

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: RO - NRC LICENSE MAINTENANCE RESPONSIBILITIES

JPM NUMBER: JPM-OWI-01.08-001 **REV.** 4

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S):
 SS299.296
 Implement the instructions regarding maintenance of active NRC licenses
 CR299.169
 Adhere to the instructions regarding maintenance of active NRC Licenses

K/A NUMBERS: 2.1 2.1.4 **Rating SRO/RO:** 3.8 / 3.3

APPLICABLE METHOD OF TESTING:

Discussion: Simulate/walkthrough: Perform:

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

Time for Completion: 10 Minutes Time Critical: No

Alternate Path: No

TASK APPLICABILITY: SRO: RO: NLO:

Additional site-specific signatures may be added as desired.

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

JPM-OWI-01.08-001 (RO - NRC License Maintenance Responsibilities) Rev. 4

JPM BRIEFING/TURNOVER

Provide briefing/turnover in accordance with applicable program description and/or training procedure.

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 Licensed Reactor Operator.
- You are qualified to stand the following Control Room (CR) watches:
 - Balance of Plant (BOP)
 - Operator at the Controls (OATC)
 - Nuclear Lead Plant Equipment and Reactor Operator (NLPE&RO)
- You are current in Licensed Operator Requalification training and your medical status is acceptable.
- Your dates, shift, watch times and positions are provided for the CR watches stood during the 2nd Quarter.

INITIATING CUES:

- Identify the number of 2nd quarter qualifying watches stood and determine if you have met the requirements for maintaining your RO license active.
 - Number of qualifying watches stood 4 ?
 - Requirements met to maintain your RO license active: YES / **NO?** (circle one)

Date	ShiftShift	Actual Watch Time	Position
4/1	Days	0600-1800	BOP
4/2	Days	0600-1800	BOP
4/3	Days	0600-1800	BOP
4/6	Nights	1800-0600	OATC
4/7	Nights	1800-0600	BOP
4/8	Nights	1800-0600	BOP
4/9	Nights	1800-0600	BOP
5/2	Days	0600-1800	BOP
5/3	Days	0600-1800	OATC
5/4	Days	0600-1800	BOP
5/5	Relief	0600-1400	OATC
5/6	Days	0600-1800	BOP
5/10	Nights	1800-0600	BOP
5/12	Nights	1800-0600	BOP
5/13	Nights	1800-0600	BOP
5/20	Days	0600-1800	NLPE&RO
5/21	Days	0600-1800	NLPE&RO
5/22	Days	0600-1800	BOP
5/23	Days	0600-1800	BOP
6/4	Days	0600-1800	BOP
6/5	Days	0600-1800	BOP
6/6	Days	0600-1800	BOP
6/24	Nights	1800-0600	BOP
6/30	Nights	1800-0600	BOP

• INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.

Retention: Life of Plant

Retain in: Training Record

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

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JPM PERFORMANCE INFORMATION

- Required Materials:**
- Copy of Procedure OWI-01.08
- General References:**
- OWI-01.08 (NRC License Maintenance Responsibilities)
 - 2142 (Monticello Active NRC SRO/RO Qualification Checklist)
 - 10CFR55.53 (Conditions of License)
- Task Standards:**
- Determination is made that Operator has not stood the minimum number of required licensed watches and his NRC license is inactive in accordance with OWI-01.08, Section 4.2 (Maintaining NRC Licenses Active).

Start Time: _____

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

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

Performance Step: 1	Reviews copy of Procedure OWI-01.08 (NRC License Maintenance Responsibilities).
Critical N	
Standard:	Reviews procedure.
Evaluator Cue:	Provide the examinee(s) with a copy of OWI-01.08.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-OWI-01.08-001 (RO - NRC License Maintenance Responsibilities) Rev. 4

Performance Step: 2 Critical N	Procedure Step 4.2.2.c Maintaining an NRC license active requires the following: <ul style="list-style-type: none"> • Standing the required number of watches as the Licensed Operator on record during each calendar quarter.
Standard:	May review this general requirement.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3 Critical Y	Procedure Step 4.2.4. Monticello's Technical Specifications requires two SRO and two RO Licensed Operators on shift during routine power operations. Credit for license maintenance is granted when an Operator fills one of these Tech Spec required positions. The Shift Manager, Control Room Supervisor, Nuclear Lead Plant Equipment and Reactor Operator (NLPE&RO) and the Nuclear Plant Equipment and Reactor Operator (NPE&RO) designated as Operator at the Controls (OATC) are considered as licensed duty positions for the purpose of license maintenance credit.
Standard:	Determines that ONLY the NLPE&RO or OATC positions can be counted toward maintenance of their active NRC license.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-OWI-01.08-001 (RO - NRC License Maintenance Responsibilities) Rev. 4

Performance Step: 4 Critical Y	<p>Procedure Step 4.2.6</p> <p>To maintain active license status, each licensee SHALL actively perform the functions of the OATC (NPE&RO), Nuclear Lead Plant Equipment and Reactor Operator (NLPE&RO) or Senior Reactor Operator (e.g. Control Room Supervisor or Shift Manager) a minimum of five 12 hour shifts per calendar quarter.</p>
Standard:	<ul style="list-style-type: none"> • Determines that a total of five watches in the required positions of OATC or NLPE&RO were performed. • Determines that the May 5th watch was only an eight hour relief shift. • Determines that the minimum of five twelve hour shifts in a required licensed position has not been met to maintain an active NRC license.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical N	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	ACKNOWLEDGE Task is COMPLETE.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: Inactive NRC License determination has been made.

Stop Time: _____

Historical Record: Rev. 4

- Updated to new JPM template and allow for group administration.

JPM-OWI-01.08-001 (RO - NRC License Maintenance Responsibilities) Rev. 4

ATTACHMENT 1
JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" 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"/>	
6. If the task is NOT time critical, 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<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? Not applicable to Non-Licensed Operators	<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"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input checked="" 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"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written.

JPM-OWI-01.08-001 (RO - NRC License Maintenance Responsibilities) Rev. 4

ATTACHMENT 2

JPM Number: JPM-OWI-01.08-001

JPM Title: RO - NRC License Maintenance Responsibilities

Examinee & ID: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

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

EVALUATOR'S SIGNATURE: _____

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

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- You are a Licensed Reactor Operator.
- You are qualified to stand the following Control Room (CR) watches:
 - Balance of Plant (BOP)
 - Operator at the Controls (OATC)
 - Nuclear Lead Plant Equipment and Reactor Operator (NLPE&RO)
- You are current in Licensed Operator Requalification training and your medical status is acceptable.
- Your dates, shift, watch times and positions are provided for the CR watches stood during the 2nd Quarter.

INITIATING CUES:

- Identify the number of 2nd quarter qualifying watches stood and determine if you have met the requirements for maintaining your RO license active.
 - Number of qualifying watches stood _____?
 - Requirements met to maintain your RO license active: YES / NO? (circle one)


Date	ShiftShift	Actual Watch Time	Position
4/1	Days	0600-1800	BOP
4/2	Days	0600-1800	BOP
4/3	Days	0600-1800	BOP
4/6	Nights	1800-0600	OATC
4/7	Nights	1800-0600	BOP
4/8	Nights	1800-0600	BOP
4/9	Nights	1800-0600	BOP
5/2	Days	0600-1800	BOP
5/3	Days	0600-1800	OATC
5/4	Days	0600-1800	BOP
5/5	Relief	0600-1400	OATC
5/6	Days	0600-1800	BOP
5/10	Nights	1800-0600	BOP
5/12	Nights	1800-0600	BOP
5/13	Nights	1800-0600	BOP
5/20	Days	0600-1800	NLPE&RO
5/21	Days	0600-1800	NLPE&RO
5/22	Days	0600-1800	BOP
5/23	Days	0600-1800	BOP
6/4	Days	0600-1800	BOP
6/5	Days	0600-1800	BOP
6/6	Days	0600-1800	BOP
6/24	Nights	1800-0600	BOP
6/30	Nights	1800-0600	BOP

- **INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.**

Retention: Life of Plant

Retain in: Training Record

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

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT
JPM TITLE: CORE THERMAL LIMITS MONITORING
JPM NUMBER: JPM-C.2-05.B.01-002 **REV.** 4
RELATED PRA INFORMATION: None
TASK NUMBERS / TASK TITLE(S): CR200.129
 Perform Core Thermal Limits Monitoring
K/A NUMBERS: 2.1.19 **Rating: SRO/RO:** 3.8 / 3.9

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: No

TASK APPLICABILITY: SRO: RO: NLO:

Additional site-specific signatures may be added as desired.

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

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

JPM BRIEFING/TURNOVER

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

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:

- Reactor power has just been raised from 95% to 98% with the Recirc Flow Control System per C.2-05, Section B.2 (Power Adjustments).
- PCIUTL is high OOS and Nuclear Engineering is investigating
- Both the MPR and EPR are in service with EPR in control and MPR as backup.
- Time is 8:00 PM.

INITIATING CUES:

- You have been directed to perform the Core Thermal Limits Monitoring for MFLCPR, MAPRAT and MFLPD per Ops Man C.2-05, Section B.1 and determine any required actions if necessary.
- Record data on Table 2 of the Operations Daily Log – Part A.
- Ops Man C.2-05, Section B.1 and Step 8 of 0000-A are provided.

Retention: Life of Plant

Retain in: Training Record

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

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

JPM PERFORMANCE INFORMATION

Required Materials: Copy of Step 8/ Table 2 from Operations Daily Log – 0000-A

General References:

- C.2-05 (Power Operation – System Operation), Rev. 70
- 0000-A (Operations Daily Log – MODE 1), Rev. 103

Task Standards: Core Thermal Limits obtained and recorded on Table 2 of 0000-A in accordance with Procedure C.2-05, section B.1.

Start Time: _____

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

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

Performance Step: 1	Review Procedure C.2-05, section B.1 (Core Thermal Limits, PCIUTL and Stability Decay Ratio Monitoring).
Critical: N	
Standard:	<ul style="list-style-type: none"> • Reviews correct procedure and section. • Based on Initiating Cue, determines PARTs A, B & C need to be performed.
Evaluator Cue:	<ul style="list-style-type: none"> • Provide examinee a copy of C.2-05 B.1 and Table 2 • If asked, INFORM Operator that ONLY MFLCPR, MAPRAT and MFLPD need to be evaluated and recorded.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 2	Procedure Step 1.
Critical: N	<u>If</u> Gardel is not anticipated to be available during a 24 hour period, <u>Then</u> contact a Nuclear Engineer to arrange determination of MCPR.
Standard:	<ul style="list-style-type: none"> • Observes Process & GARDEL computers are functioning. • Marks Step as N/A.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Step 2.a.
Critical: N	<u>If</u> Gardel is available, <u>Then</u> perform the following: <ul style="list-style-type: none"> • Evaluate the Margin Summary and the Summary Monitor panels on the Gardel User Interface.
Standard:	Observes MFLCPR values located on the Margin Summary panels.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 4	Procedure Step 2.b.
Critical: Y	Record the following data in 0000-A (Operations Daily Log – Mode 1), Surveillance requirement 0225 (Minimum Critical Power Ratio (MCPR)): 1) The value of MFLCPR 2) Core location of MFLCPR 3) Percent rated core flow
Standard:	<ul style="list-style-type: none">• Obtains Step 8/Table 2 from Ops Daily Log – 0000-A.• Records correct value for MFLCPR.• Records correct value for limiting MFLCPR Core Location.• Records correct value for Percent Rated Core Flow.
Evaluator Cue:	PROVIDE Copy of Step8/Table 2 from Operations Daily Log – 0000-A.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 5	Procedure Step 2.c.
Critical: Y	<p>Verify MFLCPR is below the Action Limit (0.99 times the Tech Spec Limit) and the Tech Spec Limit.</p> <ol style="list-style-type: none"> 1) <u>If</u> MFLCPR is below both limits, <u>Then</u> CHECK "Yes" for 0225... 2) <u>If</u> MFLCPR is not below both limits, <u>Then</u> proceed as follows: <ol style="list-style-type: none"> a) <u>If</u> MFLCPR is above the Action Limit, <u>And</u> below the Tech Spec Limit, <u>Then</u> contact a Nuclear Engineer. b) <u>If</u> MFLCPR exceeds the Tech Spec Limit...
Standard:	<ul style="list-style-type: none"> • Identifies that MFLCPR is above the Action Limit but below the Tech Spec Limit (.995) • Checks "NO" for MFLCPR on Table 2. <p><u>Non-critical Portion:</u></p> <ul style="list-style-type: none"> • Marks Step 2.c.1) N/A. • Notifies CRS that MFLCPR is above the Action Limit. • Marks Step 2.c.2)b) N/A. • Notifies Nuclear Engineering.
Evaluator Cue:	<ul style="list-style-type: none"> • As Nuclear Engineer, ACKNOWLEDGE report. • As CRS, ACKNOWLEDGE report. INFORM Operator to continue with the task while Nuclear Engineering is investigating.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Procedure Step 2.d.
Critical: N	<u>If</u> MPR or EPR is out of service...
Standard:	Based on Initial Conditions and/or observation of MPR/EPR status, marks Step as N/A.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 7	Procedure Step 3.
Critical: N	<u>If</u> Gardel is not anticipated to be available during a 24 hour period, <u>Then</u> contact a Nuclear Engineer to arrange determination of MAPRAT.
Standard:	<ul style="list-style-type: none"> • Observes Process & GARDEL computers continue to function. • Marks Step as N/A.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	Procedure Step 4.a.
Critical: N	<u>If</u> Gardel is available, <u>Then</u> perform the following: <ul style="list-style-type: none"> • Evaluate the Margin Summary and the Summary Monitor panels on the Gardel User Interface.
Standard:	Observes MAPRAT values located on the Margin Summary panels.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 9	Procedure Step 4.b.
Critical: Y	Record the following data in 0000-A (Operations Daily Log – Mode 1), Surveillance requirement 0207 (Maximum Average Planar Linear Heat Generation Rate (MAPLHGR): 1) The value of MAPRAT. 2) Core location of MAPRAT. 3) Percent rated core flow.
Standard:	<ul style="list-style-type: none"> Records correct value for MAPRAT. Records correct value for limiting MAPRAT Core Location. Records correct value for Percent Rated Core Flow.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10	Procedure Step 4.c.
Critical: Y	Verify MAPRAT is below the Action Limit (0.99 times the Tech Spec Limit) and the Tech Spec Limit. 1) <u>If</u> MAPRAT is below both limits, <u>Then</u> CHECK “Yes” for 0207... 2) <u>If</u> MAPRAT is not below both limits...
Standard:	<ul style="list-style-type: none"> Identifies that MAPRAT is below the Action Limit. Checks “YES” for MAPRAT on Table 2. <p><u>Non-critical Portion:</u></p> <ul style="list-style-type: none"> Initials “Nights” space on Table 2.
Evaluator Note:	Operator may choose to wait for initialing until after values for MFLPD are recorded. Step 4.d is N/A.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 11	Procedure Step 5.
Critical: N	<u>If</u> Gardel is not anticipated to be available during a 24 hour period, <u>Then</u> contact a Nuclear Engineer to arrange determination of MFLPD.
Standard:	<ul style="list-style-type: none"> • Observes Process & GARDEL computers continue to function. • Marks Step as N/A.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12	Procedure Step 6.a.
Critical: N	<u>If</u> Gardel is available, <u>Then</u> perform the following: <ul style="list-style-type: none"> • Evaluate the Margin Summary and the Summary Monitor panels on the Gardel User Interface.
Standard:	Observes MFLPD values located on the Margin Summary panels.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 13	Procedure Step 6.b.
Critical: Y	Record the following data for the most limiting fuel bundle on 0000-A (Operations Daily Log – Mode 1), Surveillance requirement 0208 (Maximum Fraction Of The Limiting Power Density (MFLPD)): 1) The value of MFLPD. 2) Core location of MFLPD. 3) Percent rated core flow.
Standard:	<ul style="list-style-type: none"> Records correct value for MFLPD. Records correct value for limiting MFLPD Core Location. Records correct value for Percent Rated Core Flow.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 14	Procedure Step 6.c.
Critical: Y	Verify MFLPD is below the Action Limit (0.99 times the Tech Spec Limit) and the Tech Spec Limit. 1) <u>If</u> MFLPD is below both limits, <u>Then</u> CHECK “Yes” for 0208... 2) <u>If</u> MFLPD is not below both limits...
Standard:	<ul style="list-style-type: none"> Identifies that MFLPD is below the Action Limit. Checks “YES” for MFLPD on Table 2. <p><u>Non-critical Portion:</u></p> <ul style="list-style-type: none"> Initials “nights” space on Table 2.
Evaluator Cue:	None
Evaluator Note:	Step 5.d is N/A.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Performance Step: 15		INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical N		
Standard:	Operator informs evaluator that the task is completed.	
Evaluator Cue:	ACKNOWLEDGE that the task has been completed.	
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>	
Comments:	_____	

Terminating Cues: Values for MFLCPR, MAPRAT & MFLPD have been recorded on Table 2 and MFLCPR above Action Limit reported to Nuclear Engineer.

Stop Time: _____

Historical Record:

New template and procedure revisions for the 2018 ILT NRC Exam

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

Simulator Setup (as required):

1. This JPM can be run from the following Standard (Specific) IC sets:
 - Initialize to a Mode 1 IC.
 - Lower Reactor power to 98%.
 - Adjust Recirc flow and Control Rod pattern such that MFLCPR as displayed on GARDEL is between 0.99 & 1.00.
 - Ensure MAPRAT & MFLPD values as displayed on GARDEL are <0.98.

PROCEDURE/PROP CHECKLIST: The following procedures will be used during this JPM. Verify the procedures/props are free of place keeping marks and/or returned to the proper location before and after the JPM is administered. First and second checkers, initial below.

BEFORE		AFTER		PROCEDURES/PROPS
<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	
				C.2-05, section B.1 (Core Thermal Limits, PCIUTL and Stability Decay Ratio Monitoring)
				Used/New copy of 0000-A (Operations Daily Log – MODE 1)

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input checked="" 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. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" 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"/>	
6. If the task is NOT time critical, 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<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? Not applicable to Non-Licensed Operators	<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"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input checked="" 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"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written.

JPM-C.2-05.B.1-002 (Core Thermal Limits Monitoring) Rev. 4

ATTACHMENT 2

JPM Number: JPM-C.2-05.B.1-002

JPM Title: Core Thermal Limits Monitoring

Examinee & ID: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

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

EVALUATOR'S SIGNATURE: _____

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

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- Reactor power has just been raised from 95% to 98% with the Recirc Flow Control System per C.2-05, Section B.2 (Power Adjustments).
- PCIUTL is high OOS and Nuclear Engineering is investigating
- Both the MPR and EPR are in service with EPR in control and MPR as backup.
- Time is 8:00 PM.


INITIATING CUES:

- You have been directed to perform the Core Thermal Limits Monitoring for MFLCPR, MAPRAT and MFLPD per Ops Man C.2-05, Section B.1 and determine any required actions if necessary.
- Record data on Table 2 of the Operations Daily Log – Part A.
- Ops Man C.2-05, Section B.1 and Step 8 of 0000-A are provided.

Retention: Life of Plant

Retain in: Training Record

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

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: INDEPENDENT VERIFICATION OF HPCI

JPM NUMBER: JPM-4 AWI-04.04.02-004 **REV.** 1

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR206.102
Perform the HPCI Pump Flow and Valve Tests

K/A NUMBERS: Generic 2.2.15 **Rating SRO/RO:** Error! Reference source not found.4.3/4.3.9

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: No

TASK APPLICABILITY: SRO: RO: NLO:

Additional site-specific signatures may be added as desired.

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

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

JPM BRIEFING/TURNOVER

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

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:

- 0255-06-IA-1 (HPCI Quarterly Pump And Valve Tests) is complete through STEP 78.
- Independent verification is now required.
- You are an extra licensed operator and did not participate in the test up to this point.

INITIATING CUES:

- The CRS directs you to perform independent verification, for the components in the Control Room by performing STEP 79 of Test 0255-06-IA-1 (HPCI Quarterly Pump & Valve Test).
- STEP 79 of Test 0255-06-IA-1 is provided.

Retention: Life of Plant

Retain in: Training Record

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

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

JPM PERFORMANCE INFORMATION

Required Materials: Test 0255-06-IA-1
General References: 4 AWI-04.04.02
Task Standards: Verify the HPCI System is in Standby Readiness

Start Time: _____

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

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

Performance Step: 1	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	a. MO-2034 open, handswitch 23A-S2 in NEUTRAL.
Standard:	Operator observes MO-2034 open, handswitch 23A-S2 in NEUTRAL.
Evaluator Cue:	Provide operator with copy of 0255-06-IA-1 Step 79.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

Performance Step: 2	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	b. MO-2035 open, handswitch 23A-S3 in AUTO.
Standard:	Operator observes MO-2035 open, handswitch 23A-S3 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	c. MO-2036 closed, handswitch 23A-S1 in AUTO.
Standard:	Operator observes MO-2036 closed, handswitch 23A-S1 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	d. MO-2061 closed, handswitch 23A-S14 in AUTO.
Standard:	Operator observes MO-2061 closed, handswitch 23A-S14 in AUTO
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

Performance Step: 5	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	e. MO-2062 closed, handswitch 23A-S13 in AUTO.
Standard:	Operator observes MO-2062 closed, handswitch 23A-S13 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	f. MO-2063 open, handswitch 23A-S4 in AUTO.
Standard:	Operator observes MO-2063 open, handswitch 23A-S4 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	g. CV-2065 closed, handswitch 23A-S10 in AUTO.
Standard:	Operator observes CV-2065 closed, handswitch 23A-S10 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

Performance Step: 8	Procedure Step 79
Critical: Y	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	h. MO-2067 closed, handswitch 23A-S7 in AUTO.
Standard:	Operator observes MO-2067 OPEN , handswitch 23A-S7 in AUTO.
Evaluator Cue:	Acknowledge the out of position valve, tell examinee to continue with Independent Verification
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	i. MO-2068 closed, handswitch 23A-S6 in AUTO.
Standard:	Operator observes MO-2068 closed, handswitch 23A-S6 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	j. MO-2071 closed, handswitch 23A-S8 in AUTO.
Standard:	Operator observes MO-2071 closed, handswitch 23A-S8 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

Performance Step: 11	Procedure Step 79
Critical: Y	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	k. CV-3503 closed, valve controller set at 0% open.
Standard:	Operator observes CV-3503 throttled open , valve controller set at 47% open.
Evaluator Cue:	Acknowledge the out of position valve, tell examinee to continue with Independent Verification
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	l. Aux Oil Pmp handswitch 23A-S17 in AUTO.
Standard:	Operator observes Aux Oil Pmp handswitch 23A-S17 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 13	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	m. Gland Seal Condenser Blower Handswitch 23A-S18 in AUTO.
Standard:	Operator observes Gland Seal Condenser Blower Handswitch 23A-S18 in AUTO.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

Performance Step: 14	Procedure Step 79
Critical: Y	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	n. Gland Seal Condensate Pump handswitch 23A-S19 in RUN.
Standard:	Operator observes Gland Seal Condensate Pump handswitch 23A-S19 in RUN.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 15	Procedure Step 79
Critical: N	Perform independent verification that the following HPCI system components are in the proper ECCS line-up:
	o. Pump Flow Controller, FIC-23-108, in AUTO at 3000 gpm.
Standard:	Operator observes Pump Flow Controller, FIC-23-108, in AUTO at 3000 gpm.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When operator informs the evaluator that step 79 is complete, state the JPM is complete

Stop Time: _____

Historical Record: Procedure 0255-06-IA-1 Revision 101 updates for the 2018 ILT NRC Exam

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

Simulator Setup (as required):

SIMULATOR SETUP:

- Initialize to any Mode 1 IC where HPCI is operable.
- Fill out Procedure 0255-06-IA-1 as follows:
 - Provide portion of procedure that includes Step 79 to perform the IV.
- Open MO-2067
- Position CV-3503 throttled open, valve controller set at 47% open

PROCEDURE/PROP CHECKLIST: The following procedures will be used during this JPM. Verify the procedures/props are free of place keeping marks and/or returned to the proper location before and after the JPM is administered. First and second checkers, initial below.				
BEFORE		AFTER		PROCEDURES/PROPS
<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	
				Used/New 0255-06-IA-1 (HPCI Quarterly Pump And Valve Tests)

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input checked="" 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. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" 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"/>	
6. If the task is NOT time critical, 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<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? Not applicable to Non-Licensed Operators	<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"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input checked="" 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"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written.

JPM-4 AWI-04.04.02-004 (Independent Verification Of HPCI) Rev. 1

ATTACHMENT 2

JPM Number: JPM-4 AWI-04.04.02-004

JPM Title: Independent Verification Of HPCI

Examinee & ID: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

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

EVALUATOR'S SIGNATURE: _____

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

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- 0255-06-IA-1 (HPCI Quarterly Pump And Valve Tests) is complete through STEP 78.
- Independent verification is now required.
- You are an extra licensed operator and did not participate in the test up to this point.


INITIATING CUES:

- The CRS directs you to perform independent verification, for the components in the Control Room by performing STEP 79 of Test 0255-06-IA-1 (HPCI Quarterly Pump & Valve Test).
- STEP 79 of Test 0255-06-IA-1 is provided.

Retention: Life of Plant

Retain in: Training Record

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

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: DETERMINE PRIMARY CONTAINMENT WATER LEVEL

JPM NUMBER: JPM-C.5-3403-002 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR314.121
Determine Containment Water Levels

K/A NUMBERS: 2.4.47 **Rating SRO/RO:** 4.2 / 4.2

APPLICABLE METHOD OF TESTING:

Discussion: Simulate/walkthrough: Perform:

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

Time for Completion: 10 Minutes Time Critical: No

Alternate Path: No

TASK APPLICABILITY: SRO: RO: NLO

Additional site-specific signatures may be added as desired.

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

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

JPM BRIEFING/TURNOVER

Provide briefing/turnover in accordance with applicable program description and/or training procedure.

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 major LOCA has occurred.
- RPV level can NOT be maintained above 2/3 Core Height.
- EOPs have been exited and SAMGs entered.
- Primary Containment flooding is in progress.
- DW pressure on PLR-7251B and PCT101 indicate 13 psig
- RCIC Suction pressure on PI-13-96 indicates 40 psig

INITIATING CUES:

- The CRS directs you to determine Primary Containment water level and record results on Special Log C.5-3403-3 (RCIC Suction to Drywell Pressure Comparison Method) IAW C.5-3403, Step 3.e.
- The Torus air pressure method in Steps 1 and 2 are not being performed.

• **KEY**

DETERMINING DW LEVEL - RCIC SUCTION TO DW PRESSURE COMPARISON METHOD - SPECIAL LOG C.5-3403-3
 RECORD THE FOLLOWING AT 5 MINUTE INTERVALS OR AS DIRECTED BY THE EMERGENCY DIRECTOR

(C-03) PI-13-96 (RCIC SUCTION PRESSURE) (psi)	-	PLR-7251B OR PCT101* (DW PRESS) (psi)	=		x	2.3	=		+	LEVEL OF PT-13-65 897.5 ft	=	APPROX DW WATER LEVEL (ft)
40	-	13	=	27	x	2.3	=	62.1	+	897.5 ft	=	959.6 ft.
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	
	-		=		x	2.3	=		+	897.5 ft	=	

Special Log
C.5-3403-3

*COMPUTER POINT SHOULD BE USED IF AVAILABLE

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

JPM PERFORMANCE INFORMATION

- Required Materials:**
- Marked up copy of Procedure C.5-3403 showing Steps 1 & 2 N/A and 3.a-d as complete.
- General References:**
- C.5-3403 (Methods for Determining Containment Water Level)
- Task Standards:**
- Primary Containment water level has been determined in accordance with Procedure C.5-3403, Special Log C.5-3403-3.

Start Time: _____

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

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

Performance Step: 1 Critical N	Review Procedure C.5-3403 (Methods for Determining Containment Water Level).
Standard:	Reviews procedure.
Evaluator Cue:	PROVIDE Operator with copy of Procedure C.5-3403 marked up as specified in Required Materials.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

Performance Step: 2	Procedure Steps 3.e.
Critical Y	<p><u>If</u> the RCIC suction to DW pressure comparison method is to be used, <u>Then</u> perform the following:</p> <ul style="list-style-type: none"> Determine the DW water level trend by comparing the RCIC suction pressure to the DW pressure. Record values on Special Log C.5-3403-3.
Standard:	Based on data provided in the Initiating Cue, transposes data correctly and determines that differential pressure is $40 \text{ psig} - 13 \text{ psig} = \mathbf{27 \text{ psig}}$. This value is recorded in column 3 of Special Log C.5-3403-3.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Steps 3.e.
Critical Y	<p><u>If</u> the RCIC suction to DW pressure comparison method is to be used, <u>Then</u> perform the following:</p> <ul style="list-style-type: none"> Determine the DW water level trend by comparing the RCIC suction pressure to the DW pressure. Record values on Special Log C.5-3403-3.
Standard:	Using the C.5-3403-3 calculation method, multiplies $27 \text{ psig} \times 2.3 = \mathbf{62.1}$
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

Performance Step: 4	Procedure Steps 3.e.
Critical Y	<p>If the RCIC suction to DW pressure comparison method is to be used, Then perform the following:</p> <ul style="list-style-type: none"> Determine the DW water level trend by comparing the RCIC suction pressure to the DW pressure. Record values on Special Log C.5-3403-3.
Standard:	Using the C.5-3403-3 calculation method, adds 62.1 + 897.5 ft. = 959.6 ft. This elevation is the approximate water level in the DW.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: Primary Containment water level has been determined and recorded on Special Log C.5-3403-4.

Stop Time: _____

Historical Record: New Create for the 2018 ILT NRC Exam based on C.5-3403 revision 5.

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

Simulator Setup (as required):

- None

SIMULATOR - MALFUNCTIONS:

None

SIMULATOR - REMOTE FUNCTIONS:

1.							
2.							
3.							

SIMULATOR - OVERRIDES:

	OVR ID	OVERRIDE TITLE	EVENT	DELAY	RAMP	FINAL	VALUE
1.							
2.							
3.							
4.							
5.							

SIMULATOR - TRIGGERS:

None

PROCEDURE/PROP CHECKLIST: The following procedures will be used during this JPM. Verify the procedures/props are free of place keeping marks and/or returned to the proper location before and after the JPM is administered. First and second checkers, initial below.

BEFORE		AFTER		PROCEDURES/PROPS
<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>	
				Used/New copy of C.5-3403 (Methods for Determining Containment Water Level)

Retention: Life of Plant

Retain in: Training Record

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

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" 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"/>	
6. If the task is NOT time critical, 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	<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? Not applicable to Non-Licensed Operators	<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"/>	
11. Have all special tools and equipment needed to perform the task been identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Are all references identified, current, and accurate?	<input checked="" 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"/>	

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written.

JPM-C.5-3403-002 (Determine Primary Containment Water Level) Rev. 0

ATTACHMENT 2

JPM Number: JPM-C.5-3403-002

JPM Title: Determine Primary Containment Water Level

Examinee & ID: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

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

EVALUATOR'S SIGNATURE: _____

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

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- A major LOCA has occurred.
- RPV level can NOT be maintained above $\frac{2}{3}$ Core Height.
- EOPs have been exited and SAMGs entered.
- Primary Containment flooding is in progress.
- DW pressure on PLR-7251B and PCT101 indicate 13 psig
- RCIC Suction pressure on PI-13-96 indicates 40 psig

INITIATING CUES:

- The CRS directs you to determine Primary Containment water level and record results on Special Log C.5-3403-3 (RCIC Suction to Drywell Pressure Comparison Method) IAW C.5-3403, Step 3.e.
- The Torus air pressure method in Steps 1 and 2 are not being performed.