Exelon Generation.

Job Performance Measure

Evaluate Plant Chemistry

JPM Number: <u>JPM557</u>

Revision Number: <u>00</u>

Date: <u>3/1/18</u>

Developed By:	<u>Tony Jennings</u> Instructor	<u>3/1/18</u> Date
Validated By:	<u>Mark McCleary</u> SME or Instructor	<u>4/2/18</u> Date
Reviewed By:	<u>James Lucas</u> Operations Representative	<u>4/10/18</u> Date
Approved By:	<u>Tony Jennings</u> Training Department	<u>4/10/18</u> Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 9 and 13 below.

_____   1.   Task description and number, JPM description and number are identified.

_____   2.   Knowledge and Abilities (K/A) references are included.

_____   3.   Performance location specified. (in-plant, control room, simulator, or other)

_____   4.   Initial setup conditions are identified.

_____   5.   Initiating cue (and terminating cue if required) are properly identified.

_____   6.   Task standards identified and verified by SME review.

_____   7.   Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

_____   8.   If an alternate path is used, the task standard contains criteria for successful completion.

_____   9.   Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure 4010.02_____ Rev: 8a___
Procedure CY-AB-120-100___ Rev: 19___
Procedure ORM 2.3.1_____ Rev: 76___
Procedure 5013.03_____ Rev: 27___
Procedure 4010.01_____ Rev: 11a___

_____   10.   Verify cues both verbal and visual are free of conflict.

_____   11.   Verify performance time is accurate

_____   12.   If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____   13.   When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

Revision Record (Summary)

Revision	Date	Description
00	3/1/18	New JPM.

SIMULATOR SETUP INSTRUCTIONS

a.   This is an SRO admin JPM; no simulator setup is required.

b.   Administer this JPM in a location that allows access to the Operational Requirements Manual (ORM).

INITIAL CONDITIONS

The plant is in Mode 1 at rated thermal power.

At 0800 the following MCR annunciator was received:

- 5013-3B Trouble PS System Local Pnl 1PL88JB.

Operators dispatched to 1PL88JB report the following 1PL88JB alarms:

- 5205-4E High Specific Conductivity Condensate Demineralizer Discharge Header, and
- 5205-5F High Spec Cdty Reactor Feedwater Header

At 0900, Chemistry reports the following reactor coolant chemistry sample results:

- Chlorides – 0.34 ppb (up from 0.21 ppb 72 hours ago)
- Conductivity – 1.05 µS/cm (up from 0.42 µS/cm 72 hours ago)
- pH – 5.8 (down from 6.1 72 hours ago)

INITIATING CUE

Evaluate plant chemistry and determine any required actions.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

- * Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

SRRS: 3D.100; There are no retention requirements for this section

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	Provide the examinee with **Cue Sheet 1** and the following items: • 5013.03 Alarm Panel 5013 Annunciators – Row 3 • CPS 4010.02 Plant Chemistry (when requested) • CY-AB-120-100 Reactor Water Chemistry (when requested) • CPS 5205 Alarm Panel 5205 Annunciators (1PL88JB) (when requested)				
*1	Determines reactor coolant conductivity has exceeded ORM and procedural limitations.	• Refers to CPS 4010.02 Plant Chemistry, step 4.4, and starts 24 hour clock to return reactor water conductivity below the Action Level 2 limit or initiate an orderly plant shutdown within 16 hours. • Refers to CY-AB-120-100 step 4.3.3.1 Reactor Water Control Parameters – Power Operation and determines reactor coolant conductivity has exceeded Action Level 2 limit. • Refers to ORM 2.3.1 and determines that conductivity has exceeded Table. 3.3.1-1 Mode 1 Conductivity limit. • Enters ORM 2.3.1 Action 3.3.1.1a. • Begins 72 hour clock for ORM 2.3.1 Action 3.3.1.1.b	___	___	___

SRRS: 3D.105 (when utilized for operator initial or continuing training)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	As the ATC and BOP operators, **provide Cue Sheet #2** to the examinee and cue the examinee as follows: • Over the past 10 minutes: • RWCU Inlet Conductivity has risen from 0.14 μS/cm to 1.01 μS/cm. • 1RIX-PR034 Off Gas Pre-Treat PRM has risen from 2.65 μci/cc to 35 μci/cc. • Determine if any additional actions are required. Provide the examinee with a copy of CPS 4010.01 Reactor Coolant High Activity when requested.					
*2	Determines that response is required for rapidly rising conductivity IAW CPS 4010.02 section 4.2 and CPS 4010.01 symptom 1.2.	Reviews 4010.02 Plant Chemistry and determines that the limits for rapid conductivity rise have been exceeded requiring the following: • Rapid Plant Shutdown per CPS 3005.01 Unit Power Changes to establish Mode 4 as rapidly as plant conditions and ITS cooldown rates allow, and • Transfer level control to an alternate source and secure and isolate the Condensate / Feedwater systems.	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

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JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☒ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Evaluate Plant Chemistry
JPM Number: JPM557   Revision Number: 00
Task Number and Title: 401002.01 Respond to Abnormal Plant Chemistry
K/A Number and Importance: 2.1.34 / RO (2.7), SRO (3.5)
Suggested Testing Environment: Simulator
Alternate Path: ☐ Yes ☒ No   SRO Only: ☒ Yes ☐ No   Time Critical: ☐ Yes ☐ No
Reference(s):

- CPS 4010.02 Plant Chemistry, Rev. 8a
- CPS 4010.01 Reactor Coolant High Activity, Rev. 11a
- CY-AB-120-100 Reactor Water Chemistry Rev. 19
- ORM 2.3.1 Reactor Coolant System Chemistry Rev. 76
- CPS 5013.03 (3B) Trouble PS System Local Pnl 1PL88JB Rev. 27

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☒ Other

Testing Method: ☐ Simulate   ☒ Perform

Estimated Time to Complete: 30 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

_____

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_____

_____

_____

_____

Evaluator's Name (Print): _____

Evaluator's Signature: _____   **Date**: _____

SRRS: 3D.105 (when utilized for operator initial or continuing training)

CUE SHEET 2 (DO NOT PROVIDE TO THE EXAMINEE UNTIL PROMPTED IN JPM STEP 2)

Cue the examinee as follows:

- **Over the past 10 minutes:**
    - **RWCU Inlet Conductivity has risen from 0.14 µS/cm to 1.01 µS/cm.**
    - **1RIX-PR034 Off Gas Pre-Treat PRM has risen from 2.65 µci/cc to 35 µci/cc.**
    - **Determine if any additional actions are required.**

CUE SHEET 1

INITIAL CONDITIONS

The plant is in Mode 1 at rated thermal power.

At 0800 the following MCR annunciator was received:

- 5013-3B Trouble PS System Local Pnl 1PL88JB.

Operators dispatched to 1PL88JB report the following 1PL88JB alarms:

- 5205-4E High Specific Conductivity Condensate Demineralizer Discharge Header, and
- 5205-5F High Spec Cdty Reactor Feedwater Header

At 0900, Chemistry reports the following reactor coolant chemistry sample results:

- Chlorides – 0.34 ppb (up from 0.21 ppb 72 hours ago)
- Conductivity – 1.05 µS/cm (up from 0.42 µS/cm 72 hours ago)
- pH – 5.8 (down from 6.1 72 hours ago)

INITIATING CUE

Evaluate plant chemistry and determine any required actions.

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Job Performance Measure

Determine Minimum Crew Complement

JPM Number: <u>JPM510</u>

Revision Number: <u>02</u>

Date: <u>3/5/18</u>

Developed By: <u>Tony Jennings</u>   <u>3/5/18</u>
                          Instructor   Date

Validated By: <u>Cuong Hoang</u>   <u>4/2/18</u>
                        SME or Instructor   Date

Reviewed By: <u>James Lucas</u>   <u>4/20/18</u>
                   Operations Representative   Date

Approved By: <u>Tony Jennings</u>   <u>4/20/18</u>
                      Training Department   Date

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JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 9 and 13 below.

_____ 1. Task description and number, JPM description and number are identified.

_____ 2. Knowledge and Abilities (K/A) references are included.

_____ 3. Performance location specified. (in-plant, control room, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) are properly identified.

_____ 6. Task standards identified and verified by SME review.

_____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

_____ 8. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure OP-CL-101-102-1001 Rev: 7c____
Procedure_____ Rev: _____
Procedure _____ Rev: _____

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____	_____
SME / Instructor	Date
_____	_____
SME / Instructor	Date
_____	_____
SME / Instructor	Date

Revision Record (Summary)

Revision	Date	Description
00	11/18/12	New JPM.
01	7/8/16	Updated procedure references. Updated estimated time to complete based on validation.
02	3/5/18	Updated procedure references. Updated JPM to new template.

SIMULATOR SETUP INSTRUCTIONS

    a.   This is an SRO admin JPM; no simulator setup is required.

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INITIAL CONDITIONS

Plant status is as follows:

- The plant scrammed late on midshift.
- All rods are in.
- Reactor pressure is 600 psig and stable.
- RPV level is being maintained between Level 3 and Level 8 with feed water.

INITIATING CUE

You are the on-coming Work Center Supervisor. The on-coming crew consists of the following personnel:

- SRO #1 – Qualified STA
- SRO #2 – Qualified Shift Manager & STA
- SRO #3 – Qualified Shift Manager
- 5 Reactor Operators (all qualified FB and 1 qualified as a FB Leader)
- 3 Equipment Operators (all qualified FB and EROC)
- 2 RP Technicians
- 2 First Aid/Rescue Operations Responders supplied by Security
- 1 EMD/IMD Technician
- 1 Chemistry Technician

Determine shift manning requirements for the on-coming crew.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

- -

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

   * Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

- -

SRRS: 3D.100; There are no retention requirements for this section

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	Provide the examinee with a copy of OP-CL-101-102-1001 CPS Minimum On-Shift Staffing Functions.				
*1	Compares on-coming crew composition with the minimum shift staffing requirements.	Reviews OP-CL-101-102-1001 Table 1 and determines that an additional NLO qualified operator (EO or RO) is required to meet minimum shift staffing requirements.	___	___	___
CUE	You now take the shift with the personnel listed in the INITIATING CUE and any additional personnel you have requested. Two hours after you take the shift SRO #1 has a personal emergency, leaves the site and will not return. SRO #1 was the CRS. SRO #3 assumes the CRS position and SRO #2 remains as the SM. Evaluate shift manning requirements in light of this recent change in staffing.				
*2	Determines required staffing and additional manning needs.	Reviews OP-CL-101-102-1001 Table 1 and determines that: • an IA OR STA is required in Mode 3, and • an additional SRO is required to meet minimum shift staffing requirements, and • the position must be manned within two hours.	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____
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JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☒ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Determine Minimum Crew Complement
JPM Number: JPM510   Revision Number: 02
Task Number and Title: 999999.25 Prepare a Minimum Shift Complement Form
K/A Number and Importance: 2.1.5 / RO (2.9), SRO (3.9)
Suggested Testing Environment: Classroom
Alternate Path: ☐ Yes ☒ No   SRO Only: ☒ Yes ☐ No   Time Critical: ☐ Yes ☒ No
Reference(s):

- OP-CL-101-102-1001, Rev 7c CPS Minimum On-Shift Staffing Functions

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☐ Other

Testing Method: ☐ Simulate   ☒ Perform

Estimated Time to Complete: 25 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____
_____
_____
_____
_____
_____
_____
_____
_____

Evaluator's Name (Print): _____

Evaluator's Signature: _____   **Date**: _____

SRRS: 3D.105 (when utilized for operator initial or continuing training)

INITIAL CONDITIONS

Plant status is as follows:

- The plant scrammed late on midshift.
- All rods are in.
- Reactor pressure is 600 psig and stable.
- RPV level is being maintained between Level 3 and Level 8 with feed water.

INITIATING CUE

You are the on-coming Work Center Supervisor. The on-coming crew consists of the following personnel:

- SRO #1 – Qualified STA
- SRO #2 – Qualified Shift Manager & STA
- SRO #3 – Qualified Shift Manager
- 5 Reactor Operators (all qualified FB and 1 qualified as a FB Leader)
- 3 Equipment Operators (all qualified FB and EROC)
- 2 RP Technicians
- 2 First Aid/Rescue Operations Responders supplied by Security
- 1 EMD/IMD Technician
- 1 Chemistry Technician

Determine shift manning requirements for the on-coming crew.

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Job Performance Measure

Review CPS 9071.01 Diesel Driven Fire Pumps Operability Test

JPM Number: <u>JPM556</u>

Revision Number: <u>00</u>

Date: <u>3/5/18</u>

Developed By: <u>Tony Jennings</u>   <u>3/5/18</u>
                     Instructor   Date

Validated By: <u>Mark McCleary</u>   <u>4/2/18</u>
                   SME or Instructor   Date

Reviewed By: <u>James Lucas</u>   <u>4/10/18</u>
                 Operations Representative   Date

Approved By: <u>Tony Jennings</u>   <u>4/10/18</u>
                 Training Department   Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 9 and 13 below.

_____ 1. Task description and number, JPM description and number are identified.

_____ 2. Knowledge and Abilities (K/A) references are included.

_____ 3. Performance location specified. (in-plant, control room, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) are properly identified.

_____ 6. Task standards identified and verified by SME review.

_____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

_____ 8. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure 9071.01 Rev: 40b
Procedure 1893.01 Rev: 20f
Procedure _____ Rev: _____

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

Revision Record (Summary)

Revision	Date	Description
00	3/5/18	New JPM.

SIMULATOR SETUP INSTRUCTIONS

a.   This is an SRO admin JPM; no simulator setup is required.

INITIAL CONDITIONS

The plant is in Mode 1.

CPS 9071.01 Diesel Driven Fire Pumps Operability Test is field complete for 0FP01PA Diesel Driven Fire Pump 'A', awaiting supervisory review.

INITIATING CUE

Review CPS 9071.01 Diesel Driven Fire Pumps Operability Test.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

• •

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.
• •

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	Provide the examinee with a marked up copy of CPS 9071.01 Diesel Driven Fire Pumps Operability Test.				
*1	Determines 0FP01PA: • coolant temperature exceeded section 9.2.2 Acceptance Criteria, and • was not run for the required time (section 9.2.1.1 Acceptance Criteria	• Reviews all steps up to and including step 8.2.8. • **Determines that test performer failed to add the correction factor for engine coolant temperature from step 4.2.1. When added engine coolant temperature exceeded 200°F.** • **Determines that test performer failed to run 0FP01PA for the required 30 minutes:** ○ **8.2.2.a.3 start time - 0124** ○ **8.2.19 time – 0150** ○ **8.3.5 time – 0152** ○ **Total time operating at full speed – 28 minutes.** • Reviews remaining steps of 9071.01 – sat.	___	___	___
CUE	If the examinee identifies at least one of the deficiencies in step 1, cue him/her to determine required actions, and then provide examinee with a copy of CPS 1893.01 Fire Protection Impairment Reporting.				
*2	Determines required action for a non-functional Fire Pump.	Reviews CPS 1893.01 Fire Protection Impairment Reporting Appendix A Fire Protection Functionality Requirements, and determines that the non-functional pump must be restored to FUNCTIONAL status within 7 days or provide an alternate backup pump.	___	___	___

SRRS: 3D.105 (when utilized for operator initial or continuing training)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☒ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: <u>Review CPS 9071.01 Diesel Driven Fire Pumps Operability Test</u>

JPM Number: <u>JPM556</u>   Revision Number: <u>00</u>

Task Number and Title: <u>101100.01 Apply the administrative requirements of SURVEILLANCE TESTING PROGRAM</u>

K/A Number and Importance: <u>2.2.12 / RO (3.7), SRO (4.1)</u>

Suggested Testing Environment: <u>Classroom</u>

Alternate Path: ☐ Yes ☒ No   SRO Only: ☒ Yes ☐ No   Time Critical: ☐ Yes ☒ No

Reference(s):

- CPS 9071.01 Diesel Driven Fire Pumps Operability Test, Rev. 40b
- CPS 1893.01 Fire Protection Impairment Reporting, Rev. 20f

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☒ Other

Testing Method: ☐ Simulate   ☒ Perform

Estimated Time to Complete: <u>15</u> minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

_____

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_____

_____

_____

Evaluator's Name (Print): _____

Evaluator's Signature: _____   **Date**: _____

SRRS: 3D.105 (when utilized for operator initial or continuing training)

INITIAL CONDITIONS

The plant is in Mode 1.

CPS 9071.01 Diesel Driven Fire Pumps Operability Test is field complete for 0FP01PA Diesel Driven Fire Pump 'A', awaiting supervisory review.

INITIATING CUE

Review CPS 9071.01 Diesel Driven Fire Pumps Operability Test.

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Job Performance Measure

Review CPS 9038.70 Radiation Monitoring Source Check Surveillance

JPM Number: <u>JPM536</u>

Revision Number: <u>02</u>

Date: <u>3/5/18</u>

Developed By:	<u>Tony Jennings</u> Instructor	<u>3/5/18</u> Date
Validated By:	<u>Cuong Hoang</u> SME or Instructor	<u>4/4/18</u> Date
Reviewed By:	<u>James Lucas</u> Operations Representative	<u>4/10/18</u> Date
Approved By:	<u>Tony Jennings</u> Training Department	<u>4/10/18</u> Date

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JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 9 and 13 below.

_____   1.   Task description and number, JPM description and number are identified.

_____   2.   Knowledge and Abilities (K/A) references are included.

_____   3.   Performance location specified. (in-plant, control room, simulator, or other)

_____   4.   Initial setup conditions are identified.

_____   5.   Initiating cue (and terminating cue if required) are properly identified.

_____   6.   Task standards identified and verified by SME review.

_____   7.   Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

_____   8.   If an alternate path is used, the task standard contains criteria for successful completion.

_____   9.   Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure CY-CL-170-301   Rev: 25
Procedure CPS 9038.70   Rev: 3f
Procedure _____   Rev: _____

_____   10.   Verify cues both verbal and visual are free of conflict.

_____   11.   Verify performance time is accurate

_____   12.   If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____   13.   When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

Revision Record (Summary)

Revision	Date	Description
00	10/9/14	New JPM.
01	8/23/16	Updated procedure references.
02	3/5/18	Updated procedure references. Updated to new JPM template.

SIMULATOR SETUP INSTRUCTIONS

a.   This is an SRO admin JPM; no simulator setup is required.

b.   Administer this JPM in a location that allows access to CY-CL-170-301 Offsite Dose Calculation Manual (ODCM).

INITIAL CONDITIONS

The plant is operating at rated power.

NO LCOs are in effect.

1RIX-PR041 Off Gas Post-Treatment Monitor is currently NON-FUNCTIONAL for maintenance.

The OG Vault Refrigeration (VO) System has been shut down for repairs. The repairs have just been completed, and the VO system is being prepared for startup. The OG Charcoal Beds are in BYPASS to support VO system startup IAW CPS 3407.01 Off-Gas Vault Refrigeration (VO) step 4.1.

CPS 9038.70 Radiation Monitoring Source Check Surveillance has just been completed for the gaseous radiation monitors, OG Pre-treatment process radiation monitor, and the OG Post-Treatment process radiation monitors.

INITIATING CUE

As an on-shift SRO, perform the supervisory review of CPS 9038.70 Radiation Monitoring Source Check Surveillance.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

- -

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.
- -

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	Provide the examinee with the marked up copy of CPS 9038.70 Radiation Monitoring Source Check Surveillance.				
1	Reviews CPS 9038.70 section 5.0 Prerequisites.	Examinee reviews section 5.0 and determines section is filled out correctly.	___	___	___
Note	The examinee may perform the following review steps (2-4) in any order.				

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CUE	If the examinee reports the failure in step 2, acknowledge the report and direct the examinee to complete the task.				

*2	Evaluates surveillance data for 1RIX-PR034 Off-Gas Pre-treatment PRM.	Examinee reviews surveillance data for 1RIX-PR034 and determines the following:
		
		• Monitor failed to reach the required value of 1.5 times the current cpm value during the surveillance.
		• 1RIX-PR034 is NON-FUNCTIONAL per ODCM 3.2.1.
		• 1RIX-PR034 is required to be FUNCTIONAL during operation of the main condenser air ejector(s) per ODCM 3.2.1.1 Applicability.
		• The following ODCM 3.2.1 Required Actions must be taken:
		    • A.1, C.1, C.2.1.1, and C.2.1.2, <u>OR</u>
		    • A.1, C.1, C.2.2.1, C2.2.2, and C2.2.3 (requires that the OG Charcoal Beds must immediately be placed in service)
		
		Evaluator Note - If the examinee attempts to check the calculations on the data sheets, inform the examinee that the calculations have already been verified correct.
		
		Evaluator Note – If the examinee requests the status of the OG Charcoal Beds, cue him/her that the charcoal beds are bypassed to support startup of the OG Vault Refrigeration System.
			___	___	___

CUE	If the examinee reports the failure in step 3, acknowledge the report and direct the examinee to complete the task.				

*3	Evaluates surveillance data for 1RIX-PR035 Off-gas Post-Treatment PRM #1.	Examinee reviews surveillance data for 1RIX-PR035 and determines the following:
		
		• Monitor failed to reach 30 cpm and 1.5 times the current cpm value when the source check was performed.
		• 1RIX-PR035 is NON-FUNCTIONAL per ODCM 3.2.1.
		• 1RIX-PR035 or 1RIX-PR041 is required to be FUNCTIONAL during operation of the main condenser air ejector(s) per ODCM 3.2.1 Applicability.
		• With 1RIX-PR041 already NON-FUNCTIONAL for maintenance, the following ODCM Required Actions must be taken:
		   • A.1, D.1, and D.2.1, OR
		   • A.1, D.1, D.2.2.1, and D.2.2.2
		
		Evaluator Note - If the examinee attempts to check the calculations on the data sheets, inform the examinee that the calculations have already been verified correct.
			___	___	___

CUE	If the examinee reports the failure in step 4, acknowledge the report and direct the examinee to complete the task. If asked, 0RIX-PR001 is in service.				
4	Reviews surveillance data for the remainder of the Gaseous Monitors in the surveillance.	Examinee reviews surveillance data for each of the remaining gaseous radiation monitors and determines the following: • Each monitor passed channel functional testing with the exception of 0RIX-PR002 HVAC Exhaust PRM #2 Iodine channel. • 0RIX-PR002 HVAC Exhaust PRM #2 Iodine Sampler is required to be FUNCTIONAL at all times, and that the non-ODCM failure does not impact functionality. • *Evaluator Note - If the examinee attempts to check the calculations on the data sheets, inform the examinee that the calculations have already been verified correct.*	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

Exelon Generation.

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☒ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Review CPS 9038.70 Radiation Monitoring Source Check Surveillance
JPM Number: JPM536 Revision Number: 02
Task Number and Title: 999999.19 Review the results of Surveillance Tests.
K/A Number and Importance: 2.3.15 / RO (2.9), SRO (3.1)
Suggested Testing Environment: Classroom
Alternate Path: ☐ Yes ☒ No SRO Only: ☒ Yes ☐ No Time Critical: ☐ Yes ☒ No
Reference(s):

- CY-CL-170-301 Clinton Power Station Unit 1 Offsite Dose Calculation Manual (ODCM) Rev. 25
- CPS 9038.70 Radiation Monitoring Source Check Surveillance Rev. 3f

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☒ Other

Testing Method: ☐ Simulate ☒ Perform

Estimated Time to Complete: 20 minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____
_____
_____
_____
_____
_____
_____
_____
_____

Evaluator's Name (Print): _____

Evaluator's Signature: _____ **Date**: _____

SRRS: 3D.105 (when utilized for operator initial or continuing training)

INITIAL CONDITIONS

The plant is operating at rated power.

<u>NO</u> LCOs are in effect.

1RIX-PR041 Off Gas Post-Treatment Monitor is currently NON-FUNCTIONAL for maintenance.

The OG Vault Refrigeration (VO) System has been shut down for repairs. The repairs have just been completed, and the VO system is being prepared for startup. The OG Charcoal Beds are in BYPASS to support VO system startup IAW CPS 3407.01 Off-Gas Vault Refrigeration (VO) step 4.1.

CPS 9038.70 Radiation Monitoring Source Check Surveillance has just been completed for the gaseous radiation monitors, OG Pre-treatment process radiation monitor, and the OG Post-Treatment process radiation monitors.

INITIATING CUE

As an on-shift SRO, perform the supervisory review of CPS 9038.70 Radiation Monitoring Source Check Surveillance.

Exelon Generation.

Job Performance Measure

Determine Reporting Requirements

JPM Number: <u>JPM535</u>

Revision Number: <u>02</u>

Date: <u>3/5/18</u>

Developed By:	<u>Tony Jennings</u> Instructor	<u>3/5/18</u> Date
Validated By:	<u>Cuong Hoang</u> SME or Instructor	<u>4/4/18</u> Date
Reviewed By:	<u>James Lucas</u> Operations Representative	<u>4/10/18</u> Date
Approved By:	<u>Tony Jennings</u> Training Department	<u>4/10/18</u> Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 9 and 13 below.

_____ 1. Task description and number, JPM description and number are identified.

_____ 2. Knowledge and Abilities (K/A) references are included.

_____ 3. Performance location specified. (in-plant, control room, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) are properly identified.

_____ 6. Task standards identified and verified by SME review.

_____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

_____ 8. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure ITS 3.5.1   Rev: 163
Procedure ITS 3.6.1.3   Rev: 95
Procedure LS-AA-1020   Rev: 26
Procedure LS-AA-1110   Rev: 25
Procedure LS-AA-1400   Rev: 7

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

Revision Record (Summary)

Revision	Date	Description
00	10/8/14	New JPM.
01	7/11/16	Updated procedure references.
02	3/5/18	Updated procedure references. Converted to new JPM template.

SIMULATOR SETUP INSTRUCTIONS

a.   This is an SRO admin JPM; no simulator setup is required.

b.   Administer this JPM in a location that allows access to Technical Specifications and the Exelon Reportability Reference Manual (includes LS-AA-1010, 1020, 1110, 1120, and 1130).

INITIAL CONDITIONS

The plant is operating at rated thermal power.

NO LCOs are in effect.

Annunciator 5062-8E HPCS Out Of Service has just alarmed.

HPCS PWR LOSS OR OVLD ANY VLV status light is illuminated.

'B' RO reports that the position indication lights for 1E22-F004 HPCS To CNMT Outbd Isln Valve are extinguished.

INITIATING CUE

As the Shift Manager, evaluate the plant conditions above and determine what, if any:

- Technical Specification actions are required to be entered.
- Reportable event number and due date/method of reporting.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

- -

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

   * Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.
- -

Exelon Generation.

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*1	Reviews Technical Specifications.	The examinee evaluates and enters: • ITS 3.5.1 Condition B and determines that required actions B.1 and B.2 must be performed. • ITS 3.6.1.3 Condition A and determines that required action A.1 must be performed within 4 hours, and A.2 once per 31 days.	___	___	___
*2	Determines Reportability	Examinee determines: • event is reportable per SAF 1.8 • requires NRC notification via ENS within 8 hours, and • requires Licensee Event Report (LER) to be submitted within 60 days of discovery of the event.	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

Exelon Generation.

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☒ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Determining Reporting Requirements

JPM Number: JPM535   Revision Number: 02

Task Number and Title: 140504.01 Apply the administrative requirements for NRC NOTIFICATION REQUIREMENTS

K/A Number and Importance: 2.4.30 / RO (2.7), SRO (4.1)

Suggested Testing Environment: Simulator

Alternate Path: ☐ Yes ☒ No   SRO Only: ☒ Yes ☐ No   Time Critical: ☐ Yes ☒ No

Reference(s):
- ITS 3.5.1 ECCS Operating Amendment No. 163
- ITS 3.6.1.3 Primary Containment Isolation Valves (PCIVs) Amendment No. 95
- LS-AA-1020 Reportability Tables and Decision Trees Rev. 26
- LS-AA-1110 Reportability Manual Rev. 25
- LS-AA-1400 Event Reporting Guidelines 10CFR50.72 and 50.73 Rev. 7

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☒ Other

Testing Method: ☐ Simulate   ☒ Perform

Estimated Time to Complete: 15 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments:_____
_____
_____
_____
_____
_____
_____

Evaluator's Name (Print):_____

Evaluator's Signature: _____   **Date**: _____

SRRS: 3D.105 (when utilized for operator initial or continuing training)

INITIAL CONDITIONS

The plant is operating at rated thermal power.

NO LCOs are in effect.

Annunciator 5062-8E HPCS Out Of Service has just alarmed.

HPCS PWR LOSS OR OVLD ANY VLV status light is illuminated.

'B' RO reports that the position indication lights for 1E22-F004 HPCS To CNMT Outbd Isln Valve are extinguished.

INITIATING CUE

As the Shift Manager, evaluate the plant conditions above and determine what, if any:

- Technical Specification actions are required to be entered.
- Reportable event number and due date/method of reporting.