirc Speeds: A: 62 % B: 63 % Core Flow: 77 MLB/HR RPV Pressure: 1002 PSIG RPV Level: 197 IN Torus Temp: 80 DEGF Torus Level: -0.6 IN DW Temp: 129 DEGF DW Press: 0.4 PSIG Condenser Pressure: 1.06 PSIA Generator Output: 924 MWe	e56xxx
Yesterday 19:20	Started P4100C011 CW RESERVOIR WEST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e56xxx
Yesterday 19:25	M. Adore relieved G. Almos as Shift Manager Shift assignments are in accordance with the shift assignment sheet.	e57xxx
Yesterday 20:32	N3033 Added water to Stator Water Head Tank IAW 23.120 section 6.4	e56xxx
Yesterday 21:43	Stopped P4100C010 CW RESERVOIR EAST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e56xxx
Yesterday 23:28	N3000 Added hydrogen to the generator IAW 23.122 section 11.0, Initial pressure 70 PSIG Final Pressure 75 PSIG	e58xxx
Today 01:42	Started a planned reactivity change from 82% to 100% reactor power using a combination of Flow and Rods for Rod Pattern Adjustment Initial Recirc Speeds: A 62.00 B 63.00 Initial Core Flow is 77	e59xxx
Today 02:32	Started P4100C010 CW RESERVOIR EAST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e58xxx
Today 04:39	N3000 Added hydrogen to the generator IAW 23.122 section 11.0, Initial pressure 71 PSIG Final Pressure 75 PSIG	e58xxx
Today 04:45	Verified reactor power at 95% is within 3% (of rated) of the value indicated in the Power vs. Steam Flow graph IAW 22.000.03	e59xxx
Today 05:08	Stopped P4100C011 CW RESERVOIR WEST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e58xxx
Today 05:38	Completed a planned reactivity change from 82% to 100% reactor power using Recirc Flow. Final Recirc Speeds: A 70.2 B 70.2 Final Core Flow is 84.8 Contacted CSS (Mitchell) and MOC (Scott).	e55xxx
Today 06:18	Completed licensed operator walkdown and returned HPCI Aux Oil Pump to service.	e59xxx
Today 06:20	E4101 - Exit LCO 09-0573 for HPCI Aux Oil Pump Inoperable.	e59xxx
Today 06:30	Rel - J. Koch relieved S. Floyd as Radwaste Operator Assigned.	e55xxx
Today 06:55	R. Valor relieved G. Neco as CRNSO, R. Kitchen relieved T. Sword as P603, A. Nightlight relieved P. Crabbe as CRS, J. Konners relieved M. L. Hopwick as STA Mode: 1 Reactor Power: 99.5% 3430 MWt Recirc Speeds: A: 70.25% B: 70.25% Core Flow: 84.8 MLB/HR RPV Pressure: 1030 PSIG RPV Level: 197 IN Torus Temp: 78.8 DEGF Torus Level: 0.12 IN DW Temp: 135.5 DEGF DW Press: 0.52 PSIG Condenser Pressure: 1.36 PSIA Generator Output: 1153 MWe	e56xxx

Cue Sheet: (JP-OP-802-4101-419)**Initial Conditions:**

- You are an extra SRO assigned to the shift.
- You attended the shift turnover meeting this morning.
- Plant conditions are stable and as you see them.
- Your Qualifications have been verified.

Initiating Cue(s):

- The SM directs you to provide a Short Term Relief with the CRS.
- All prerequisites are complete.

TRAINING USE ONLY

Fermi 2 Control Room Log

Date	Entry	User
Yesterday 07:02	G. Neco relieved R. Valor as CRNSO, T. Sword relieved R. Kitchen as P603, P. Crabbe relieved A. Nightlight as CRS, M. L. Hopwick relieved J. Konners as STA Mode: 1 Reactor Power: 82 % 2807MWt Recirc Speeds: A: 62 % B: 63 % Core Flow: 77 MLB/HR RPV Pressure: 1001 PSIG RPV Level: 197 IN Torus Temp: 79 DEGF Torus Level: -0.6 IN DW Temp: 129 DEGF DW Press: 0.4 PSIG Condenser Pressure: 1.07 PSIA Generator Output: 923 MWe	e52xxx
Yesterday 15:42	N3000 Added hydrogen to the generator IAW 23.122 section 11.0, Initial pressure 70 PSIG Final Pressure 75 PSIG	e51xxx
Yesterday 18:30	Rel - S.Floyd relieved J.Koch as Radwaste Operator Assigned. Also Fred Seever is U.I. for ROA	e50xxx
Yesterday 19:05	R. Valor relieved G. Neco as CRNSO, R. Kitchen relieved T. Sword as P603, A. Nightlight relieved P. Crabbe as CRS, J. Konners relieved M. L. Hopwick as STA Mode: 1 Reactor Power: 82 % 2808MWt Recirc Speeds: A: 62 % B: 63 % Core Flow: 77 MLB/HR RPV Pressure: 1002 PSIG RPV Level: 197 IN Torus Temp: 80 DEGF Torus Level: -0.6 IN DW Temp: 129 DEGF DW Press: 0.4 PSIG Condenser Pressure: 1.06 PSIA Generator Output: 924 MWe	e56xxx
Yesterday 19:20	Started P4100C011 CW RESERVOIR WEST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e56xxx
Yesterday 19:25	M. Adore relieved G. Almos as Shift Manager Shift assignments are in accordance with the shift assignment sheet.	e57xxx
Yesterday 20:32	N3033 Added water to Stator Water Head Tank IAW 23.120 section 6.4	e56xxx
Yesterday 21:43	Stopped P4100C010 CW RESERVOIR EAST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e56xxx
Yesterday 23:28	N3000 Added hydrogen to the generator IAW 23.122 section 11.0, Initial pressure 70 PSIG Final Pressure 75 PSIG	e58xxx
Today 01:42	Started a planned reactivity change from 82% to 100% reactor power using a combination of Flow and Rods for Rod Pattern Adjustment Initial Recirc Speeds: A 62.00 B 63.00 Initial Core Flow is 77	e59xxx
Today 02:32	Started P4100C010 CW RESERVOIR EAST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e58xxx
Today 04:39	N3000 Added hydrogen to the generator IAW 23.122 section 11.0, Initial pressure 71 PSIG Final Pressure 75 PSIG	e58xxx
Today 04:45	Verified reactor power at 95% is within 3% (of rated) of the value indicated in the Power vs. Steam Flow graph IAW 22.000.03	e59xxx
Today 05:08	Stopped P4100C011 CW RESERVOIR WEST MAKEUP PUMP in accordance with 23.131 section 6.8 - CW Reservoir Makeup Pump Operation	e58xxx
Today 05:38	Completed a planned reactivity change from 82% to 100% reactor power using Recirc Flow. Final Recirc Speeds: A 70.2 B 70.2 Final Core Flow is 84.8 Contacted CSS (Mitchell) and MOC (Scott).	e55xxx
Today 06:18	Completed licensed operator walkdown and returned HPCI Aux Oil Pump to service.	e59xxx
Today 06:20	E4101 - Exit LCO 09-0573 for HPCI Aux Oil Pump Inoperable.	e59xxx
Today 06:30	Rel - J. Koch relieved S. Floyd as Radwaste Operator Assigned.	e55xxx
Today 06:55	R. Valor relieved G. Neco as CRNSO, R. Kitchen relieved T. Sword as P603, A. Nightlight relieved P. Crabbe as CRS, J. Konners relieved M. L. Hopwick as STA Mode: 1 Reactor Power: 99.5% 3430 MWt Recirc Speeds: A: 70.25% B: 70.25% Core Flow: 84.8 MLB/HR RPV Pressure: 1030 PSIG RPV Level: 197 IN Torus Temp: 78.8 DEGF Torus Level: 0.12 IN DW Temp: 135.5 DEGF DW Press: 0.52 PSIG Condenser Pressure: 1.36 PSIA Generator Output: 1153 MWe	e56xxx

JOB PERFORMANCE MEASURE

Job Position SRO	No. JP-OP-802-4101-434	Revision 3
JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	Duration 10 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / Simulator / **Classroom** Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	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.				
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number
Monitoring				
Control				
Conservatism				
Teamwork				
Knowledge				

OVERALL EVALUATOR COMMENTS:

_____ PASS _____ FAIL

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	No.: JP-OP-802-4101-434 Revision: 4 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.

JOB PERFORMANCE MEASURE

JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	No.: JP-OP-802-4101-434 Revision: 4 Page 3
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JPM Information

System:

N/A

Task:

75046 - Determine required actions for a security event using the protective actions flowchart for security events.

73669 - Classify an emergency condition using emergency action levels based on initiating conditions.

References: Required (R) / Available (A)

EP-530, Assembly, Accountability and Onsite Protective Actions (R)

EP-101, Classification of Emergencies (R)

Tools and Equipment Required:

None

Initial Conditions:

- You are the SM.
- The Reactor is shutdown.
- Reactor level and pressure are being controlled in normal bands.
- No EOP entry conditions exist.
- A Hostile Attack is in progress from an unknown group of approximately 5 to 10 armed individuals.
- Some individuals have obtained access to the Turbine Building.
- The CRS is executing the Hostile Threat AOP.

Initiating Cue(s):

Perform on-site protective actions.

Terminating Cue(s):

On-site protective actions have been performed, and the event has been classified.

Task Standard:

On-Site Protective actions for a Security Threat have been performed per EP-530, and the event has been classified as a Site Area Emergency (HS1.1) per EP-101.

JOB PERFORMANCE MEASURE

JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	No.: JP-OP-802-4101-434 Revision: 4 Page 4
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Licensed Operator Exam Information (required for NRC exams)

Safety Function/Category:

9 – Radioactivity Release

K/A Reference: (from NUREG 1123)

K/A SYSTEM: GENERIC

K/A STATEMENT: 2.4 Emergency Procedures/Plan

2.4.40 Knowledge of the SRO's responsibilities in emergency plan implementation 2.7 / 4.5
 2.4.41 Knowledge of emergency action level thresholds and classifications..... 2.9 / 4.1
 2.4.44 Knowledge of emergency plan protective action recommendations..... 2.4 / 4.4

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	No.: JP-OP-802-4101-434 Revision: 4 Page 5
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Provide Examinee with CUE Sheet	
* 1. Sound the Plant Area Alarm.	* 1. Sounds the Plant Area Alarm.
* 2. Make the following announcement using Hi-Com override: “Attention all personnel. There is a hostile attack in progress on the Fermi 2 site. All personnel take cover immediately!” Repeat announcement.	* 2. Makes the announcement.
CUE: Review EP-101 for condition classification. NOTE: This is meant to test examinee's knowledge of the emergency classification scheme as opposed to his ability to make a prompt classification and/or notification. Therefore, the Emergency Classification portion of this JPM is <u>NOT</u> being treated as time critical.	
* 3. Declare a Site Area Emergency – HS1.1, Security Event within the PROTECTED AREA..	* 3. Declares a Site Area Emergency (HS1.1).
CUE: Terminate JPM when on-site protective actions are performed, and the event has been classified.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* Critical Step

JOB PERFORMANCE MEASURE

JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	No.: JP-OP-802-4101-434 Revision: 4 Page 6
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Evaluator Notes:

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

Generic Notes and Cues:

N/A

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.

JOB PERFORMANCE MEASURE

JPM Title On-Site Protective Actions and Classification for Security Event (SAE)	No.: JP-OP-802-4101-434 Revision: 4 Page 7
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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title
On-Site Protective Actions and Classification for Security
Event (SAE)

No.: JP-OP-802-4101-434
Revision: 4
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	Delay	Ramp
N/A				

Special Instructions:

N/A

Cue Sheet: (JP-OP-802-4101-434)

Initial Conditions:

- You are the SM.
- The Reactor is shutdown.
- Reactor level and pressure are being controlled in normal bands.
- No EOP entry conditions exist.
- A Hostile Attack is in progress from an unknown group of approximately 5 to 10 armed individuals.
- Some individuals have obtained access to the Turbine Building.
- The CRS is executing the Hostile Threat AOP.

Initiating Cue(s):

Perform on-site protective actions.

Cue Sheet: (JP-OP-802-4101-434)

Initial Conditions:

- You are the SM.
- The Reactor is shutdown.
- Reactor level and pressure are being controlled in normal bands.
- No EOP entry conditions exist.
- A Hostile Attack is in progress from an unknown group of approximately 5 to 10 armed individuals.
- Some individuals have obtained access to the Turbine Building.
- The CRS is executing the Hostile Threat AOP.

Initiating Cue(s):

Perform on-site protective actions.

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JOB PERFORMANCE MEASURE

Job Position SRO / RO	No. JP-OP-802-4101-460	Revision 0
JPM Title Torus Water Average Temperature TS Call	Duration 11 minutes*	Page 1

*2 times Duration for ILO Exams

Examinee: ADMIN

Evaluator: _____

JPM Type: **Normal** / Alternate Path / Time Critical Start Time _____

Evaluation Method: **Perform** / Walkthrough / Discuss Stop Time _____

Location: Plant / Simulator / **Classroom** Total Time: _____

PERFORMANCE EVALUATION SUMMARY											
Element	S	U	Comment	Element	S	U	Comment	Element	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.				
Operator Fundamental	Meets all Expectations	Opportunity for Improvement	Does not meet Expectations	Comment Number
Monitoring				
Control				
Conservatism				
Teamwork				
Knowledge				

OVERALL EVALUATOR COMMENTS:

_____PASS _____FAIL

Evaluator Signature / Date: _____ / _____

JOB PERFORMANCE MEASURE

JPM Title Torus Water Average Temperature TS Call	No.: JP-OP-802-4101-460 Revision: 0 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.

JOB PERFORMANCE MEASURE

JPM Title Torus Water Average Temperature TS Call	No.: JP-OP-802-4101-460 Revision: 0 Page 3
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JPM Information

System:

T5000 – Primary Containment Monitoring System

Task:

52016 - Calculate Torus Water Average Temperature

References: Required (R) / Available (A)

29.ESP.01, Supplemental Information, Section 15, Torus Water Temperature Calculation (A)

T.S & TSB 3.6.2.1 Suppression Pool Average Temperature (R)

[TRM TLCO 3.3.6.4 and 24.000.02, "Shiftly, Daily, and Weekly Required Surveillances"](#)

Tools and Equipment Required:

Calculator

Initial Conditions:

- You are an on shift SRO.
- [The plant is operating in MODE 1.](#)
- Point T23N004 is INOP

Initiating Cue(s):

Review Torus Water Temperature. List any required T.S actions if any on provided sheet.

Terminating Cue(s):

End JPM TS call complete.

Task Standard:

Perform Torus Water Average Temperature Calculation and operability evaluation in accordance with [Technical Specification LCO 3.6.2.1 and its associated Bases](#). ~~29.ESP.01 and T.S evaluation per T.S~~

Licensed Operator Exam Information (required for NRC exams)

Safety Function/Category:

5 - Containment Integrity

K/A Reference: (from NUREG 1123)

K/A SYSTEM: 295026 - Suppression Pool High Water Temperature

K/A STATEMENT:

2.1.45 Ability to identify and interpret diverse indications to validate the response of another indication.

.....4.3/4.3

EA2. Ability to determine and/or interpret the following as they apply to Suppression Pool High Water Temperature:

EA2.01 Suppression Pool Water temperature4.1 / 4.2

Maintenance Rule Safety Classification:

N/A

Maintenance Rule Risk Significant? (Yes or No)

N/A

JOB PERFORMANCE MEASURE

JPM Title Torus Water Average Temperature TS Call	No.: JP-OP-802-4101-460 Revision: 0 Page 4
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PERFORMANCE EVALUATION

Start Time _____

ELEMENT	STANDARD
CUE: Provide examinee with Cue Sheet. CUE: If asked: TWL is 0"; there have been No SRV(s) actuations; and no testing that adds heat to the torus is in progress. NOTE: This set of elements and standards utilizes guidance that can be found in 24.000.02 and/or TRM TLCO 3.3.6.4. The information can also be found in 29.ESP.01. NOTE: If asked No SRV(s) have actuated and Torus Water level is 0 inches.	
* 1. [15.0 CAUTION] Determine if Torus water level is less than 11 inches.	* 1. Determines Torus water level.
* 2. [15.0 NOTE (1/2)] Determine if an SRV has actuated and point 4 is INOP	* 2. Determines that an SRV has NOT actuated and point 4 is INOP.
CUE: When asked for the instrument point readings, provide the examinee with the Data Sheet.	
* 3. Determine T23-R800, Torus Water Temperature Recorder, instrument point readings.	* 3. T23-R800 instrument point readings determined.
* 4. Calculate Average Torus Water Temperature.	* 4. Calculates Average Torus Water Temperature using NOTE 1. (98.44°F)
* 5. Determine applicable TS	* 5. Determines: TS 3.6.2.1 Cond A.1 once per hour TS 3.6.2.1 Cond A.2 in 24 hours
CUE: End JPM TS call complete.	

_____ SATISFACTORY

_____ UNSATISFACTORY

Stop Time _____

* Critical Step

CHANGE NOTES:

- Performance Step 1 deleted. Since initial conditions, as given, do not indicate any emergency or abnormal condition other than a faulty temperature instrument, there is no reason to believe that Torus Water Level is not normal.
- Added NOTE to clarify performance references and changed previous NOTE into a provisional CUE.
- Deleted Bracketed information in Performance Step 2 which refers to Section 15.0 in 29.ESP.01. Since initial conditions, as given, do not indicate any emergency or abnormal condition other than a faulty temperature instrument, use of 29.ESP.01 is not warranted in accordance with facility's procedure usage guidelines.

JOB PERFORMANCE MEASURE

JPM Title Torus Water Average Temperature TS Call	No.: JP-OP-802-4101-460 Revision: 0 Page 5
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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.

JOB PERFORMANCE MEASURE

JPM Title Torus Water Average Temperature TS Call	No.: JP-OP-802-4101-460 Revision: 0 Page 6
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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for follow-up question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE

JPM Title Torus Water Average Temperature TS Call	No.: JP-OP-802-4101-460 Revision: 0 Page 7
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Simulator Setup

IC#:

N/A

Malfunctions:

Number	Title	Value	Delay	Ramp
N/A				

Remote Functions:

Number	Title	Value	Delay	Ramp
N/A				

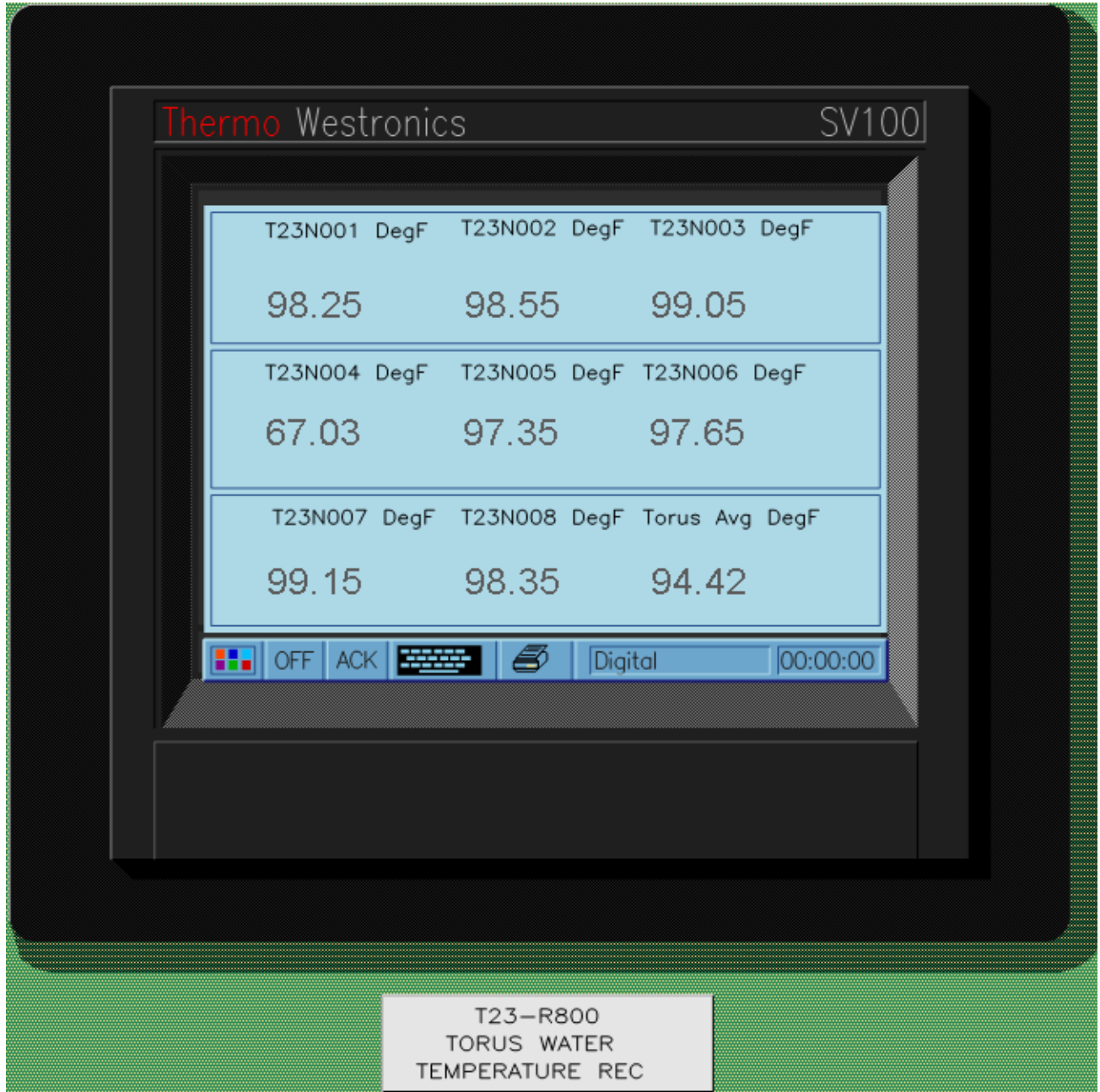
Override Functions:

Number	Title	Value	Delay	Ramp
N/A				

Special Instructions:

N/A

Data Sheet: (JP-OP-802-4101-460)



**T23-R800, Torus Water Temperature Recorder,
Instrument Point Readings**

DELETE PAGE29.ESP.01
Revision 19
Page 49**15.0 TORUS WATER AVERAGE TEMPERATURE CALCULATION****CAUTION**

With Torus Water Level less than -11 inches, Torus Water temperature must be obtained from T50-R800A/B, Div 1/2 PC Air And Water Temperatures Rec (H11-P601/P602), Points 11 and 12.

NOTE (1): If an instrument point is inoperable and an SRV has not actuated, the inoperable instrument point must be replaced with the highest reading temperature of the operable instrument points.

NOTE (2): If an instrument point is inoperable and an SRV has actuated, for a period of 48 hours following the SRV actuation, the inoperable instrument point must be replaced with the highest reading temperature of the operable instrument points plus 45°F.

TORUS WATER AVERAGE TEMPERATURE CALCULATION

Instrument: T23-R800, Torus Water Temperature Rec (H11-P601)

Instrument Points (if available): 1, 2, 3, 4, 5, 6, 7, 8

Calculation:

$$\frac{(1) + (2) + (3) + (4) + (5) + (6) + (7) + (8)}{8} = \text{_____ } ^\circ\text{F Average}$$

END OF SECTION

Per NOTE (1) point 4 is INOP so value will be 99.15 vice 67.03 (bolded)

$$98.25 + 98.55 + 99.05 + \mathbf{99.15} + 97.35 + 97.65 + 99.15 + 98.35 = 98.4375$$

Cue Sheet: (JP-OP-802-4101-460)

Initial Conditions:

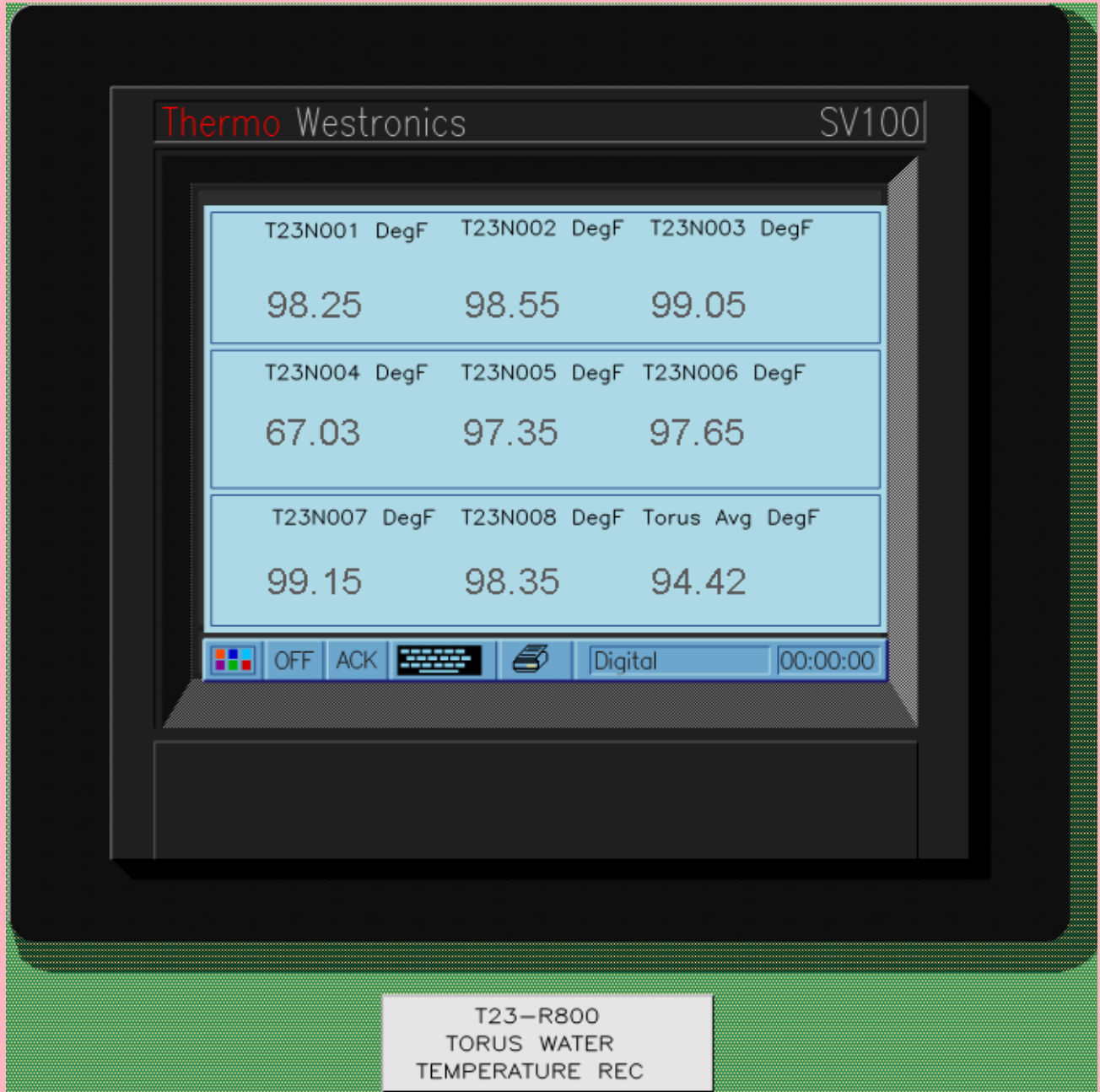
- You are a on shift SRO.
- Point T23N004 is INOP

Initiating Cue(s):

Review Torus Water Temperature. List any required T.S actions if any on provided sheet.

TS	CONDITION	REQUIRED ACTION	COMPLETION TIME

Data Sheet: (JP-OP-802-4101-460)



**T23-R800, Torus Water Temperature Recorder,
Instrument Point Readings**

Cue Sheet: (JP-OP-802-4101-460)

Initial Conditions:

- You are a on shift SRO.
- Point T23N004 is INOP

Initiating Cue(s):

Review Torus Water Temperature. List any required T.S actions if any on provided sheet.

TS	CONDITION	REQUIRED ACTION	COMPLETION TIME