



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: Bulk D/W Temperature Manual Calculation

JPM NUMBER: JPM-001 **REV.** 1

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): CR304.103
Perform Actions Associated with Primary Containment Control

K/A NUMBERS: 2.1.25 **Rating: SRO/RO:** 3.1/2.8

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐

Simulator: ☒ Other: ☐

Lab: ☐

Time for Completion: 15 Minutes Time Critical: No

Alternate Path / Faulted: No

TASK APPLICABILITY: SRO: _____ SRO/RO: X SRO/RO/NLO: _____

Additional signatures may be added as needed.

Developed by:	J. Ruth	
	Instructor	Date
Validated by:	Validation Instructor (See JPM Validation Checklist, Attachment 1)	
		Date
Approved by:	Training Supervisor	
		Date

JPM-001, Bulk D/W Temperature Manual Calculation Rev. 1

JPM Number: JPM-001

JPM Title: Bulk D/W Temperature Manual Calculation

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER

(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

- A LOCA is in progress
- EOP-1200 has been entered
- SPDS is OOS
- You are an extra licensed operator in the control room

INITIATING CUES (IF APPLICABLE):

- The CRS directs you to manually calculate and report bulk average Drywell temperature.
- **INFORM EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.**

JPM PERFORMANCE INFORMATION**Required Materials:** Simulator**General References:** Operator Aid for Bulk Drywell Temperature Manual Calculation**Task Standards:** Operator Aid for Bulk Drywell Temperature Manual Calculation**Start Time:** _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step **SHALL** result in failure of this JPM.

Performance Step: 1 Locates Operator Aid for Bulk Drywell Temperature Manual Calculation
Critical: N

Standard: Locates Operator Aid

Evaluator Cue: None

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments:

Performance Step: 2 From TR23-115 determines Drywell temperature from the following points:
Critical: Y

- East 932' Point 22
- South 951' Point 23
- West 970' Point 21
- North 994' Point 24

Standard: Determines the following temperatures:

- East 932' Point 22 = 259.2°F
- South 951' Point 23 = 267.2°F
- West 970' Point 21 = 259.8°F
- North 994' Point 24 = 275.5°F

Evaluator Cue: After operator identifies the trend recorder and applicable points, provide the sheet with a printout of the above points and their readings.

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments:

Performance Step: 3 Critical: Y	Apply Weight Factor to the temperatures from previous step to determine Weight Temperatures. <ul style="list-style-type: none"> • East 932' Point 22 X .400 • South 951' Point 23 X .423 • West 970' Point 21 X .093 • North 994' Point 24 X .084
Standard:	Apply Weight Factor to the temperatures as follows: <ul style="list-style-type: none"> • East 932' Point 22 X .400 = $(259.2 \times .4 = 103.68)$ • South 951' Point 23 X .423 = $(267.2 \times .423 = 113.03)$ • West 970' Point 21 X .093 = $(259.8 \times .093 = 24.16)$ • North 994' Point 24 X .084 = $(275.5 \times .084 = 23.14)$
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 4 Critical: Y	Add Weight Temperatures to determine Bulk Average Drywell Temperature Total.
Standard:	Adds Weight Temperatures to obtain a calculated temperature of 264.01°F + or - 2°F
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 5 Critical: N	Reports bulk average Drywell temperature calculated above to CRS.
Standard:	Reports bulk average Drywell temperature calculated above to CRS.
Evaluator Cue:	Acknowledge report.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 6	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical: N	
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	When informed of calculated average drywell bulk temperature, acknowledge the report and state that the JPM is complete.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Terminating Cues: When informed of calculated average drywell bulk temperature, acknowledge the report and state that the JPM is complete.

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- A LOCA is in progress
- EOP-1200 has been entered
- SPDS is OOS
- You are an extra licensed operator in the control room

INITIATING CUES (IF APPLICABLE):

- The CRS directs manually calculate and report bulk average Drywell temperature.
- **INFORM EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.**

SIMULATOR SET UP:

INITIAL CONDITIONS:

Any simulator condition is acceptable as the only requirement for the simulator is access to the calculation instructions on the trend recorder.

SET UP INSTRUCTIONS:

- None

ATTACHMENT 1
JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

Historical Record: (Optional)



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: CONTROL ROOM SHIFT TURNOVER CHECKLIST

JPM NUMBER: JPM-3139-001 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): CR298.103
Perform the Control Room Shift Turnover Checklist

K/A NUMBERS: 2.1.3 **Rating: SRO/RO:** 3.4 /3.0

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐

Simulator: ☒ Other: ☐

Lab: ☐

Time for Completion: 20 Minutes Time Critical: No

Alternate Path / Faulted: Yes

TASK APPLICABILITY: SRO: _____ SRO/RO: X SRO/RO/NLO: _____

Additional signatures may be added as needed.

Developed by:	J Ruth	
	Instructor	Date
Validated by:	Validation Instructor	Date
	(See JPM Validation Checklist, Attachment 1)	
Approved by:	Training Supervisor	Date

JPM-3139-001 (CONTROL ROOM SHIFT TURNOVER CHECKLIST) Rev.0

JPM Number: JPM-3139-001

JPM Title: Control Room Shift Turnover Checklist

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER
(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

- The reactor is operating at power
- You are the LPEO on the 19-07 shift
- The Shift Manager is “Smith”

INITIATING CUES (IF APPLICABLE):

- Perform the front page of 3139, Control Room Shift Turnover Checklist

JPM PERFORMANCE INFORMATION**Required Materials:** Checklist 3139**General References:** OWI-02.01, Operations Shift Turnover**Task Standards:** Complete front page of checklist**Start Time:** _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: 1 Complete the shift complement section of the checklist.**Critical: N****Standard:** Fills in Shift Manager, Date, Shift.**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 2** Record Mode Switch position**Critical: N****Standard:** Checks Run box**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____

Performance Step: 3 Record Core thermal Power**Critical: N****Standard:** Records 1773 ± 2 MWT**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 4** Record Core Flow**Critical: N****Standard:** Records 51×10^6 Lb/Hr ± 0.5 **Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 5** Record Core/Rx dP**Critical: N****Standard:** Records 14.2 / 22 Psid ± 0.5 **Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 6** Record Rx Pressure**Critical: N****Standard:** Records 1000 Psig ± 5 **Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____

Performance Step: 7 Record Rx Level**Critical: N****Standard:** Records 35 inches \pm 1**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 8** Record Torus Level**Critical: N****Standard:** Records 0 inches \pm .5**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 9** Record RCP dP**Critical: N****Standard:** Records 117 / 116 psid \pm 2**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____**Performance Step: 10** Record Steam Flow**Critical: N****Standard:** Records 7.25×10^6 Lb/Hr \pm .25**Evaluator Cue:** None**Performance:** **SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:** _____

Performance Step: 11	Record FW Flow
Critical: N	
Standard:	Records 7.25×10^6 Lb/Hr \pm .25
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12	Records status of Nuclear Instruments
Critical: N	
Standard:	Records APRMs 2 and 5 bypassed with none above normal
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 13	Records status of Rad Monitors
Critical: N	
Standard:	Records none are bypassed and none above normal
Evaluator Cue:	
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 14	Record Rx Level Mode / Controllers
Critical: Y	
Standard:	Records 3 element, MSTR-AUTO, and notes the Lo Flow Reg Va is in AUTO and informs the CRS of the position being out of normal. Takes Lo Flow Reg Va to MAN and reports CRS.
Evaluator Cue:	Acknowledge the report of the Lo Flow Reg Va in AUTO and directs it to be placed in MAN.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 15	Record RFP Level Trip
Critical: N	
Standard:	Records position of RFP Level Trip in NORMAL
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 16	Record Press Contr
Critical: N	
Standard:	Records MPR # 910 ± 5 and EPR# 903 ± 1
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 17	Record Switch position and Alarms for 11 & 12 D Gen
Critical: N	
Standard:	Records AUTO for switch positions and None for alarms
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 18	Record ADS "A", "C", "D" switch positions and alarms
Critical: N	
Standard:	Records ADS switch positions in AUTO and None for alarms
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-3139-001 (CONTROL ROOM SHIFT TURNOVER CHECKLIST) Rev.0

Performance Step: 19	Record SRV Low-Low Set C-03 "E", "G", "H" switch positions and alarms
Critical: N	
Standard:	Records Low-Low Set switch positions in AUTO and None for alarms
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 20	Record DIV II Low-Low Set Logic switch position and alarms
Critical: N	
Standard:	Records switch in Auto and None for alarms
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 21	Record "A" RHR switch position, alarms, and valve line-up
Critical: Y	
Standard:	Records switch position in Auto, None for alarms, and notes MO-2002 (RHR DIV 1 HX BYPASS) valve is in the CLOSED position. Reports to CRS and takes keylock switch to OPEN when directed by CRS.
Evaluator Cue:	Acknowledge report of MO-2002 (RHR DIV 1 HX BYPASS) valve is in the CLOSED position. Directs valve be opened.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 22	Record "A" RHRSW switch position, alarms, and valve line-up
Critical: N	
Standard:	Records switch position in Auto, None for alarms, and valve line-up sat
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 23	TASK COMPLETED
Critical: N	
Standard:	Operator acknowledges to the evaluator that the task is completed.
Evaluator Cue:	When the RHRSW check has been completed, state that the JPM is completed
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When the RHRSW check is been completed, state that the JPM is completed

Stop Time: _____

Critical Time N/A

TURNOVER SHEET

INITIAL CONDITIONS:

- The reactor is operating at power
- You are the LPEO on the 19-07 shift
- The Shift Manager is "Smith"

INITIATING CUES (IF APPLICABLE):

- Perform the front page of 3139, Control Room Shift Turnover Checklist

SIMULATOR SET UP:

- IC-15 or other 100% power IC.
- Place the Low Flow Reg Valve in AUTO
- Place the key lock switch for MO-2002 (RHR DIV 1 HX BYPASS) in the CLOSED position.

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL.
1.							
2.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

ATTACHMENT 1**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Historical Record: (Optional)



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: DETERMINE SHIFT STAFFING

JPM NUMBER: JPM OWI-01.06-003 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): SS299.289
Implement the Operations Group Organization and Responsibilities Assignments

K/A NUMBERS: 2.1.4 **Rating: SRO/RO:** 3.4 / 2.3

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

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

Time for Completion: 15 Minutes Time Critical: No

Alternate Path / Faulted: No

TASK APPLICABILITY: SRO: X SRO/RO: _____ SRO/RO/NLO: _____

Additional signatures may be added as needed.

Developed by:	J Ruth	
	Instructor	Date
Validated by:	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	Training Supervisor	Date

JPM Number: JPM-OWI-01.06-003

JPM Title: Determine Shift Staffing

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER

(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

- You are a fully qualified CRS at the beginning of a shift change
- The reactor is operating in MODE 1
- The following Operations personnel have reported to work:
 - Mitchell
 - Alfano
 - Mack
 - Casperson
 - Rose
 - Dowd
 - Kreidler

INITIATING CUES (IF APPLICABLE):

- Determine if the staffing requirements are met for the Control Room and the following On-shift collateral duties:
 - Fire Brigade
 - Toxic Gas
 - S/D Outside the Control Room

JPM PERFORMANCE INFORMATION

Required Materials: MTF-7600-002, Monticello Fire Brigade Training Summary, Monticello Nuclear Generating Plant Operations Department Organization/Qualification

General References: OWI-01.06 Rev. 28

Task Standards: Determine Staffing Requirements

Start Time: _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: 1	Refers to OWI-01.06, DUTY OPERATIONS PERSONNEL REQUIREMENTS AND RESPONSIBILITIES
Critical: N	
Standard:	Refers to OWI for guidance
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Requirements for Control Room staffing are listed in the TRM table 5.2-1
Critical: Y	
Standard:	Reviews requirements of Table 5.2-1 and determines requirements are met by having a total number of operators is 4 of which 2 are SROs. (May note that both Alfano and Casperson have “no solo” status.)
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	(May note that both Alfano and Casperson have “no solo” status.) _____

JPM-OWI-01.06-003 (DETERMINE SHIFT STAFFING) Rev. 0

Performance Step: 3 Critical: Y	On-shift collateral duties require the following staffing: 1. Fire Brigade: Five duty crew members normally filled by the following individuals: BOP, two NAPEOs, Shift Chemist, Shift Rad Prot Spec. These individuals are required to be respirator qualified.
Standard:	Assigned Casperson, and 2 of either Rose, Dowd or Kreidler to Fire Brigade.
Evaluator Cue:	If asked, inform the candidate that all non-operations required individuals are available and respirator qualified.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical: Y	On-shift collateral duties require the following staffing: 2. Toxic Gas Event: Technical specifications requires two active SROs and two active ROs while in Startup or Run mode. The Shift Mgr, Control Room Supv, and two of the three Control room Operators satisfy this requirement. These individuals are required by A.4 (HAZARDOUS MATERIALS PROCEDURES) to be respirator qualified.
Standard:	Determines that any 2 of the 3 ROs will satisfy the requirement.
Evaluator Cue:	Acknowledges report
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical: Y	On-shift collateral duties require the following staffing: 3. S/D Outside the Control Room: Three duty crew members are required to effectively implement C.4-C (SHUTDOWN OUTSIDE CONTROL ROOM). Normally four individuals are available to implement this procedure. These individuals cannot simultaneously have fire Brigade duties. (Fire in the Control room or Cable spreading Room requires both Fire Brigade and C.4-C implementation). The Shift Mgr, NLPE&RO, NPE&RO, and NAPEO normally satisfies this requirement. There are no respirator qualifications associated with this requirement.
Standard:	Determines this requirement can be met.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step:	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical:	N
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	When the operator informs evaluator that the task is completed state that the JPM is complete.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When the operator informs evaluator that the task is completed state that the JPM is complete.

Stop Time: _____

Critical Time N/A

TURNOVER SHEET

INITIAL CONDITIONS:

- You are a fully qualified CRS at the beginning of a shift change
- The reactor is operating in MODE 1
- The following Operations personnel have reported to work:
 - Mitchell
 - Alfano
 - Mack
 - Casperson
 - Rose
 - Dowd
 - Kreidler

INITIATING CUES (IF APPLICABLE):

- Determine if the staffing requirements are met for the Control Room and the following On-shift collateral duties:
 - Fire Brigade
 - Toxic Gas
 - S/D Outside the Control Room

SIMULATOR SET UP:

Admin JPM; no simulator setup required.

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL.
1.							
2.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

ATTACHMENT 1**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Historical Record: (Optional)



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: DAILY JET PUMP OPERABILITY CHECK TEST 0133

JPM NUMBER: JPM-0133-001 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): CR299.349
Perform Operations Daily Log – Parts A, B, D, E, G, H, & J

K/A NUMBERS: 2.2.12 **Rating: SRO/RO:** 3.4/3.0

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐

Simulator: ☒ Other: ☐

Lab: ☐

Time for Completion: 15 Minutes Time Critical: No

Alternate Path / Faulted: No

TASK APPLICABILITY: SRO: _____ SRO/RO: X SRO/RO/NLO: _____

Additional signatures may be added as needed.

Developed by:	J Ruth	
	Instructor	Date
Validated by:	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	Training Supervisor	Date

JPM Number: JPM-0133-001

JPM Title: Daily Jet Pump Operability Check Test 0133

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER
(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

- The reactor is operating at power
- You are the BOP operator

INITIATING CUES (IF APPLICABLE):

- The CRS directs you to perform Test 0133, Daily Jet Pump Operability Check per Operations Daily Log – Part B

JPM PERFORMANCE INFORMATION

Required Materials: Individual Jet Pump dP readings, B.01.04-06 Figures 15, 16 & 17.

General References: Simulator IC at 100% power.

Task Standards: Complete Test 0133 (Expected readings are provided in red.)

Start Time: _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: 1

Critical: Y

NOTE: STEP 3.b. and 3.c. not required to be performed until 4 hours after associated recirculation loop is in operation and until 24 hours after THERMAL POWER >25% RTP.

IF the Reactor is in MODE 1 or 2,
AND recirculation loop(s) is in operation,
THEN obtain and record the values for the operating loop(s) described in the matrices below and perform the following:

Variable	Panel	Item Description	Value	Unit
	CRT	RPV501, Core Thermal Power %	~99.9	%
A	C-04	SI-2-184-16A, Recirc Pump 11 %Speed	~95	%
B	C-04	SI-2-184-16B, Recirc Pump 12 %Speed	~96	%
C	C-04	FI-2-159A, Recirc Loop 11 Flow	~29.1	gpm
D	C-04	FI-2-159B, Recirc Loop 12 Flow	~29.3	gpm

Standard: Obtains and records the above data.

Evaluator Cue: None

Performance: SATISFACTORY ☐ UNSATISFACTORY ☐

Comments: _____

Performance Step: 2**Critical: Y**

On Figure 17, Recirculation Pump Flow vs Speed, of Ops Man B.01.04-06 (REACTOR RECIRCULATION SYSTEM – FIGURES) plot points for values of variables A vs C and variables B vs D.

1) Does point A vs C fall in ACCEPTABLE RANGE?

Yes ☐ No ☐

2) Does point B vs D fall in ACCEPTABLE RANGE?

Yes ☐ No ☐

Standard:

Plots points and determines values are in the acceptable range.

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:****Performance Step: 3****Critical: Y**

Variable	Panel	Item Description	Value	Unit
E	C-04	FI-2-3-92B, Jet Pump Loop A Flow	~27.8 x 10 ⁶	lb/hr
F	C-04	FI-2-3-92A, Jet Pump Loop B Flow	~27.1 x 10 ⁶	lb/hr
G	calc	(E ÷ L) X 100, % Loop A Flow	~97	%
H	calc	(F ÷ L) X 100, % Loop B Flow	~94	%
J	calc	(G ÷ A) % Loop Flow / % Pump Speed	~102	ratio
K	calc	(H ÷ B) % Loop Flow / % Pump Speed	~98	ratio
L=Constant		Half of rated Core Flow	28.8 x 10 ⁶	lb/hr
M	calc	(E ÷ (L x 2)) x 100%, % Core Flow	~48.26	%
N	calc	(F ÷ (L x 2)) x 100%, % Core Flow	~47.07	%

Standard:

Obtains and records the above data.

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:**

Performance Step: 4 IF THERMAL POWER IS >25% RTP,
Critical: Y THEN on Figure 15, Loop A: Jet Pump Loop Flow/Pump Speed, of Ops Man B.01.04-06 plot points for values of variables J vs A.

1) Does point J vs A fall in ACCEPTABLE RANGE?

Yes ☐ No ☐ N/A ☐

Standard: Plots points and determines values are in the acceptable range.

Evaluator Cue: None

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Performance Step: 5 IF THERMAL POWER IS >25% RTP,
Critical: Y THEN on Figure 16, Loop B: Jet Pump Loop Flow/Pump Speed, of Ops Man B.01.04-06 plot points for values of variables K vs B.

1) Does point K vs B fall in ACCEPTABLE RANGE?

Yes ☐ No ☐ N/A ☐

Standard: Plots points and determines values are in the acceptable range.

Evaluator Cue: None

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Performance Step: 6 IF any question in STEPs 3.a. through 3.c. is checked "No",
Critical: N THEN notify Control Room Supervisor,
AND perform procedure 0442 (SPECIAL JET PUMP OPERABILITY TEST).

Standard: Determines no step is "No".

Evaluator Cue: None

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Performance Step: 7**Critical: Y**

IF in MODE 1 or 2,
AND both recirculation loops are in operation,
THEN :

- 1) Calculate percent of total rated core flow (M + N) ~95.3 %

Standard:

Calculates percent of total rated core flow.

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:****Performance Step: 8****Critical: Y**

IF in MODE 1 or 2,
AND both recirculation loops are in operation,
THEN :

- 2) Calculate absolute value (M - N), Jet Pump Flow Mismatch
~1.19 %

Standard:

Calculates absolute value.

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:****Performance Step: 9****Critical: N**

IF in MODE 1 or 2,
AND both recirculation loops are in operation,
THEN :

- 3) IF percent of total rated core flow from STEP 3.e.1) is <70%,
THEN is the Jet Pump Flow Mismatch from STEP 3.e.2) ≤10%?

Yes ☐ No ☐ N/A ☐

Standard:

Determines this step is N/A.

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:**

Performance Step: 10**Critical: Y**IF in MODE 1 or 2,AND both recirculation loops are in operation,THEN :

- 4) IF percent of total rated core flow from STEP 3.e.1) is $\geq 70\%$,
THEN is the Jet Pump Flow Mismatch from STEP 3.e.2) $\leq 5\%$?

Yes ☐No ☐N/A ☐**Standard:**Determines Jet Pump Flow Mismatch is $\leq 5\%$.**Evaluator Cue:**

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:****Performance Step: 11****Critical: N**IF any question in STEP 3.e. is checked "No",THEN notify Control Room Supervisor,AND evaluate Tech Spec 3.4.1 and enter appropriate Condition.**Standard:**

Determines no step is "No".

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:****Performance Step: 12****Critical: Y**IF the Reactor is in MODE 1,AND there is recirculation flow,THEN perform the following:

- From FPR-2-3-95 (C-04), Core dP Red Pen, record dP: (~17)
- Record the square root of Core dP (from a. above): (~4.1)
- From CRT mimic obtain and record Core Flow: (~55.2 X 10⁶)
- Calculate and record 100 x (c. ÷ 57.6 x 10⁶ lb/hr): (~95.8)
- On Figure 20 Core Plate dP vs Core Flow, of Ops Man B.01.04-06 plot point for value of b. vs d. above.

Standard:

Obtains and records the above data.

Evaluator Cue:

None

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:**

Performance Step: 13
Critical: Y

On figure 20 Core Plate dP vs. Core Flow, of Ops Man B.01.04-06 plot point for value b. vs. d. above.

1) Does point for b. vs. d fall in ACCEPTABLE RANGE?

Yes ☐ No ☐

2) IF No,
THEN notify Shift Supervision to determine actions and notifications.

Standard:

Plots points and determines values are in the acceptable range.

Evaluator Cue:

None

Performance:

SATISFACTORY ☐ **UNSATISFACTORY** ☐

Comments:**Performance Step: 14**
Critical: Y

IF the Reactor is in MODE 1,
AND THERMAL POWER >25% RTP with a recirculation loop in operation,
THEN from FR-7288, JET PUMP FLOW RECORDER (Panel C-38), record individual Jet Pump and loop average dPs in the matrix below and perform the following:

Loop A		
Jet Pump	Raw dP	DP/Loop Avg
11	2.8	1
12	2.8	1
13	2.7	0.96
14	2.8	1
15	2.6	0.93
16	2.9	1.03
17	2.8	1
18	2.7	0.96
19	2.8	1
20	2.6	0.93
Loop Avg dP	2.8	

Loop B		
Jet Pump	Raw dP	DP/Loop Avg
1	2.8	1
2	2.6	0.93
3	2.7	0.96
4	2.9	1.03
5	2.7	0.96
6	2.8	1
7	2.7	0.96
8	2.6	0.93
9	2.7	0.96
10	2.7	0.96
Loop Avg dP	2.8	

Standard:

Records data provided.

Evaluator Cue:

Provide individual Jet Pump Raw dP data.

Performance:

SATISFACTORY ☐ **UNSATISFACTORY** ☐

Comments:

Performance Step: 15	For each loop divide each individual Jet Pump raw dP by its Loop Average dP and record in matrix.
Critical: Y	
Standard:	Divides and records in matrix.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 16	<u>IF</u> the Reactor is in MODE 1, <u>AND</u> Recirc Pump speed (SI-2-184-16A&B on C04) >50%, <u>THEN</u> perform the following:
Critical: Y	<ul style="list-style-type: none"> a. Record 2-184-23A (C04), A Pump Volts, indication: (~3500 Volts) b. Record 2-184-23B (C04), B Pump Volts, indication: (~3550 Volts) c. Record SI-2-184-16A, Recirc Pump 11 %Speed, indication: (~95) d. Record SI-2-184-16B, Recirc Pump 12 %Speed, indication: (~96) e. Record result of a. ÷ c.: (~36.8) Volts/% Speed for 11(35.5 – 40.5) f. Record result of b. ÷ d.: (~37) Volts/% Speed for 12 (35.5 – 40.5)
Standard:	Obtains and records above parameters.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 17	<u>IF</u> either acceptance criteria is not met, <u>THEN</u> on Panel C-21 from TR-2-184-26, RECIRC MG SET WINDING TEMP, and TR-2-2-31, RECIRC PUMP AND MTR TEMP, verify MG set generator and Recirc pump motor winding temperatures are normal and not unexpectedly trending up, <u>AND</u> notify Shift Supervision to determine actions and notifications.
Critical: N	
Standard:	Determines acceptance criteria is met.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 18 **INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.**

Critical: N

Standard: Operator informs evaluator that the task is completed.

Evaluator Cue: Acknowledge report of task completion.

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Terminating Cues: **AFTER TASK COMPLETION REPORT IS MADE, STATE THAT THE JPM IS COMPLETE.**

Stop Time: _____

Critical Time N/A

TURNOVER SHEET

INITIAL CONDITIONS:

- The reactor is operating at power
- You are the BOP operator

INITIATING CUES (IF APPLICABLE):

- The CRS directs you to perform Test 0133, Daily Jet Pump Operability Check per Operations Daily Log – Part B

SIMULATOR SET UP:

- IC-15 or other 100% power IC.

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL.
1.							
2.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

ATTACHMENT 1
JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

Historical Record: (Optional)



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: DAILY JET PUMP OPERABILITY CHECK TEST 0133

JPM NUMBER: JPM-0133-002 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): CR299.349
Perform Operations Daily Log – Parts A, B, D, E, G, H, & J

K/A NUMBERS: 2.1.12 **Rating: SRO/RO:** 3.4/3.0

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐

Simulator: ☒ Other: ☐

Lab: ☐

Time for Completion: 15 Minutes Time Critical: No

Alternate Path / Faulted: Yes

TASK APPLICABILITY: SRO: X SRO/RO: _____ SRO/RO/NLO: _____

Additional signatures may be added as needed.

Developed by:	J Ruth	
	Instructor	Date
Validated by:	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	Training Supervisor	Date

JPM Number: JPM-0133-002

JPM Title: Daily Jet Pump Operability Check Test 0133

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER

(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

- The reactor is operating at power
- Test 0133, Daily Jet Pump Operability Check per Operations Daily Log – Part B has been completed by the RO
- You are the CRS

INITIATING CUES (IF APPLICABLE):

- Review the provided Test 0133, Daily Jet Pump Operability Check per Operations Daily Log – Part B

JPM PERFORMANCE INFORMATION

Required Materials: Marked up copy of completed test, B.01.04-06 Figures 15, 16 & 17.

General References: Simulator IC at 100% power.

Task Standards: Complete Test 0133 review.

Start Time: _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: 1
Critical: N

NOTE: STEP 3.b. and 3.c. not required to be performed until 4 hours after associated recirculation loop is in operation and until 24 hours after THERMAL POWER >25% RTP.

IF the Reactor is in MODE 1 or 2,
AND recirculation loop(s) is in operation,
THEN obtain and record the values for the operating loop(s) described in the matrices below and perform the following:

Variable	Panel	Item Description	Value	Unit
	CRT	RPV501, Core Thermal Power %	99.9	%
A	C-04	SI-2-184-16A, Recirc Pump 11 %Speed	94	%
B	C-04	SI-2-184-16B, Recirc Pump 11 %Speed	96	%
C	C-04	FI-2-159A, Recirc Loop 11 Flow	25	gpm
D	C-04	FI-2-159B, Recirc Loop 12 Flow	27	gpm

Standard: Reviews the above data.

Evaluator Cue: None

Performance: SATISFACTORY ☐ UNSATISFACTORY ☐

Comments: _____

Performance Step: 2**Critical: Y**

On Figure 17, Recirculation Pump Flow vs Speed, of Ops Man B.01.04-06 (REACTOR RECIRCULATION SYSTEM – FIGURES) plot points for values of variables A vs C and variables B vs D.

1) Does point A vs C fall in ACCEPTABLE RANGE?

Yes ☐ No ☐

2) Does point B vs D fall in ACCEPTABLE RANGE?

Yes ☐ No ☐

Standard:

Reviews points and determines 1) is **NOT** in the acceptable range and 2) is in the acceptable range.

Evaluator Cue:

None

Performance:

SATISFACTORY ☐ **UNSATISFACTORY** ☐

Comments:**Performance Step: 3****Critical: N**

Variable	Panel	Item Description	Value	Unit
E	C-04	FI-2-3-92B, Jet Pump Loop A Flow	24.9×10^6	lb/hr
F	C-04	FI-2-3-92A, Jet Pump Loop B Flow	26.1×10^6	lb/hr
G	calc	$(E \div L) \times 100$, % Loop A Flow	86.45	%
H	calc	$(F \div L) \times 100$, % Loop B Flow	90.62	%
J	calc	$(G \div A) \times 100$, % Loop Flow / % Pump Speed	0.9196	ratio
K	calc	$(H \div B) \times 100$, % Loop Flow / % Pump Speed	0.9439	ratio
L=Constant		Half of rated Core Flow	28.8×10^6	lb/hr
M	calc	$(E \div (L \times 2)) \times 100\%$, % Core Flow	43.23	%
N	calc	$(F \div (L \times 2)) \times 100\%$, % Core Flow	45.31	%

Standard:

Reviews the above data.

Evaluator Cue:

None

Performance:

SATISFACTORY ☐ **UNSATISFACTORY** ☐

Comments:

Performance Step: 4 IF THERMAL POWER IS >25% RTP,
Critical: Y THEN on Figure 15, Loop A: Jet Pump Loop Flow/Pump Speed, of Ops Man B.01.04-06 plot points for values of variables J vs A.

1) Does point J vs A fall in ACCEPTABLE RANGE?

Yes ☐ No ☐ N/A ☐

Standard: Review points and determines values are **NOT** in the acceptable range.

Evaluator Cue: If informed, acknowledge that point does not fall within the acceptable range.

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Performance Step: 5 IF THERMAL POWER IS >25% RTP,
Critical: Y THEN on Figure 16, Loop B: Jet Pump Loop Flow/Pump Speed, of Ops Man B.01.04-06 plot points for values of variables K vs B.

1) Does point K vs B fall in ACCEPTABLE RANGE?

Yes ☐ No ☐ N/A ☐

Standard: Reviews points and determines values are **NOT** in the acceptable range.

Evaluator Cue: If informed, acknowledge that point does not fall within the acceptable range.

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Performance Step: 6 IF any question in STEPs 3.a. through 3.c. is checked "No",
Critical: Y THEN notify Control Room Supervisor,
AND perform procedure 0442 (SPECIAL JET PUMP OPERABILITY TEST).

Standard: When informed, acknowledge that performance of procedure 0442 is required and state that the JPM is complete.

Evaluator Cue: None

Performance: **SATISFACTORY** ☐ **UNSATISFACTORY** ☐

Comments: _____

Terminating Cues: **EVALUATOR INFORMS OPERATOR THAT THE JPM IS COMPLETE.**

Stop Time: _____

Critical Time N/A

TURNOVER SHEET

INITIAL CONDITIONS:

- The reactor is operating at power
- Test 0133, Daily Jet Pump Operability Check per Operations Daily Log – Part B has been completed by the RO
- You are the CRS

INITIATING CUES (IF APPLICABLE):

- Review the provided Test 0133, Daily Jet Pump Operability Check per Operations Daily Log – Part B

SIMULATOR SET UP:

- Admin JPM – no simulator setup is required.

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL.
1.							
2.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

ATTACHMENT 1
JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

Historical Record: (Optional)



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: HIGH RADIATION AREA ENTRY

JPM NUMBER: JPM-4 AWI-08.04.06-002 **REV.** 1

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): CR999.299
ADMINISTRATIVE PROCEDURES

K/A NUMBERS: 2.3.10 **Rating: SRO/RO:** 3.3/2.9

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☐

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐

Simulator: ☐ Other: ☒

Lab: ☐

Time for Completion: 15 Minutes Time Critical: NO

Alternate Path / Faulted: NO

TASK APPLICABILITY: SRO: _____ SRO/RO: _____ SRO/RO/NLO: X

Additional signatures may be added as needed.

Developed by:	J. Ruth	
	Instructor	Date
Validated by:	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	Training Supervisor	Date

JPM Number: JPM-4 AWI-08.04.06-002

JPM Title: HIGH RADIATION AREA ENTRY

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER
(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

The task conditions are as follows:

- The plant is at 100% power.
- The RWCU pump room must be entered and MO-2398 must be inspected for potential valve stem leakage.
- You are an extra operator on shift
- Provide Survey Map
- Provide RWP

INITIATING CUES (IF APPLICABLE):

“[STATE OPERATOR’S NAME] the CRS directs you to perform the specific instructions per 4 AWI-08.04.06 for a non routine entry into the posted locked high radiation area for the inspection.

JPM PERFORMANCE INFORMATION

Required Materials: SURVEY MAP AND RWP FOR HI RADIATION AREA TO BE ENTERED

General References: 4 AWI-08.04.06, AREA CONTROL

Task Standards: PERFORM INDIVIDUAL EXPOSURE CONTROL DUTIES

Start Time: _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: 1	Provided a copy of 4 AWI-08.04.06 (AREA CONTROL) reviews procedure and locates Section 4.4.2 specific instructions for high, locked high, and very high radiation areas.
Critical: N	
Standard:	Locates appropriate section of procedure.
Evaluator Cue:	Provide copy of procedure 4 AWI-08.04.06 (AREA CONTROL)
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Specific instructions for high, lock high, and very high radiation areas.
Critical: N	<p>A. Obtain any required special approvals as follows:</p> <ol style="list-style-type: none"> 1. Locked High Radiation Area: Non-routine entries your supervisor (if on site), the Shift Manager's, or the Rad Prot Coord's approval prior to the entry. Supervisors may approve their own entries. 2. Very High Radiation Area You SHALL obtain written approval from the plant manager, which is based on a sound operational or safety reason. <p>Determines neither of the above conditions apply as the entry is for a high radiation area.</p>
Standard:	Determines step is applicable.
Evaluator Cue:	If asked, state that the entry has been approved.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Obtain a high radiation area pre-entry briefing from the Radiation Protection staff.
Critical: N	This briefing and all high radiation area requirements of the RWP are required if any part of the body breaks the plane of the boundary, even if permission to reach over was granted.
Standard:	Determines that a radiological briefing must be performed.
Evaluator Cue:	State that the radiological briefing has been performed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	Prepare to perform your individual exposure control duties as follows:
Critical: Y	1. You <i>SHALL</i> determine the expected area dose rates for all regions of the area you will be entering by reviewing area surveys.
	Reviews area surveys provided and determines the dose rate for the inspection is 1200 Mrem/hr at the valve and 180 Mrem/hr in the general vicinity of the valve.
Standard:	Determines dose rates will be 1200 Mrem/hr at the valve and 180 Mrem/hr in the general vicinity of the valve.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5	Prepare to perform your individual exposure control duties as follows:
Critical: Y	2. Determine the expected duration of the entry and the expected dose needed to make the entry.
	Operator determines expected dose using determined dose rate and given duration of entry.
Standard:	Determines expected dose to be 115 Mrem.
Evaluator Cue:	State the expected duration of the entry is 5 minutes at the valve and an additional 5 minutes in the general vicinity of the valve.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Prepare to perform your individual exposure control duties as follows:
Critical: Y	3. Determine the allowable entry dose, either from the electronic dosimeter log-in process, from the local point, or from your dosimeter.
	Operator determines the dose alarm and dose rate alarm setpoints are too low for the performance of this task.
Standard:	Operator determines the dose alarm and dose rate alarm setpoints are too low for the performance of this task.
Evaluator Cue:	If reported, acknowledge the report.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7	Prepare to perform your individual exposure control duties as follows:
Critical: Y	4. <u>IF</u> the allowable entry dose is less than the expected entry dose, <u>THEN</u> you SHALL report to the Rad Prot Coord for resolution.
Standard:	Operator determines the allowable entry dose is less than the expected entry dose and reports to the Rad Prot Coord.
Evaluator Cue:	Acknowledge report as the Rad Prot Coord.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: WHEN REPORT IS MADE, STATE THAT THE JPM IS COMPLETE.

Stop Time: _____

Critical Time N/A

TURNOVER SHEET

INITIAL CONDITIONS:

The task conditions are as follows:

- The plant is at 100% power.
- The RWCU pump room must be entered and MO-2398 must be inspected for potential valve stem leakage.
- You are an extra operator on shift
- Provide Survey Map
- Provide RWP

INITIATING CUES (IF APPLICABLE):

“[STATE OPERATOR'S NAME] the CRS directs you to perform the specific instructions per 4 AWI-08.04.06 for a non routine entry into the posted locked high radiation area for the inspection.

SIMULATOR SET UP:

Admin JPM; no simulator setup required.

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL.
1.							
2.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

ATTACHMENT 1
JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

Historical Record: (Optional)



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: OFF-SITE PROTECTIVE ACTION RECOMMENDATIONS

JPM NUMBER: JPM-A.2-204-004 **REV.** 2

RELATED PRA INFORMATION: None

TASK NUMBER(S) / TASK TITLE(S): SS304.121
Formulate off-site protective action recommendations for the general public during the early phase of an emergency.

K/A NUMBERS: Generic 2.4.44 **Rating: SRO/RO:** 4.0/2.1

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

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

Time for Completion: 12 Minutes Time Critical: YES

Alternate Path / Faulted: NO

TASK APPLICABILITY: SRO: X SRO/RO: _____ SRO/RO/NLO: _____

Additional signatures may be added as needed.

Developed by:		
Instructor		Date
Validated by:		
Validation Instructor (See JPM Validation Checklist, Attachment 1)		Date
Approved by:		
Training Supervisor		Date

JPM Number: JPM-A.2-204-004

JPM Title: Off-Site Protective Action Recommendations

Examinee:

Evaluator:

Job Title:

Date:

Start Time

Finish Time

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments <i>SHALL</i> be made for any steps graded unsatisfactory).

EVALUATOR’S SIGNATURE: _____

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

JPM BRIEFING/TURNOVER
(See MTCP-03.32, Figure 6.2)

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

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

INITIAL CONDITIONS:

- **THIS IS A DRILL.**
- The plant is shutdown in an Emergency Condition. An escalation to a General Emergency has just been declared (EAL RG1.1, Stack Effluent Monitor "A" exceeds $2.1\text{E}+8$ $\mu\text{curies/second}$).
- Current Met Data is:
 - Wind direction (from): 0 degrees
 - Wind speed: 13 mph
 - Temperature: 85°F
 - Precipitation: none
 - Ch. 11 – Diff. Temp: -0.79
- Dose assessment is not currently available

INITIATING CUES (IF APPLICABLE):

- **THIS IS A DRILL.**
- Initiate and complete Form 5790-102-02 (MONTICELLO EMERGENCY NOTIFICATION REPORT FORM) and provide to Shift Manager/Emergency Director when complete.
- **THIS IS A DRILL.**

INSTRUCTOR NOTE: This JPM is time critical. Start time is when the initiating cue is acknowledged by the examinee. Stop time is when the examinee returns the JPM paper work to you or verbally states the task is complete.

JPM PERFORMANCE INFORMATION

Required Materials: None

General References: Simulator

Task Standards: A.2-204 rev 20

Start Time: _____

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

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: 1	Locate General Emergency form packet. (May also reference procedure A.2-204 OFF-SITE PROTECTION ACTION RECOMMENDATIONS)
Critical: N	
Standard:	Locates General Emergency packet.
Evaluator Cue:	When examinee locates General Emergency packet, hand them a copy of the material from the packet.
	<u>NOTE:</u> The items covered by JPM steps 2 and 3 may be done in any order as long as the standard for each step is met.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2 Critical: Y	6.1.1 Initiate Form 5790-102-02 (MONTICELLO EMERGENCY NOTIFICATION REPORT FORM) A. Complete the Protective Action Recommendations section recommending sheltering or an evacuation of a 2 mile radius and 5 miles downwind and advise the remainder of the plume EPZ to go indoors to monitor EAS broadcasts. (See Figure 7.3.A for assistance.) B. Determine which geopolitical subareas are affected by referring to the Sector-Subarea Conversion Table on Form 5790-102-02
Standard:	Complete Section 10 of Form 5790-102-02. The grading standard is as follows: <ul style="list-style-type: none"> • Item B is circled. • The blank in front of "Sectors out to 2 miles" contains the word "ALL" • The blank in front of "Sectors out to 5 miles" contains "H,J,K" • Only the following subareas are circled: 2, 5W and 5S.
Evaluator Cue:	None
<u>NOTE:</u> See attached form with data filled in.	
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Initiate Form 5790-102-02
Critical: Y	C. Ensure completion of the remaining sections of Form 5790-102-02 and submit the completed form to the ED for approval.
Standard:	<p>The grading standard is as follows:</p> <ul style="list-style-type: none"> Section 1: item B should be circled (not critical). Section 2: item B should be circled. Section 4: item D should be circled. Section 5: item A circled (not critical) and date and time filled in and EAL RG1.1. Section 6: item B should be circled. Section 7: item B should be circled (not critical). Section 8: Wind direction is 0 degrees and affected downwind sectors H, J and K should be circled. Section 9: Wind speed of 13 mph and stability class E circled (stability class not critical). Section 11: Examinee should indicate that they would use the label from the General emergency packet here (specifically the label for RG1.1) or they may write the IC description for RG1 in the space provided.
Evaluator Cue:	None
<u>NOTE:</u> See attached form with data filled in.	
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical: N	
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When told the actions are complete, acknowledge, and state the JPM is complete.

Stop Time: _____

Critical Time _____

TURNOVER SHEET

INITIAL CONDITIONS:

- **THIS IS A DRILL.**
- The plant is shutdown in an Emergency Condition. An escalation to a General Emergency has just been declared (EAL RG1.1, Stack Effluent Monitor "A" exceeds $2.1\text{E}+8$ $\mu\text{curies/second}$).
- Current Met Data is:
 - Wind direction (from): 0 degrees
 - Wind speed: 13 mph
 - Temperature: 85°F
 - Precipitation: none
 - Ch. 11 – Diff. Temp: -0.79
- Dose assessment is not currently available

INITIATING CUES (IF APPLICABLE):

- **THIS IS A DRILL.**
- Initiate and complete Form 5790-102-02 (MONTICELLO EMERGENCY NOTIFICATION REPORT FORM) and provide to Shift Manager/Emergency Director when complete.
- **THIS IS A DRILL.**

SIMULATOR SET UP:

Admin JPM; no simulator setup required.

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL.
1.							
2.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							

ATTACHMENT 1
JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

 Validation Personnel /Date

 Validation Personnel/Date

Historical Record: (Optional)