

Facility: Indian Point 3Task No: 0240010101Task Title: Perform Daily Containment Leakage CalculationK/A Reference: 2.2.12 (3.0/3.4)Job Performance Measure No: RO-A-1

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____

READ TO THE EXAMINEE

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

Initial Conditions: The Weld Channel system is aligned for normal operation. Containment Integrity is set with the plant operating at 100% Power. The previous Daily Weld Channel Leakage Calculation was performed last mid-shift at 0010. Flow integrators were reset to zero. The time is now today at 0025.

Task Standard: 3-SOP-CB-004, Attachment 3 is complete and returned to the CRS.

Required Materials: 3-SOP-CB-004 Attachment 3, Daily Weld Channel Leakage Calculation

Panel SLF WCCPPS – Current Integrator Indication handout

General References: 3-SOP-CB-004 Weld Channel and Containment Penetration Pressurization System Operation.

Initiating Cue: The CRS had directed you to perform the Daily Weld Channel Leakage Calculation per 3-SOP-CB-004, Attachment 3.

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

(Denote critical steps with a check mark)

√ 1. Performance Step: Record date and time of current reading.

Standard: From initial conditions, records today's date and time 0025

Comment:

√ 2. Performance Step: Record time of previous day readings.

Standard: From initial conditions, records yesterday's date and time 0010

Comment:

√ 3. Performance Step: Calculate difference in time (minutes).

Standard: Calculates $\Delta T = (24 \text{ hrs} \times 60 \text{ min/hr}) + 15 \text{ minutes} = 1455 \text{ minutes}$

Comment:

√ 4. Performance Step: Record current WCCPPS integrator readings.

Standard: From Panel SLF WCCPPS – Current Integrator Indication handout, enters 1440 for Zone I, enters 1960 for Zone II, enters 3120 for Zone III, and 1840 for Zone IV.

Comment:

Performance Information

(Denote critical steps with a check mark)

√ 5. Performance Step: Reset integrator counters to zero.

CUE: After each pushbutton is depressed, the integrator display changes to zero

Standard: Describes pressing integrator reset pushbutton to reset integrators to zero

Comment:

√ 6. Performance Step: Record previous day integrator readings.

Standard: Enters 0 in each of the L2 Zone I, II, III, and IV positions.

Comment:

√ 7. Performance Step: Subtract integrator readings for each zone

Standard: Calculates $LZ = L1 - L2$ for each of the four zones.

Comment:

√ 8. Performance Step: Record difference as Zone Leakage Since Previous Day

Standard: Records the following zone leakage values:

Zone 1 = 1140

Zone II = 1960

Zone III = 3120

Zone IV = 1840

Comment:

Performance Information

(Denote critical steps with a check mark)

√ 9. Performance Step: Add Zone I, Zone II, Zone III and Zone IV leakages to obtain the day's Total Leakage.

Standard: Records total leakage of 8360

Comment:

√ 10. Performance Step: Divide current day Total Leakage by time interval between readings to obtain current day average leakage rate.

Standard: Divides 8360 scf by 1455 minutes to get 5.7 scfm.

Comment:

√ 11. Performance Step: Record instantaneous recorder leak rate from recorder FR-1126 WCCPP Air Flow

CUE: FR-1126 indicates 6.0 SCFM

Standard: Records 6.0 scfm

Comment:

Performance Information

(Denote critical steps with a check mark)

√ 12. Performance Step: Check average daily leakage and recorder reading < 10scfm.

Standard: Notes that both average leak rate and instantaneous leak rate are less than 10 scfm

Comment:

√ 13. Performance Step: Review and sign completed calculation sheet

Standard: Signs and dates RO/BOP line.

Comment:

14. Performance Step: Request CRS review and sign completed calculation sheet

CUE: CRS has signed completed calculation sheet.

Standard: States that CRS would review and sign completed form Attachment 3.

Comment:

Terminating Cue: 3-SOP-CB-004, Attachment 3 is complete and returned to the CRS.

VERIFICATION OF COMPLETION

Job Performance Measure No. RO-A-1, Perform Daily Containment Leakage
Calculation

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- The Weld Channel System is aligned for normal operation.
- Containment Integrity is set with the plant operating at 100% power.
- The previous Daily Weld Channel Leakage Calculation was performed last mid-shift at 0010.
- Flow integrators were reset to zero.
- The time is now today at 0025.

Initiating Cue:

- The CRS had directed you to perform the Daily Weld Channel Leakage Calculation per 3-SOP-CB-004, Attachment 3.

RETURN THIS TO THE EVALUATOR WHEN THE TASK IS COMPLETE

WELD CHANNEL AND CONTAINMENT PENETRATION PRESSURIZATION SYSTEM OPERATION

No: 3-SOP-CB-004 Rev: 23

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ATTACHMENT 3, DAILY WELD CHANNEL LEAKAGE CALCULATION (Page 2 of 2)

Calculation Δ Time:

Date	Time of Current Reading (T_1)	Time of Previous Day Readings (T_2)	Δ Time in Minutes ($T_2 - T_1$)
TODAY	0025	0010	1455

WCCPP Integrator Readings:

Zone	Current Reading (L_1)	Previous Day Reading (L_2)	Zone Leakage ($LZ = L_1 - L_2$)
I	1440	0	1440
II	1960	0	1960
III	3120	0	3120
IV	1840	0	1840
Total Leakage ($LZ_I + LZ_{II} + LZ_{III} + LZ_{IV}$)			8360

IF time period is exactly 24 hours, THEN Total Leakage must be less than 14,400 S.C.F.

$$\text{Leak Rate} = \frac{\text{Total Leakage}}{\Delta \text{ Time (min)}} = \frac{8360}{1455} = 5.75 \text{ scfm}$$

600 X Hours (to nearest tenth) Between Readings = Allowed Leak Rate

Instantaneous Recorder Leak Rate 6.0 scfm (FR-1126)
(Leakage Rate and FR-1126 must be less than 10.0 scfm)

RO/DOP

TODAY
Date

CRS

Date

RO-A-I KEY
DO NOT GIVE TO
CANDIDATE !!

Facility: Indian Point 3Task No: 0040040101Task Title: Calculate Shutdown MarginK/A Reference: 2.1.25 (2.8/3.1)Job Performance Measure No: RO-A-2

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____**READ TO THE EXAMINEE**

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

Initial Conditions: The plant is at BOL at 100% power with Control Bank D at 224 Steps and RCS Boron at 1000 ppm. During rod motion checks it was determined that control rod K-12 is stuck and untrippable.

Task Standard: Determine shutdown margin within plus or minus 100 ppm.

Required Materials: Graphs book

General References: N/A

Initiating Cue: You have been directed by the CRS to determine shutdown margin at power with control rod K-12 stuck.

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

(Denote critical steps with a check mark)

1. Performance Step: Candidate obtains copy of graphs RV-1, RV-7B, and RV-14

Standard: Obtains Reactivity Summary Log Sheet and Graphs book

Comment: Hand the candidate a copy of the Graphs.

√ 2. Performance Step: Determine Power Defect in accordance with graph RV-1

Standard: Records Power Defect as +1498 pcm (+/- 10 pcm)

Comment:

√ 3. Performance Step: Determine control bank worth using graph RV-7B

Standard: Records -3451 pcm (read directly from bottom of table – BOL)

Comment:

√ 4. Performance Step: Determine shutdown bank worth from graph RV-7B

Standard: Records -4055 pcm (read directly from bottom of table – BOL)

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **5. Performance Step:** Determine worth not available from most reactive stuck rod

Standard: Determines from RV-14 that highest worth stuck rod (BOL) is -850 PCM. Assuming one additional rod stuck besides rod K-12, doubles this value to arrive at -1700 pcm not available due to two stuck rods.

Comment:

√ **6. Performance Step:** Calculates shutdown margin as the sum of Power defect, control bank worth, shutdown bank worth, and worth not available due to stuck rods.

Standard: Determines SDM is $+1498 - 3451 - 4055 + 1700 = -4308$ pcm (± 100 pcm)

Comment:

√ **7. Performance Step:** Inform CRS that calculated SDM is - 4308 pcm

CUE: CRS acknowledges

Standard: CRS informed

Comment:

Terminating Cue: Shutdown margin is determined and reported to CRS.

VERIFICATION OF COMPLETION

Job Performance Measure No.: RO-A-2, Calculate Shutdown Margin

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- The plant is at BOL at 100% power with Control Bank D at 224 Steps and RCS Boron at 1000 ppm.
- During rod motion checks it was determined that control rod K-2 (in control Bank D) is stuck at 224 steps and is untrippable.

Initiating Cue:

You have been directed by the CRS to perform a tabletop calculation of shutdown margin at power with control rod K-2 stuck (in addition to the assumed stuck most-reactive rod,) using reactivity values from Graphs RV-1, RV-7B, and RV-14.

Facility: Indian Point 3Task No: N/ATask Title: Generate A Manual Tag-outK/A Reference: GKA 2.2.13 (3.6/3.8)Job Performance Measure No: RO-A-3

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____**READ TO THE EXAMINEE**

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

Initial Conditions: A pump seal failure occurred on 33 CCW Pump. SOMS is not available for protective tagging. Maintenance has requested a tag-out of 33 CCW pump to replace the pump seal. The Field Support Supervisor has prepared Attachment 9.3, Tagout Cover Sheet for 33 CCW Pump Seal Replacement. The FSS has provided you with the following references:

- EN-OP-102, Protective and Caution Tagging
- 3-COL-EL-1, 6900 and 480 Volt Ac Distribution
- 3-COL-CCW-1, Component Cooling Water System
- Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys

Task Standard: 33 CCW pump is de-energized, isolated from normal flows and pressures, with a vent path available. The following components are expected points identified in the Equipment/Placement Configuration columns for the tag-out:

33 CCW Pump Control Switch	PULLOUT
33 CCW Pump 480V Breaker Control Power Fuses	FUSES REMOVED
33 CCW Pump 480V Breaker	RACKED OUT
AC-762C 33 CC Pump Disch Isolation	CLOSED
AC-760C 33 CC Pump Suction Isolation	CLOSED
AC-1858F 33 CC Pump Drain	OPEN
AC-1858E 33 CC Pump Vent	OPEN

NOTE: Other valves may be acceptable. Candidate may find other components to accomplish the task. The purpose is to determine appropriate TAGOUT points for a simple tagout. The candidate needs to provide isolation from normal flow and pressures, with a drain or vent path available, and de-energize the motor.

Required Materials: EN-OP-102, Protective and Caution Tagging, Attachment 9.2
Tagout Standards
3-COL-EL-1, 6900 and 480 Volt Ac Distribution
3-COL-CCW-1, Component Cooling Water System
Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys

General References: Same as required Materials, except that the candidate may refer to a complete copy of EN-OP-102 if requested.

Initiating Cue: Using the provided references, specify the type of tag, component number/names, required positions, and hang sequence necessary to provide a tagout boundary for 33 CCW Pump Seal Replacement.

Time Critical Task: No

Validation Time: 20 minutes

Performance Information

(Denote critical steps with a check mark)

1. Performance Step: Obtains correct procedure and references.

CUE: FSS provides copies of the required materials:

- Completed Attachment 9.3
- EN-OP-102, Protective and Caution Tagging
- 3-COL-EL-1, 6900 and 480 Volt Ac Distribution
- 3-COL-CCW-1, Component Cooling Water System
- Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys

Standard: Procedure and references obtained

Comment:

√ 2. Performance Step: Determines tag out points and required positions

Standard: Refers to supplied references and determines that the following points need to be placed in the positions listed:

- | | |
|--|------------|
| ○ 33 CCW Pump Control Switch | PULLOUT |
| ○ 33 CCW Pump 480V Breaker | RACKED OUT |
| ○ AC-762C 33 CC Pump Disch Isolation | CLOSED |
| ○ AC-760C 33 CC Pump Suction Isolation | CLOSED |
| ○ AC-1858F 33 CC Pump Drain | OPEN |

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **3. Performance Step:** Enter tagout points on the manual tagout tag sheet.

Standard: Refers to Attachment 9.2, Tagout Standards and lists placement sequences in the following order:

- | | |
|---|------------|
| 1. 33 CCW Pump Control Switch | PULLOUT |
| 2. 33 CCW Pump 480V Breaker | RACKED OUT |
| 3. AC-762C 33 CC Pump Disch Isolation | CLOSED |
| 4. AC-760C 33 CC Pump Suction Isolation | CLOSED |
| 5. AC-1858F 33 CC Pump Drain | OPEN |

NOTE: The critical sequence is control switch, breaker, close isolation valves, open drains/vents. The order of Disch and Suction Isolation is not critical.

NOTE: Candidate may choose additional steps such as removing control power fuses and opening vents. If the candidate does not identify the minimum points listed, additional scrutiny may be required to determine satisfactory completion of the JPM.

Comment:

Terminating Cue: JPM is complete when isolation points have been recorded, placement configuration determined, and placement sequence specified.

VERIFICATION OF COMPLETION

Job Performance Measure No. RO-A-3, Generate A Manual Tag-out

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- A pump seal failure occurred on 33 CCW Pump.
- SOMS is not available for protective tagging.
- Maintenance has requested a tag-out of 33 CCW pump to replace the pump seal.
- The Field Support Supervisor has prepared Attachment 9.3, Tagout Cover Sheet for 33 CCW Pump Seal Replacement.
- The FSS has provided you with the following references:
 - EN-OP-102, Protective and Caution Tagging
 - 3-COL-EL-1, 6900 and 480 Volt Ac Distribution
 - 3-COL-CCW-1, Component Cooling Water System
 - Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys

Initiating Cue:

- The FSS has asked you to fill out Attachment 9.4, Tagout Tag Sheet to tag out 33 CCW Pump for Seal Replacement.
- Using the provided references, specify the type of tag, component number/names, required positions, and hang sequence necessary to provide a tagout boundary for 33 CCW Pump Seal Replacement.

**NUCLEAR MANAGEMENT
MANUAL**

QUALITY RELATED

EN-OP-102

REV. 3

INFORMATIONAL USE

PAGE 60 of 128**ATTACHMENT 9.4****TAGOUT TAGS SHEET**CLEARANCE: MANUAL

TAGOUT: _____

Tag Serial No.	Tag Type	Equipment Description Equipment Location	Place. Seq.	Placement Configuration	Place. 1st Verif Date/Time	Place. 2nd Verif Date/Time	Rest. Seq.	Restoration Configuration	Rest. 1st Verif Date/Time	Rest. 2nd Verif Date/Time	Placement/ Removal Tag Notes
	D	33 Component Cooling Pump Control Switch 53' CCR Panel SGF	1	Pullout							
	D	33 Comp Cooling Water Pump Control Power Fuses 480V Bus 6A, 15' Ctrl Bldg	2	Fuses Removed							
	D	33 Comp Cooling Water Pump 480V Breaker 480V Bus 6A, 15' Ctrl Bldg	3	Racked Out							
	D	AC-760C 33 CC Pump Suction Isolation 41' PAB	4	Closed							
	D	AC-762C 33 CC Pump Disch Isolation 41' PAB	5	Closed							
	D	AC-1858F 33 CC Pump Drain 41' PAB	6	Open							

RO-A-3 Key

Facility: Indian Point 3Task No: 1500040502Task Title: CCR Offsite Communicator – NUE Notification

K/A Reference: _____

Job Performance Measure No: RO-A-5

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance X Actual Performance _____Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

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

Initial Conditions: The plant was tripped following indications of a 30 gpm RCS leak. The Shift Manager has implemented the Emergency Plan and declared a Notification of Unusual Event.

Task Standard: Control Room NUE Notification Checklist complete. Initial Roll Call initiated within 15 minutes.

Required Materials: Completed NYS Part 1 Form (Radiological Emergency Data Form)
IP-EP-210 Att 9.3, CCR Offsite Communicator Checklist
IP-EP-130, Emergency Notification and Mobilization
Form EP-3, Control Room NUE Notification Checklist

General References: CCR Offsite Communicator Book located in emergency plan locker
(contains copies of IP-EP-210 Att 9.3 and IP-EP-130, and blank forms)

Initiating Cue: The SM has directed you to assume the duties of the CR Offsite Communicator and perform Notification of Unusual Event Initial Notification per IP-EP-130; IP-EP-210, Att 9.3 CCR Offsite Communicator Checklist; and Form EP-3 Control Room NUE Notification Checklist.

Time Critical Task: Yes

Validation Time: 15 minutes

Performance Information

(Denote critical steps with a check mark)

EVALUATOR: Enter the time in the blank on line 4 of the Form EP-3 and enter the date and time in box 2 of the Part 1 form. This starts the 15 minute clock for step 8 below.

1. Performance Step: Obtain CCR Offsite Communicator book from E-Plan cabinet

Standard: CCR Offsite Communicator book obtained

Comment:

2. Performance Step: Check if accountability is being performed

CUE: No, accountability is not being performed

Standard: Checks to see if accountability is being performed

Comment:

√ 3. Performance Step: Inform SM and CCR staff that you have assumed duties of CCR Offsite Communicator

CUE: Acknowledge as CCR Staff and SM. Inform candidate that he is to make initial notification for NUE.

Standard: CCR staff and SM informed

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **4. Performance Step:** Obtain completed and signed NYS Radiological Emergency Data Form Part 1 (Form EP-1) from the SM. Review form for completeness.

CUE: Provide completed Part 1 form to candidate. Also, provide Form EP-3 with steps 1-4 already completed by SM

Standard: Form obtained and reviewed.

Comment:

√ **5. Performance Step:** Pick Up RECS Handset and initiate conference call

CUE: You have made 3 unsuccessful attempts to initiate a RECS conference call.

Standard: Determines RECS is not operational and advises Emergency Director (SM)

Comment:

√ **6. Performance Step:** Use Local Government Radio to make notifications. Verify Power on. Transmit message: "This is to report that an Unusual Event has been declared at Indian Point Energy Center. Stand by for transmission of Part 1 Form information, and fax of the Part 1 Form."

CUE: Remind candidate to Simulate using the Local Government Radio. When candidate locates and simulates turning on the power switch, cue that the LGR power is on.

Standard: Simulates turning on LGR and transmitting message.

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **7. Performance Step:** Fax the Part 1 form to the state and counties warning points and EOCs. Return to step 10.

CUE: When candidate locates the fax machine, cue that the CCR Admin Support clerk will operate the fax machine for you. Cue that the fax has been sent to state and counties warn points and EOCs.

Standard: Part 1 form simulated faxed.

Comment:

√ **8. Performance Step:** Enter time that roll call is being started

Standard: Time entered is within 15 minutes of time in line 4

Comment:

√ **9. Performance Step:** Initiate Roll Call by asking each location if they are on the line.

CUE: As each location is polled, respond "(location) on the line."

Standard: Checks off each location and allows each location to identify themselves. All locations polled.

Comment:

Performance Information

(Denote critical steps with a check mark)

✓ **10. Performance Step:** State "an emergency has been declared at the Indian Point Energy Center. A Part I notification Form #1, has been sent to you via Email with a follow-up fax."

Standard: Prescribed message transmitted

Comment:

✓ **11. Performance Step:** Announce "New York State, do you acknowledge receipt of and Email of fax from IPEC. If any location did not receive Email or fax or additional information is required contact NYS at (518) 292-2200 for assistance."

CUE: NYS acknowledges receipt of email from IPEC

Standard: Checks for confirmation from NYS and repeats above message.

Comment:

12. Performance Step: End Notification by saying "Indian Point Out at (*time*)"

Standard: Makes prescribed statement and enters time call completed in box 11

Comment:

Performance Information

(Denote critical steps with a check mark)

13. Performance Step: Check with SM to determine if Emergency Response Organization mobilization or notification is required

CUE: The Shift Manager has determined that Envelope A for All ERO mobilization will be used. The SM states that he will initiate the mobilization per envelope A while you continue with the notifications.

Standard: Ensures ERO notification/mobilization initiated

Comment:

14. Performance Step: Notify NRC Resident

CUE: It is normal working hours. Acknowledge phone call as senior resident.

Standard: Simulates notification of resident inspector

Comment:

15. Performance Step: Contact NRC by calling main number listed on ENS Phone

CUE: Trainee should simulate contacting ENS number. Acknowledge notification

Standard: Simulates notification of NRC on ENS line

Comment:

Performance Information

(Denote critical steps with a check mark)

16. Performance Step: Record comments. Date and sign form. Inform SM of completion of NUE notification.

CUE: SM acknowledges completion. Cue that the admin assistant clerk will fax the Part 1 form to the State, Counties, TSC, EOF, JIC.

Standard: Form completed and SM notified of completion of notifications.

Comment:

Terminating Cue: Notification checklist complete.

VERIFICATION OF COMPLETION

Job Performance Measure No. RO-A-5, CCR Offsite Communicator – NUE Notification

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- The plant was tripped following indications of a 30 gpm RCS leak.
- The Shift Manager has implemented the Emergency Plan and declared a Notification of Unusual Event.

Initiating Cue:

- The SM has directed you to assume the duties of the CR Offsite Communicator and perform Notification of Unusual Event Initial Notification per
 - IP-EP-130;
 - IP-EP-210, Att 9.3 CCR Offsite Communicator Checklist;
 - and Form EP-3 Control Room NUE Notification Checklist.

RETURN THIS TO THE EVALUATOR WHEN THE TASK IS COMPLETE

NEW YORK STATE
Indian Point Energy Center
RADIOLOGICAL EMERGENCY DATA FORM
PART 1

Notification #: 1

This is the Indian Point Energy Center with a Part 1 Notification on: 8/28/2006 at 14:16

1. This is an EXERCISE at UNIT 3

Reactor Status: Unit 2 A. Operational

Unit 3 B. Shutdown (Date) 8/28/06 14:16 (Time 24 hr clock)

2. The Emergency Classification is:

A. Unusual Event

This Emergency Classification declared on: 08/28/06 at 14:10
(Date) (Time 24 hr clock)

3. EAL#: 3.1.1

Water is leaking from the reactor coolant system in excess of allowed limits. This EAL poses no threat to the safety of plant personnel or the general public.

4. Release of Radioactive Materials due to the Classified Event:

A. No Release

5. Wind Speed: 3.2 Meters/Sec at elevation 10 meters

6. Wind Direction: (From) 110 Degrees at elevation 10 meters

7. Stability Class: ☒ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

8. The following Protective Actions are recommended to be implemented as soon as practicable:

A. NO NEED for PROTECTIVE ACTIONS outside the site boundary

2 miles around 5-miles downwind

9. Reported By - Communicator: _____ Telephone # _____
(Communicator's Name)

10. Emergency Director Approval: Shirley Meyer Date/Time: Ready/now

Facility: Indian Point 3Task No: 0240010102Task Title: Review Daily Containment Leakage Calculation (Faulted)K/A Reference: 2.2.12 (3.0/3.4)Job Performance Measure No: SRO-A-1

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____

READ TO THE EXAMINEE

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

Initial Conditions: The Weld Channel system is aligned for normal operation. Containment Integrity is set with the plant operating at 100% Power. The previous Daily Weld Channel Leakage Calculation was performed last mid-shift at 0010. Flow integrators were reset to zero. The time is now today at 0025.

Task Standard: 3-SOP-CB-004, Attachment 3 is reviewed and errors noted and corrected.

Required Materials: 3-SOP-CB-004 Attachment 3, Daily Weld Channel Leakage Calculation

General References: 3-SOP-CB-004 Weld Channel and Containment Penetration Pressurization System Operation.

Initiating Cue: The BOP operator has given you for review and approval the Daily Weld Channel Leakage Calculation per 3-SOP-CB-004, Attachment 3.

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

(Denote critical steps with a check mark)

√ 1. Performance Step: Verify recorded date and time of current reading correct.

Standard: From initial conditions, verifies today's date and time 0025

Comment:

√ 2. Performance Step: Verify time of previous day readings.

Standard: From initial conditions, verifies yesterday's date and time 0010

Comment:

√ 3. Performance Step: Verify difference in time (minutes).

Standard: Calculates Delta-T = (24 hrs X 60 min/hr) + 15 minutes = 1455 minutes.

Comment:

√ 4. Performance Step: Verify Record current WCCPPS integrator readings.

Standard: Observes the following entries recorded: 1440 for Zone I, 1960 for Zone II, 3120 for Zone III, and 1840 for Zone IV.

Comment:

Performance Information

(Denote critical steps with a check mark)

√ 5. Performance Step: Verify integrator counters reset to zero.

Standard: Observes from handout that all integrators were reset to zero

Comment:

√ 6. Performance Step: Verify Record previous day integrator readings.

Standard: Verifies 0 entered in each of the L2 Zone I, II, III, and IV positions.

Comment:

√ 7. Performance Step: Verify subtraction of integrator readings for each zone

Standard: Calculates $LZ=L1-L2$ for each of the four zones.

Comment:

√ 8. Performance Step: Verify Zone Leakage Since Previous Day calculation

Standard: Checks the following zone leakage values:

Zone I = 1140

Zone II = 1960

Zone III = 3120

Zone IV = 1840

Comment:

Performance Information

(Denote critical steps with a check mark)

√ 9. Performance Step: Verify sum of Zone I, Zone II, Zone III and Zone IV leakages equals the day's Total Leakage.

Standard: Verifies total leakage. Adds 1440, 1960, 3120 and 1840 and obtains 8360. Notes that value is different from what is recorded on Att 3 and corrects attachment 3 entry.

Comment:

√ 10. Performance Step: Verify calculation divide current day Total Leakage by time interval between readings to obtain current day average leakage rate.

Standard: Divides 8360 scf by 1455 minutes to get 5.8 sfcf. Observes 6.7 recorded on sheet. Notes/corrects error.

Comment:

√ 11. Performance Step: Verify instantaneous recorder leak rate from recorder FR-1126 WCCPP Air Flow

Standard: Observes that value recorded by BOP is 5.0 SCFM and notes it is less than 10 SCFM.

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **12. Performance Step: Verify average daily leakage and recorder reading < 10scfm.**

Standard: Notes that both average leak rate and instantaneous leak rate are less than 10 scfm

Comment:

√ **13. Performance Step: Verify BOP operator signed and dated completed calculation sheet**

Standard: Notes that BOP did not date the signature block.

Comment:

14. Performance Step: Sign and date completed calculation sheet

Standard: Signs and dates CRS block on completed form Attachment 3.

Comment:

Terminating Cue 3-SOP-CB-004, Attachment 3 is reviewed and errors noted and corrected.

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO-A-1, Review Daily Containment Leakage
Calculation (Faulted)

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- The Weld Channel System is aligned for normal operation.
- Containment Integrity is set with the plant operating at 100% power.
- The previous Daily Weld Channel Leakage Calculation was performed last mid-shift at 0010.
- Flow integrators were reset to zero.
- The time is now today at 0025.

Initiating Cue:

- The CRS had directed you to perform the Daily Weld Channel Leakage Calculation per 3-SOP-CB-004, Attachment 3.

RETURN THIS TO THE EVALUATOR WHEN THE TASK IS COMPLETE

**WELD CHANNEL AND CONTAINMENT
PENETRATION PRESSURIZATION SYSTEM
OPERATION**

No: 3-SOP-CB-004

Rev: 23

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**ATTACHMENT 3,
DAILY WELD CHANNEL LEAKAGE CALCULATION**
(Page 2 of 2)

Calculation Δ Time:

Date	Time of Current Reading (T_1)	Time of Previous Day Readings (T_2)	Δ Time in Minutes ($T_2 - T_1$)
TODAY	0010	0025	1455

WCCPP Integrator Readings:

Zone	Current Reading (L_1)	Previous Day Reading (L_2)	Zone Leakage ($LZ = L_1 - L_2$)
I	1440	0	1440
II	1960	0	1960
III	3120	0	3120
IV	1840	0	1840
Total Leakage ($LZ_I + LZ_{II} + LZ_{III} + LZ_{IV}$)			8460

IF time period is exactly 24 hours, THEN Total Leakage must be less than 14,400 S.C.F.

Leak Rate = $\frac{\text{Total Leakage}}{\Delta \text{ Time (min)}}$ = 6.7 scfm

600 X Hours (to nearest tenth) Between Readings = Allowed Leak Rate

Instantaneous Recorder Leak Rate 5.0 scfm (FR-1126)
(Leakage Rate and FR-1126 must be less than 10.0 scfm)

RO/BOP

Date

CRS

Date

SRO HANDOUT

Facility: Indian Point 3Task No: 0040040102Task Title: Review Shutdown Margin Calculation (Faulted)K/A Reference: 2.1.25 (2.8/3.1)Job Performance Measure No: SRO-A-2

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____

READ TO THE EXAMINEE

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

Initial Conditions: The plant is at BOL at 100% power with Control Bank D at 224 Steps and RCS Boron at 1000 ppm. During rod motion checks it was determined that control rod K-12 is stuck. I&C has reported that the rod is untrippable. The RO has provided you with a SDM calculation.

Task Standard: Determine shutdown margin within plus or minus 100 pcm.

Required Materials: RO's SDM Calculation
Graphs Book

General References: N/A

Initiating Cue: Review the shutdown margin calculation provided by the RO

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

(Denote critical steps with a check mark)

1. Performance Step: Candidate obtains copy of Technical Specifications, Graphs Book and the COLR

Standard: Obtains Technical Specifications, Graphs Book and the COLR

Comment: Provide the candidate with a copy of the Technical Specifications, Graphs Book and the COLR

2. Performance Step: Verify Power Defect in accordance with graph RV-1

Standard: Verifies Power Defect as +1498 pcm (+/- 10 pcm)

Comment:

3. Performance Step: Verify control bank worth using graph RV-7B

Standard: Verifies -3451 pcm (read directly from bottom of table – BOL)

Comment:

4. Performance Step: Verify shutdown bank worth from graph RV-7B

Standard: Verifies -4055 pcm (read directly from bottom of table – BOL)

Comment:

Performance Information

(Denote critical steps with a check mark)

√ 5. Performance Step: Verify worth not available from most reactive stuck rod

Standard: Determines from RV-14 that highest worth stuck rod (BOL) is -850 PCM. Assuming one additional rod stuck besides rod K-12, doubles this value to arrive at -1700 pcm not available due to two stuck rods. Corrects the RO mistake of using -850 PCM once instead of twice.

Comment:

√ 6. Performance Step: Verifies calculated shutdown margin as the sum of Power defect, control bank worth, shutdown bank worth, and worth not available due to stuck rods.

Standard: Determines SDM should be $+1498 - 3451 - 4055 + 1700 = -4308$ pcm (+/- 100 pcm)
Corrects mistake on RO calculation.

Comment:

Terminating Cue: Correct Shutdown margin is determined assuming an additional stuck rod.

VERIFICATION OF COMPLETION

Job Performance Measure No.: SRO-A-2, Review Shutdown Margin Calculation
(Faulted)

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- The plant is at BOL at 100% power with Control Bank D at 224 Steps and RCS Boron at 1000 ppm.
- During rod motion checks it was determined that control rod K-12 is stuck.
- I&C has reported that the rod is untrippable.
- The RO has provided you with a shutdown margin calculation.

Initiating Cue:

- Review the shutdown margin calculation provided by the RO.

RO's SDM Calculation:

Total Power Defect =	+ 1498 pcm
Total Control Bank Worth =	- 3451 pcm
Total Shutdown Bank Worth =	- 4055 pcm
<u>Highest Worth Stuck Rod =</u>	<u>+ 850 pcm</u>
SDDM = Sum of above =	- 5158 pcm

Facility: Indian Point 3Task No: N/ATask Title: Review A Manual Tag-outK/A Reference: GKA 2.2.13 (3.6/3.8)Job Performance Measure No: SRO-A-3

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____**READ TO THE EXAMINEE**

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

Initial Conditions: A pump seal failure occurred on 33 CCW Pump. SOMS is not available for protective tagging. Maintenance has requested a tag-out of 33 CCW pump to replace the pump seal. The Field Support Supervisor has prepared a manual tagout.

Task Standard: Identifies incorrect placement sequence for AC-1858F 33 CC Pump Drain which should be performed last instead of first. Identifies Incorrect train/valve for Pump Discharge Valve – should be AC-762C for 33 CC Pump Disch Isolation.

Required Materials: EN-OP-102, Protective and Caution Tagging
3-COL-EL-1, 6900 and 480 Volt Ac Distribution
3-COL-CCW-1, Component Cooling Water System
Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys
SRO-A-3 Handout (Tagout tag sheet with proposed isolation points, tag types, placement sequence, and placement configuration.)

General References: Same as required Materials

Initiating Cue: The FSS has asked you to perform an independent review of the proposed tagout.

Time Critical Task: No

Validation Time: 20 minutes

Performance Information

(Denote critical steps with a check mark)

1. Performance Step: Obtains correct procedure and references.

CUE: FSS provides copies of the required materials:

- Completed Attachment 9.3
- EN-OP-102, Protective and Caution Tagging
- 3-COL-EL-1, 6900 and 480 Volt Ac Distribution
- 3-COL-CCW-1, Component Cooling Water System
- Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys

Standard: Procedure and references obtained

Comment:

√ 2. Performance Step: Reviews tag out points and required positions

Standard: Refers to supplied references and determines that an incorrect component: AC-662B 32 CCW Pump Disch Isol is the wrong train. Identifies that AC-662C, 33 CCW Pump Disch Isol should be specified.

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **3. Performance Step:** Review tagout points on the manual tagout tag sheet

Standard: Refers to Attachment 9.2, Tagout Standards and determines placement sequence should be in the following order.

- | | |
|---|---------------|
| 1. 33 CCW Pump Control Switch | PULLOUT |
| 2. 33 Comp Cooling Control Power Fuses | Fuses Removed |
| 3. 33 CCW Pump 480V Breaker | RACKED OUT |
| 4. AC-762C 33 CC Pump Disch Isolation | CLOSED |
| 5. AC-760C 33 CC Pump Suction Isolation | CLOSED |
| 6. AC-1858F 33 CC Pump Drain | OPEN |

NOTE: The critical sequence is control switch, breaker, close isolation valves, open drains/vents. The order of Disch and Suction Isolation is not critical. The handout provides the Drain Valve first, but the drain valve should be last.

NOTE: Candidate may choose additional steps such as opening vents. Critical task in this step is to identify incorrect sequence for the pump drain.

Comment:

Terminating Cue: JPM is complete when the incorrect sequence for drain valve and incorrect component for Discharge Valve have been identified.

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO-A-3, Review A Manual Tag-out

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- A pump seal failure occurred on 33 CCW Pump.
- SOMS is not available for protective tagging.
- Maintenance has requested a tag-out of 33 CCW pump to replace the pump seal.
- The Field Support Supervisor has prepared a manual tagout
- The FSS has provided you with the following references:
 - EN-OP-102, Protective and Caution Tagging
 - 3-COL-EL-1, 6900 and 480 Volt Ac Distribution
 - 3-COL-CCW-1, Component Cooling Water System
 - Drawing 9321-F-27513 Sheet 1, Flow Diagram Aux Coolant Sys

Initiating Cue:

- The FSS has asked you to perform an independent review of the proposed tagout.

ATTACHMENT 9.4
TAGOUT TAGS SHEET

CLEARANCE: MANUAL

TAGOUT: _____

Tag Serial No.	Tag Type	Equipment Equipment Description Equipment Location	Place. Seq.	Placement Configuration	Place. 1st Verif Date/Time	Place. 2nd Verif Date/Time	Rest. Seq.	Restoration Configuration	Rest. 1st Verif Date/Time	Rest. 2nd Verif Date/Time	Placement/ Removal Tag Notes
	D	AC-1858F 33 CC Pump Drain 41' PAB	1	Open							
	D	33 Component Cooling Pump Control Switch 53' CCR Panel SGF	2	Pullout							
	D	33 Comp Cooling Water Pump Control Power Fuses 480V Bus 6A, 15' Ctrl Bldg	3	Fuses Removed							
	D	33 Comp Cooling Water Pump 480V Breaker 480V Bus 6A, 15' Ctrl Bldg	4	Racked Out							
	D	AC-760C 33 CC Pump Suction Isolation 41' PAB	5	Closed							
	D	AC-762B 32 CC Pump Disch Isolation 41' PAB	6	Closed							

SRO-A-3 Handout

Facility: Indian Point 3Task No: 2000180102Task Title: Perform Independent Verification of Gaseous Waste PermitK/A Reference: 2.3.8Job Performance Measure No: SRO-A-4

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom X Simulator _____ Plant _____**READ TO THE EXAMINEE**

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

Initial Conditions: 33 Large Gas Decay Tank has been pressurized to 87 psig. The Decay tank has been isolated and sampled by Chemistry. A Gaseous Waste Release Permit is being prepared to discharge the decay tank. The data necessary to support the release permit has been collected and recorded on Attachment 1 "Gaseous Waste Release Permit" of SOP-WDS-13, "Gaseous Waste Releases." The CCR personal computer is inoperable, and the software cannot be executed. The PAB/VC exhaust fans are in service and discharging at 30,000 SCFM.

Task Standard: The calculations for GDT Curie Content, Plant Vent Release Rate, Allowable GDT Release Rate, Release Time, and R-44 Alarm setpoint are done within 10% of actual values.

Required Materials: SOP-WDS-13, Gaseous Waste Releases, Partially filled-out Attachment 1 "Gaseous Waste Release Permit," Calculator

General References: SOP-WDS-13, Gaseous Waste Releases

Initiating Cue: Using the appropriate section of SOP-WDS-13, "Gaseous Waste Releases", perform independent verification of the calculations performed for Attachment 1, "Gaseous Waste Release Permit" for 33 Large Gas Decay Tank.

Time Critical Task: No

Validation Time: 17 minutes

Performance Information

(Denote critical steps with a check mark)

1. Performance Step: Refers to SOP-WDS-013. Reviews P&Ls and section 4.2

Standard: Procedure obtained and reviewed

Comment:

2. Performance Step: Reviews steps 4.2.1 through 4.2.9 and verifies that required data has been entered on Attachment 1

Standard: Steps 4.2.1 through 4.2.9 reviewed against the provided copy of Attachment 1, Gaseous Waste Release Permit Form

Comment:

✓ 3. Performance Step: **Verify GDT Curie Content calculation performed correctly.**

Standard: PERFORMS the following calculation and verifies data on Attachment 1, "Gaseous Waste Release Permit"

$A = (1.93 \text{ E}+03) * (C) * (V) * (P)$, where:

C = Concentration of noble gas activity in tank (uCi/cc) (6)

V = unpressurized volume of tank (ft³) (4)

P = initial pressure of tank, in psia (psia = psig + 14.7) (5)

Comment:

Performance Information

(Denote critical steps with a check mark)

4. Performance Step: Check available release rate entered

Standard: Checks block 12 and block 10. Difference is R-27 Channel 4 reading

CUE: If asked, R-27 channel 4 is reading $1e-5$ uci/cc

Comment:

5. Performance Step: Check NA recorded in blocks 8a, 13, 15, and 16

Standard: Checks NA in appropriate blocks.

Comment:

6. Performance Step: Checks R-27 in block 11 and setpoint in block 12

Standard: Block 11 and 12 checked.

Comment:

✓ 7. Performance Step: Checks Emax calculation

Standard: VERIFIES maximum allowable release rate (Emax), in SCFM for this release using the following equation:

Emax = $D / (C * 472)$, where:

Emax = Maximum allowable release rate (ft³/min)

D = Available Release Rate (□Ci/sec) (10)

C = Concentration of noble gas activity in tank (□Ci/cc) (6)

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **8. Performance Step:** Verifies that a conservative actual release rate (E), in SCFM that is less than Emax for this release has been selected. Per the note, typical conservative value is 1% of Emax

Standard: Observes that E is 1% of Emax

Comment:

√ **9. Performance Step:** Check RCV-014 setting against Attachment 12 for 67 SCFM

Standard: Verifies 67 SCFM corresponds to 86% open

Comment:

√ **10. Performance Step:** Check Calculated Release Rate (R) in uCi/sec in block 9

Standard: DETERMINE Calculated Release Rate, (R) in uCi/sec and RECORD on Attachment 1, as follows: (9)

$R = E * C * 472$, where:

R = Calculated Release Rate (uCi/sec)

E = Release rate for RCV 014 position (ft³/min) (30)

C = Concentration of noble gas activity in tank (uCi/cc) (6)

Identifies error in block 9 entry. Should be 30.7, not 3.7 uCi/cc

Comment:

Terminating Cue: Terminate JPM after error in block 9 is identified, or after all calculations complete.

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO-A-4, Perform Independent Verification of
Gaseous Waste Permit

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- 33 Large Gas Decay Tank has been pressurized to 87 psig.
- The Decay tank has been isolated and sampled by Chemistry
- A Gaseous Waste Release Permit is being prepared to discharge the decay tank.
- The data necessary to support the release permit has been collected and recorded on Attachment 1 "Gaseous Waste Release Permit" of SOP-WDS-13, "Gaseous Waste Releases."
- The CCR personal computer is inoperable, and the software cannot be executed.
- The PAB/VC exhaust fans are in service and discharging at 30,000 SCFM.

Initiating Cue:

- Using the appropriate section of SOP-WDS-13, "Gaseous Waste Releases", perform independent verification of the calculations performed for Attachment 1, "Gaseous Waste Release Permit" for 33 Large Gas Decay Tank.

GASEOUS WASTE RELEASES

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**ATTACHMENT 1,
GASEOUS WASTE RELEASE PERMIT FORM**
(Page 1 of 1)

Tank/ System (1) <u>33 LGDT</u>	Current Date/Time (2) <u>10/23/06</u> <u>0800</u>	Permit No. (3) <u>618</u>
	Date	Time
Volume (4) <u>525</u> ft ³	Initial Pressure (5) <u>87</u> psig	Concentration of Noble Gas (C)(6) <u>9.7e-4</u> $\mu\text{Ci/cc}$
Grab Sample:(7) Sample # <u>36702</u>	Date <u>10/23/06</u>	Time <u>0810</u> OR R-12 Monitor
Activity (A)(8) <u>99956</u> μCi	Noble Gas	Iodine 131 Activity (8a) <u>N/A</u> $\mu\text{Ci/cc}$
		VC Purge Only
Calculated Release Rate (R)(9) <u>3.7</u> $\mu\text{Ci/sec}$	Available Release Rate (D)(10) <u>3.07e+3</u> $\mu\text{Ci/sec}$	
Discharge Monitor (11) <u>R-27</u>	Actual Alarm Setpoint (12) <u>3.08e+3</u> $\mu\text{Ci/sec}$	
Calculated alarm setpoint (13) <u>N/A</u> $\mu\text{Ci/sec}$	Alert setpoint (14) <u>1.50e+3</u> $\mu\text{Ci/sec}$	
R-12 Auto Closure/Alarm Setpoints: Calculated (15) <u>N/A</u> $\mu\text{Ci/cc}$	Actual (16) <u>N/A</u> $\mu\text{Ci/cc}$	
IF discharge monitor is OOS, THEN COMPLETE the following:		
• Monitor (17) <u>N/A</u> placed out service @ <u>N/A</u> <u>N/A</u>		
	Date	Time
• Vent Sample:(18) Sample # <u>N/A</u> Date <u>N/A</u> Time <u>N/A</u> Results (19) <u>N/A</u> $\mu\text{Ci/cc}$		
		(Noble Gas)
• Vent flow rate (20) <u>N/A</u> cfm Continuous Release Rate (CR)(21) <u>N/A</u> $\mu\text{Ci/sec}$		
Release Calculations verified by (22) _____		
Release Path Valve Alignment Verified (23) _____		
CRS/SM		
Discharge Authorized (24) _____	Release Start (25) _____	
CRS/SM	Date	Time
Final Pressure (26) _____ psig	Release Stop (27) _____	
	Date	Time
Calculations Results: S (28) <u>N/A</u>	Emax (29) <u>6705</u> ft ³ /min	
E(30) <u>67</u> ft ³ /min	RCV-014 Setting (31) <u>86</u> % open	
Comments:(32) _____		

SRO-A-4 HANDOUT

GASEOUS WASTE RELEASES

No: 3-SOP-WDS-013

Rev: 22

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**ATTACHMENT 1,
GASEOUS WASTE RELEASE PERMIT FORM**
(Page 1 of 1)

Tank/ System (1)	<u>33 LQDT</u>	Current Date/Time (2)	<u>10/23/06</u> Date	<u>0800</u> Time	Permit No. (3)	<u>618</u>
Volume (4)	<u>525</u> ft ³	Initial Pressure (5)	<u>87</u> psig	Concentration of Noble Gas (C)(6)	<u>9.7e-4</u> μCi/cc	
Grab Sample:(7)	Sample # <u>36702</u>	Date	<u>10/23/06</u>	Time	<u>0810</u>	OR R-12 Monitor
Activity (A)(8)	<u>99956</u> μCi	Noble Gas		Iodine 131 Activity (8a)	<u>N/A</u> μCi/cc	VC Purge Only
Calculated Release Rate (R)(9)	<u>30.7</u> μCi/sec	Available Release Rate (D)(10)	<u>3.07e+3</u> μCi/sec			
Discharge Monitor (11)	<u>R-27</u>	Actual Alarm Setpoint (12)	<u>3.08e+3</u> μCi/sec			
Calculated alarm setpoint (13)	<u>N/A</u> μCi/sec	Alert setpoint (14)	<u>1.50e+3</u> μCi/sec			
R-12 Auto Closure/Alarm Setpoints: Calculated (15)	<u>N/A</u> μCi/cc	Actual (16)	<u>N/A</u> μCi/cc			
IF discharge monitor is OOS, THEN COMPLETE the following:						
• Monitor (17)	<u>N/A</u>	placed out service @	<u>N/A</u>	<u>N/A</u>		
		Date		Time		
• Vent Sample:(18)	Sample # <u>N/A</u>	Date	<u>N/A</u>	Time	<u>N/A</u>	Results (19) <u>N/A</u> μCi/cc
						(Noble Gas)
• Vent flow rate (20)	<u>N/A</u> cfm	Continuous Release Rate (CR)(21)	<u>N/A</u> μCi/sec			
Release Calculations verified by (22) _____						
Release Path Valve Alignment Verified (23) _____						
CRS/SM						
Discharge Authorized (24)	_____	Release Start (25)	_____	_____	_____	_____
	CRS/SM		Date		Time	
Final Pressure (26)	_____ psig	Release Stop (27)	_____	_____	_____	_____
			Date		Time	
Calculations Results: S (28) <u>N/A</u> Emax (29) <u>6705</u> ft ³ /min						
E(30) <u>67</u> ft ³ /min RCV-014 Setting (31) <u>86</u> % open						
Comments:(32) _____						

SRO-A-4 KEY

Facility: Indian Point 3Task No: N/ATask Title: Event Classification and NYS Part 1 FormK/A Reference: 2.4.41 (4.1)Job Performance Measure No: SRO-A-5

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance _____ Actual Performance XClassroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

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

Initial Conditions: An event has occurred requiring Emergency classification

Task Standard: Classification is correctly made for the event completed

Required Materials: IP-EP-120, Emergency Classification
IP-EP-130, Emergency Notifications and Mobilization
Event Classification Guide (Wall Chart)

General References: Event Classification Guide
IP-EP-AD13, IPEC Emergency Action Level Technical Bases

Initiating Cue: Classify the event just completed and provide a completed NYS
Radiological Emergency Data Part 1 Form for the CCR Offsite
Communicator

Time Critical Task: Yes – 15 minutes from start of JPM to EAL declaration. Time for
completion of Part 1 form is not part of 15 minute clock.

Validation Time: 15 minutes

Performance Information

(Denote critical steps with a check mark)

√ 1. Performance Step: Classify the event in accordance with the Emergency Plan Implementing Procedures.

Standard: Correctly classifies event by selecting the correct EAL within 15 minutes of initiating cue.

For Scenario 1 – EAL 4.2.1, Site Area Emergency

Note: EAL 9.1.8 SAE or EAL 3.2.2 SAE, or 4.1.3 SAE are also acceptable

For Scenario 2 – EAL 6.1.4, Site Area Emergency

For Scenario 3 – EAL 1.1.1, Alert

Note: EAL 3.1.2 Alert also acceptable since both events occurred at essentially the same time

For Scenario 4 – EAL 1.3.1, Site Area Emergency

Comment:

Performance Information

(Denote critical steps with a check mark)

√ **2. Performance Step:** Complete NYS Radiological Emergency Data Part 1 Form

Standard: See attached keys for each event.

The following is critical:

1. Selects this is an exercise
2. Enters notification #1
3. Declared on unit 3
4. Enters EAL 4.2.1
5. Enters date and time of declaration
6. Unit 2 operational
7. Unit 3 shutdown
8. Date and time unit 3 shutdown
9. Selects release above TS to atmosphere
10. Obtains and enters MET data (speed, direction and Stability) from met data display on rear of flight pane
11. Selects Print/Save or Preview to print a copy, or completes required data on a blank form

CUE: If necessary, ensure candidate selects Exercise – NOT REAL EVENT

If necessary, provide cue for dates and times

If necessary, cue candidate that unit 2 is operating at 100% power

If necessary, cue candidate to obtain MET data from the simulator MET display

Comment:

Terminating Cue: Event classified and a completed Part 1 form is ready for the CCR Offsite Communicator

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO-A-5, Event Classification and NYS Part 1 Form

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to complete:

Question Documentation:

Question:

Response:

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions

Initial Conditions:

- An event has occurred requiring Emergency classification

Initiating Cue:

- Classify the event just completed and provide a completed NYS Radiological Emergency Data Part 1 Form for the CCR Offsite Communicator
- If the EAL escalated during the scenario, classify the highest (most severe) EAL encountered.
- If multiple EAL entry criteria for the same classification occurred during the scenario, classify the event that occurred first.
- Complete the NYS Radiological Emergency Data Part 1 Form after classifying the event.