Exelon Nuclear

Job Performance Measure

Excess Letdown Operations

JPM Number: CR a

Revision Number: 8

Date: 2/22/2013

Revised By:	Bill Hochstetter Instructor	2/22/13 Date
Validated By:	Kelly Wilson Operations Representative	03/03/2013 Date
Approved By:	Rob Lawlor Operations Representative nt	03/03/2013 Date

INITIAL CONDITIONS

1. You are the Unit 1 Assist NSO.
2. 1CV459 has failed closed and MM are investigating the cause of the failure.
3. Normal charging has been isolated.
4. Reactor power is < 99.5%.

INITIATING CUE

1. The US directs you to establish excess letdown to the VCT using the A loop drain and BOTH letdown heat exchangers for maximum cooling.
2. The SM does NOT desire flow to be directed to the VCT spray nozzle and is aware of the procedural limitations associated with this alignment.
3. Rad Protection has been informed of this evolution.
4. Another NSO will respond to ALL other Control Room annunciators and conditions

RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1. Refer to BOP CV-15 **Note: May be performed at any time** ***Cue: Prerequisites are met*** ***Cue: (if asked) It is not necessary to use an EST***	◦ LOCATE and OPEN BOP CV-15			
2. Verify/open 1CV8100	• 1CV8100 is OPEN			
3. Verify/open 1CV8112	• 1CV8112 is OPEN			
*4. Establish CC flow to the Excess Letdown Heat Exchangers	• 1CC9437B is OPEN • 1CC9437A is OPEN			
5. Verify closed 1CV123	• 1CV123 is closed			
6. Verify/direct flow to VCT	• 1CV8143 selected to VCT			
*7. Open loop drain valve	• Open at least one loop drain valve 1RC8037A,			
*8. Open Excess Ltdn HX inlet valve	• 1CV8153A and B are OPEN			
*9. Open flow control valve and ensure Excess Ltdn outlet temperature stabilizes at <165°F.	• 1CV123 is throttled OPEN • 1TI-122A <165°F			
Cue: This JPM is completed.				

RECORD STOP TIME: _____

INITIAL CONDITIONS

1. You are the Unit 1 Assist NSO.
2. 1CV459 has failed closed and MM are investigating the cause of the failure.
3. Normal charging has been isolated.
4. Reactor power is < 99.5%.

INITIATING CUE

1. The US directs you to establish excess letdown to the VCT using the A loop drain and BOTH letdown heat exchangers for maximum cooling.
2. The SM does NOT desire flow to be directed to the VCT spray nozzle and is aware of the procedural limitations associated with this alignment.
3. Rad Protection has been informed of this evolution.
4. Another NSO will respond to ALL other Control Room annunciators and conditions

Exelon Nuclear

Job Performance Measure

Raise Letdown flow from 75 to 120 gpm

JPM Number: CR-b

Revision Number: 00

Date: 1/24/2013

Revised By:	Bill Hochstetter Instructor	1/24/13 Date
Validated By:	Kelly Wilson Operations Dept.	3/3/2013 Date
Approved By:	/s/Rob Lawlor Operations Representative	3/3/2013 Date

INITIAL CONDITIONS

1. You are the Unit 1 NSO.
2. Unit 1 is at 100% power, steady state, equilibrium Xenon, MOL
3. Letdown flow is currently 75 gpm

INITIATING CUE

1. You have been directed to raise letdown flow to 120 gallons per minute and then restore systems to automatic in accordance with BOP CV-9, step 2.
2. Inform the US when complete.
3. Another NSO will respond to ALL other Control Room annunciators and conditions.

RECORD START TIME: _____

ELEMENT	**STANDARD**	**SAT**	**UNSAT**	**Comment Number**
NOTE If this JPM is performed on the simulator, only the cues underlined are required to be provided to the examinee				
1. Refer to BOP CV-9, Letdown Orifice Operation Note: Step 1 may be performed at any time **Cue: <u>All prerequisites are met</u>**	o Locate and OPEN BOP CV-9, step F.2	____	____	____
NOTE **Provide the examinee with a copy of the BOP CV-9** The evaluator may judge the candidate, if performed on the simulator, by correctly performing the critical steps, and the candidates' competency by NOT receiving the following alarms: • 1-9-B1 LP LTDWN REL TEMP HIGH • 1-9-A1 REGEN HX LTDWN TEMP HIGH • 1-9-E2 LTDWN TEMP HIGH • 1-9-D3 CHG LINE FLOW HI LOW • 1-7-B2 RCP SEAL WTR INJ FLOW LOW				
2. Adjust _CV121, in manual to compensate for additional ltdwn flow ***Cue:* _FK121 manual light is LIT** ***Cue:* charging flow is reading about 132 gpm on 1FI-121A**	At 1PM05J: • Place _CV121 in Manual • Raise charging flow to about 132 gpm using the raise pushbutton as indicated on 1FI-121A	____	____	____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*3. Place _PCV-CV131 to manual and lower letdown pressure to ~180 psig.	At _PM05J: • PLACE _CV131 in MANUAL AND • LOWER letdown pressure to ~180 psig by raising output on 1PK-131			
NOTE **The examinee may decide that step 4 is NOT required and go to step 5.**				
4. If required, ADJUST _CC130A/B, as necessary	At _PM05J: ○ Place 1TK-130 in MANUAL AND ○ RAISE Output			
*5. Raise letdown flow from 75 gpm to 120 gpm letdown ***NOTE to Evaluator:*** Evaluate the alarms that annunciate to determine competency of manual operations of controls in previous 3 steps	At _PM05J: • SIMULTANEOUSLY OPEN _CV8149A AND • SIMULTANEOUSLY ADJUST PCV-_CV131 to maintain pressure ~370 psig			
6. Restore _PCV-CV131 to AUTO	At _PM05J: • PLACE _CV131 in AUTO			
NOTE **If examinee manipulated _CC130A/B in manual to control letdown temperature perform step 7. If the valve was not manipulated and temperature is normal, step 7 may be bypassed.**				

ELEMENT	**STANDARD**	**SAT**	**UNSAT**	**Comment Number**
7. Ensure _CC130A/B is maintaining normal letdown temperature of about120 °F.	At 1PM05J: ◦ Check letdown temp. normal on _TI-130 • Place 1TK-130 in AUTO			
8. Adjust _CV121, in manual to match charging and letdown flow while establishing PZR at program level	At 1PM05J: o Adjust _CV121 in Manual o Verify charging flow is about 12 gpm greater than letdown flow and PZR level is trending to program. • Place _FK-121 in AUTO			
Cue:(if required) This JPM is completed:	Informs US that 120 gpm letdown flow is in service			

RECORD STOP TIME: _____

INITIAL CONDITIONS

1. You are the Unit 1 NSO.
2. Unit 1 is at 100% power, steady state, equilibrium Xenon, MOL
3. Letdown flow is currently 75 gpm

INITIATING CUE

1. You have been directed to raise letdown flow to 120 gallons per minute and then restore systems to automatic in accordance with BOP CV-9, step 2.
2. Inform the US when complete.
3. Another NSO will respond to ALL other Control Room annunciators and conditions.

Exelon Nuclear

Job Performance Measure

Perform Transfer to Hot Leg Recirc (1SI-8840 will not OPEN)

JPM Number: CR-c

Revision Number: 00

Date: 1/24/2013

Revised By:	Bill Hochstetter Instructor	1/24/13 Date
Reviewed By:	Chuck Guernsey Operations Representative	03/03/2013 Date
Approved By:	Rob Lawlor Operations Representative	03/03/2013 Date

INITIAL CONDITIONS

1. You are the Unit 1 NSO.
2. A large LOCA is in progress.
3. 1BEP-1 step 19 has been completed.
4. 5 hours 50 minutes has elapsed since SI was actuated.
5. The Shift Manager is aware of this procedure transition

INITIATING CUE

1. The Unit Supervisor has directed you to proceed with 1BEP ES-1.4, Transfer to Hot Leg Recirculation.

RECORD START TIME: _____

ELEMENT	**STANDARD**	**SAT**	**UNSAT**	**Comment Number**
NOTE If this JPM is performed on the simulator, only the cues underlined are required to be provided to the examinee Once the examinee references the procedure the evaluator may hand the candidate a copy of 1BEP ES-1.4				
1. Refer to 1BEP ES-1.4, Transfer to Hot Leg Recirculation **Note: This step may be performed at any time.**	o LOCATE and OPEN 1BEP ES-1.4	____	____	____
*2. Place SVAG Valve Bus Feeds to Close.	At 1PM06J, CLOSE: • 480V Feed to Bus 131X1A/X2A • 480V Feed to Bus 132X2A/X4A	____	____	____
3. Close RH to cold legs isol valves.	At 1PM06J, CLOSE: • 1SI8809A • 1SI8809B	____	____	____
4. Check 1A RH pump running.	At 1PM06J: • CHECK RHR pump 1A RUNNING	____	____	____
5. OPEN Train A RH HX discharge crosstie header valve	At 1PM06J: • OPEN 1RH8716A	____	____	____
NOTE **Alternate Path JPM starts here**				
*6. Open RH to hot legs isol valve.	At 1PM06J: • Recognize that 1SI8840 will **not** OPEN	____	____	____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*7. CLOSE any open RH HX discharge crosstie header valve	At 1PM06J: • CLOSE 1RH8716A • CLOSE 1RH8716B			
*8. OPEN RH to cold legs isol. valves	At 1PM06J: • OPEN 1SI8809A • OPEN 1SI8809B			
*9. Stop SI pump 1A.	At 1PM06J: • STOP 1A SI pump			
*10. Close SI pump 1A to cold legs isol valve.	At 1PM06J: • CLOSE 1SI8821A			
*11. Open SI pump 1A to hot legs isol valve.	At 1PM06J: • OPEN 1SI8802A			
*12. Start the 1A SI pump.	At 1PM06J: • START 1A SI pump			
*13. Stop SI pump 1B.	At 1PM06J: o STOP 1B SI pump			
*14. Close SI pump 1B to cold legs isol valve.	At 1PM06J: • CLOSE 1SI8821B			
*15. Open SI pump 1B to hot legs isol valve.	At 1PM06J: • OPEN 1SI8802B			
*16. Start the 1B SI pump.	At 1PM06J: • START 1B SI pump			
17. Check SI pumps to hot legs isol valves open	At 1PM06J, Verify OPEN o 1SI8802A o 1SI8802B			
*18. Close SI pumps to cold leg isol valve	At 1PM06J: • CLOSE 1SI8835			

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
19. Place SVAG Valve Bus Feeds to TRIP.	At 1PM06J, TRIP o 480V Feed to Bus 131X1A/X2A o 480V Feed to Bus 132X2A/X4A			
Cue: This JPM is completed				

RECORD STOP TIME: _____

INITIAL CONDITIONS

1. You are the Unit 1 NSO.
2. A large LOCA is in progress.
3. 1BEP-1 step 19 has been completed.
4. 5 hours 50 minutes has elapsed since SI was actuated.
5. The Shift Manager is aware of this procedure transition

INITIATING CUE

1 The Unit Supervisor has directed you to proceed with 1BEP ES-1.4, Transfer to Hot Leg Recirculation.

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Job Performance Measure

Align the SX towers for LOCA conditions (Failure of OG SX tower fan to start)

JPM Number: CR JPM d.

Revision Number: 04

Date: 01 / 25 / 2013

Developed By:	W. Hochstetter Instructor	01/25/2013 Date
Validated By:	Greg Gugle SME or Instructor	03/03/2013 Date
Approved By:	Rob Lawlor Operations Representative	03/03/2013 Date

INITIAL CONDITIONS

1. You are the Unit 2 Assist NSO.
2. A LOCA is in progress with containment spray actuated
3. 2BEP-0 is in progress.

INITIATING CUE

The Unit Supervisor directs you to align the SX towers per 2BEP-0, step 14.g.

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
		NOTE: **If this JPM is performed on the simulator, only the <u>underlined</u> cues are required to be provided to the examinee.** Once the examinee references the procedure the evaluator may hand the candidate a copy of 2BEP 0 step 14.g			
1	Refer to 2BEP 0	○ LOCATE and OPEN 2BEP 0	___	___	___
*2	Verify/open all 8 SX tower riser valves	At 0PM01J VERIFY/OPEN: ○ 0SX163A ○ 0SX163B • 0SX163C • 0SX163D ○ 0SX163E ○ 0SX163F ○ 0SX163G ○ 0SX163H			
NOTE:		**If this JPM is performed in the plant, then some or all of the SX tower bypass valves may be open. Give the appropriate cues if the bypass valve is open. The examinee may elect not to close the valve if SX pump discharge temperature is less than 52°F as the valve will immediately automatically reopen.**			
3	Verify/close all 4 hot water basin bypass valves	At 0PM01J VERIFY/CLOSE: ○ 0SX162A ○ 0SX162B ○ 0SX162C ○ 0SX162D	___	___	___

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
NOTE: **The 0G SX tower fan will not be allowed to start in the following series of steps and therefore starts the alternate path required to accomplish the SX Tower alignment task. The examinee may attempt to start the fan a second time. If so, provide the appropriate cues.**					
ALTERNATE PATH STARTS HERE					
*4	Verify/start all 8 SX cooling tower fans in High Speed (won't start): If examinee expresses to the evaluator **CUE: understand 0SX03CG won't start.**	At 0PM01J Verify/start in High Speed: ○ 0SX03CA ○ 0SX03CB • 0SX03CC • 0SX03CD ○ 0SX03CE ○ 0SX03CF ○ 0SX03CG ○ 0SX03CH	___	___	___
*5	Close riser valve for 0G SX tower fan **Cue**: Outside air temperature is 80°F	At 0PM01J • Close 0SX163G	___	___	___
CUE	**This JPM is complete.**				

JPM Stop Time: _____

INITIAL CONDITIONS

1. You are the Unit 2 Assist NSO.
2. A LOCA is in progress with containment spray actuated.
3. 2BEP-0 is in progress.

INITIATING CUE

The Unit Supervisor directs you to align the SX towers per 2BEP-0, step 14.g.

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Job Performance Measure

Align Containment Spray for Recirculation

JPM Number: CR JPM e.

Revision Number: 02

Date: 01 / 25 / 2013

Developed By:	W. Hochstetter Instructor	1/25/13 Date
Validated By:	Chuck Guernsey Validator/SME	03/03/2013 Date
Approved By:	Rob Lawlor Operations Representative	03/03/2013 Date

TASK STANDARDS:

1. Align 1A containment spray pump suction to the containment recirculation sump prior to the pump losing suction (RWST level < 9% or exhibiting signs of cavitation).
2. Determine 1CS009B will not open.
3. Stop 1B containment spray pump prior to the pump losing suction (RWST level < 9% or exhibiting signs of cavitation).
4. Isolate both containment spray pumps from the RWST.

INITIAL CONDITIONS

1. You are the Unit 1 NSO.
2. Unit 1 has experienced a LOCA.
3. 1A and 1B Containment Spray pumps are running.
4. RWST level is as indicated.
5. 1BEP ES-1.3, TRANSFER TO COLD LEG RECIRCULATION, has been completed up to step 9.

INITIATING CUE

1. The Unit 1 Unit Supervisor has directed you to align 1A and 1B Containment Spray pumps per step 9 of 1BEP ES-1.3.
2. Inform the Unit 1 Unit Supervisor when you have completed aligning the CS pumps.

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment number
1.	Refer to 1BEP ES-1.3, Transfer to Cold Leg Recirculation	Refer to 1BEP ES-1.3, Transfer to Cold Leg Recirculation, step 9.	___	___	___
2	Determines RWST level is appropriate for CS pump suction swap to CNMT sump	Perform the following at 1PM06J: • Check RWST LEVEL LO-3 status lights lit. • Determine RWST level is appropriate for CS pump suction swap to sump.	___	___	___
NOTE:	**EVALUATOR NOTE: Alternate path begins here.**				
***3**	Open 1CS009A & B Determine 1CS009B valve will NOT open.	Perform the following at 1PM06J: • Place 1CS009A & B, CS pump 1A & 1B sump suction valves, control switches to open. • Determine 1CS009B will not open. ○ Inform US 1CS009B will not open.	___	___	___
***4**	Stop 1B CS Pump	Perform the following at 1PM06J: • Determine 1B CS pump must be stopped. • Stop 1B CS pump prior to the pump losing suction (RWST level < 0.5%).	___	___	___
***5**	Isolate 1A & 1B CS Pump from the RWST.	Perform the following at 1PM06J: • Place 1CS001A & B, CS pump 1A & 1B RWST suction valves, control switches to close.	___	___	___
6	Verify 1A CS pump running.	Verify 1A CS pump run light lit.	___	___	___
CUE	**This JPM is complete.**				

JPM Stop Time: _____

INITIAL CONDITIONS

1. You are the Unit 1 NSO.
2. Unit 1 has experienced a LOCA.
3. 1A and 1B Containment Spray pumps are running.
4. RWST level is as indicated.
5. 1BEP ES-1.3, TRANSFER TO COLD LEG RECIRCULATION, has been completed up to step 9.

INITIATING CUE

1. The Unit 1 Unit Supervisor has directed you to align 1A and 1B Containment Spray pumps per step 9 of 1BEP ES-1.3.
2. Inform the Unit 1 Unit Supervisor when you have completed aligning the CS pumps.

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Job Performance Measure

Synchronize a SAT to a Bus being Fed by a DG

JPM Number: CR JPM f.

Revision Number: 09

Date: 01 / 30 / 2013

Developed By:	Bill Hochstetter Instructor	1/30/2013 Date
Validated By:	Greg Gugle SME or Instructor	3/3/2013 Date
Approved By:	Rob Lawlor Operations Representative	3/3/2013 Date

INITIAL CONDITIONS

1. You are an extra NSO.
2. The unit is in MODE 1.
3. The 1B DG was started manually and is supplying bus 142 to support Unit 1 SAT restoration per BOP AP-52
4. OP AP-52 is complete up to step F.18.f

INITIATING CUE

The US directs you to synchronize the SAT back to bus 142 by placing the 1B DG in parallel to the grid per BOP AP-32.

JPM Start Time: _

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
NOTE:	**If this JPM is given on the simulator, only the cues underlined are required to be given to the trainee.**				
1	Refer to BOP AP-32	LOCATE and OPEN BOP AP-32	___	___	___
CUE	**All prerequisites are met.**				
2	Check method of DG start	At 1 PM01J: ○ Leave Mode C/S in AUTO	___	___	___
3	Verify the D/G is running normally	At 1 PM01J: ○ Check DG frequency is about 60 Hz ○ Check DG voltage is about 4160 volts	___	___	___
***4**	Turn synchroscope on	At 1 PM01J: • TURN SAT 142-2 Feed to 4KV Bus 142 SYNC ACB1422 switch to ON			
5	Verify minimum incoming voltage	At 1 PM01J: • VERIFY DIV 12 incoming voltage ≥ 114 VAC			
***6**	Verify/Adjust DG voltage	At 1 PM01J: • ADJUST DG voltage control so running voltage is slightly higher than incoming voltage			

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
7	Verify on all three phases voltages are equal	At 1 PM01J: VERIFY DG voltage meter indicates the same voltage when DG voltmeter selector switch in placed in the following positions: • ØAB • ØBC • ØCA			
NOTE:	**If the governor is adjusted in LOWER direction, the synchroscope will rotate faster in the FAST direction..**				
***8**	Adjust frequency	At 1 PM01J: • PLACE DG governor adjust in RAISE until DIV 12 synchroscope is rotating slowly in the SLOW direction			
***9**	Close ACB 1422	At 1 PM01J: WHEN DIV 12 synchroscope is slightly before the 12 o'clock position: • CLOSE ACB 1422 ○ CHECK ACB 1422 closed			
10	Verify successful parallel operation	At 1 PM01J: • VERIFY synchroscope is locked in at 12 o'clock position			
11	Turn synchroscope off	At 1 PM01J: • For ACB 1422 PLACE synchroscope switch in OFF			
NOTE:	**When Trainee has stabilized DG loading (so as to not get a reverse power trip on the output breaker) cue:**				

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE	**This JPM is complete.**				

JPM Stop Time: _____

INITIAL CONDITIONS

1. You are an extra NSO.
2. The unit is in MODE 1.
3. The 1B DG was started manually and is supplying bus 142 to support Unit 1 SAT restoration per BOP AP-52.
4. 4.BOP AP-52 is complete up to step F.18.f

INITIATING CUE

The US directs you to synchronize the SAT back to bus 142 by placing the 1B DG in parallel to the grid per BOP AP-32.

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Job Performance Measure

Change RM-11 Setpoints in Preparation for Waste Gas Decay Tank Release

JPM Number: Control Room JPM g.

Revision Number: 1

Date: 7/13/2011

Revised By:	Bill Hochstetter * (Instructor)	7/13/11 (Date)
Validated By:	Bill Hochstetter * (SME or Instructor)	7/13/11 (Date)
Approved By:	Rob Lawlor* (Training Department)	07/14/11 (Date)

* Signature on File

INITIAL CONDITIONS

1. You are the Unit 1 Assist NSO.
2. A 0A Waste Gas Decay Tank release is pending.
3. 0PR02J is operable.

INITIATING CUE

You have been instructed to perform Section 5.1.2 of BCP 400-TWASTE GAS in preparation for this release.

RECORD START TIME: _____

ELEMENT	**STANDARD**	**SAT**	**UNSAT**	**Comment Number**
NOTE If this JPM is performed on the simulator, only the underlined cue needs to be provided to the examinee. To initiate this JPM, hand the partially completed BCP 400-TWASTE GAS to the examinee.				
1. Refer to the partially completed BCP 400- TWASTE GAS **:**	° REVIEW BCP 400- TWASTE GAS for completeness up to Section 5.1.1	____	____	____
2. Functional Test of 0PA202 and 0PB102 ***Cue: The inplant EO reports* all 0GW9298 valves (A, B, C, D, E and F) are CLOSED** ***Cue: Radwaste operator reports* CS for 0GW014 is in the open position** ***Cue: Radwaste operator reports* 0GW014 is in the open position using the Air Controller**	• Calls EO to verify/close All 0GW9298 valves (A, B, C, D, E and F) • Calls Rad Waste panel operator to verify C/S for 0GW014 is in open position • Calls Rad Waste panel operator to verify 0GW014 is in open position using Air Controller	____	____	____
*3. RM-11 supervisory mode ***Cue: RM-11 is in the supervisory mode of operation***	At the RM-11: • PLACE RM-11 in Supervisory Mode	____	____	____
*4. Select monitor ***Cue: 0PA202 has been selected***	At the RM-11, Grid 3, monitor 0PR02J: • SELECT the LOW Gas Channel 0PA202 and DEPRESS the SEL key	____	____	____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*5. Enter a new high alarm setpoint channel ***Cue: The channel item key has been pressed*** ***Cue: "9" has been keyed in*** ***Cue: A new high alarm setpoint has been entered.*** ***Cue: The enter key has been pressed*** NOTE: The monitor should be reading 7.9E-06. and should be set to a lower value to test the interlock. (i.e. 7.9E-07)	At the RM-11: • DEPRESS Channel Item key • KEY IN "9" • ENTER a new High Alarm setpoint (below current value) • DEPRESS the Enter key			
*6. Verifies Auto Operation • Verify 0GW014 CLOSED automatically ***Cue: <u>The Radwaste operator reports 0GW014 CLOSED automatically</u>*** ***Cue: <u>Radwaste operator reports Alarm 0GW02J A-9 is LIT</u>*** ***Cue: <u>Radwaste operator reports C/S for 0GW014 is in the closed position</u>*** ***Cue: <u>Radwaste operator reports controller demand for 0GW014 is at "0".</u>***	• Calls Rad Waste panel operator to verify 0GW014 has CLOSED automatically • Calls Rad Waste panel operator to verify Gas Decay Tank Vent Stack Eff Rad Hi Alarm comes in at 0GW02J A-9 • Calls Rad Waste panel operator to place C/S for 0GW014 in the CLOSED position • Calls Rad Waste panel operator to reduce controller demand to "0" at 0GW02J			

ELEMENT	**STANDARD**	**SAT**	**UNSAT**	**Comment Number**
*7. High alarm setpoint for 0PA202 ***Cue: 0PA202 has been selected*** ***Cue: Channel item key has been depressed*** ***Cue: Channel item 9 has been selected*** ***Cue: 833-3 (or 833-03) has been entered*** ***Cue: Enter Key has been depressed*** ***Cue: New value is displayed***	At the RM-11: • SELECT 0PA202 • DEPRESS Channel Item key • KEY IN "9" • ENTER a new High Alarm setpoint • DEPRESS the Enter key • Verify new value is displayed			
8. Initial form as NSO	Initial form			
9. Requests verification ***Cue: <u>The US will continue at step 12.</u>*** ***<u>This JPM is completed</u>***	Examinee requests verification			

RECORD STOP TIME: _____

INITIAL CONDITIONS

1. You are the Unit 1 Assist NSO.
2. A 0A Waste Gas Decay Tank release is pending.
3. 0PR02J is operable.

INITIATING CUE

You have been instructed to perform Section 5.1.2 of BCP 400-TWASTE GAS in preparation for this release.

Exelon Nuclear

Job Performance Measure

Prepare U1 for RSP Operations

JPM Number: CR JPM h.

Revision Number: 3

Date: 2/6/2013

Revised By:	Bill Hochstetter Instructor	2/06/2013 Date
Validated By:	Greg Gugle Ops Dept.	03/03/2013 Date
Approved By:	Rob Lawlor /s/ Ops Department	03/03/2013 Date

INITIAL CONDITIONS

1. You are the Unit 1 Assist NSO.
2. The Unit has been manually tripped per 1BOA PRI-5.
3. 0BOA PRI-5 and 1BOA PRI-5 have been entered due to a fire.
4. 1BOA PRI-5 step 6.d. is being carried out by another NSO.

INITIATING CUE

1. The US has directed you to prepare Unit 1 for Remote Shutdown Panel operations per 1BOA PRI-5, step 6.

2. Inform the US when complete.

RECORD START TIME: _____

ELEMENT	**STANDARD**	**SAT**	**UNSAT**	**Comment Number**
1. Refer to 1BOA PRI-5, Control Room Inaccessibility **Note: Step 1 may be performed at any time (step 6)**	◦ LOCATE and OPEN 1BOA PRI-5	____	____	____
NOTE If this JPM is performed on the simulator, only the cues underlined are required to be provided to the examinee. Provide the examinee with a copy of 1BOA PRI-5, step 6.				
2. Verify letdown divert valve in AUTO.	At 1PM05J: ◦ Verify 1CV112A is in AUTO	____	____	____
*3. Place PZR pressure control to channels 457/458.	At 1PM05J: • Place PZR Press Control Selector to 457/458	____	____	____
*4. Place PZR level control to channels 460/461.	At 1PM05J: • Place PZR Level Control Selector to 460/461	____	____	____
5. Obtain logs and keys. ***Cue: (If asked) step 6.d is being performed by another NSO***	Obtain the following: o Unit Log Book o Unit 1 PRI-5 keys o Temporary Change Tracking Log o Equipment Status Tag Log/Abnormal Component Position Sheet Book	____	____	____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*6. Open RCS loop sample valves.	At 1PM11J OPEN: • 1PS9356A • 1PS9356B	____	____	____
*7. Open PZR liquid sample valves.	At 1PM11J OPEN: • 1PS9355A • 1PS9355B	____	____	____
*8. Open PZR steam sample valves.	At 1PM11J OPEN: • 1PS9354A • 1PS9354B	____	____	____
Cue: (if required) This JPM is completed	Informs US of completion	____	____	____

RECORD STOP TIME: _____

INITIAL CONDITIONS

1. You are the Unit 1 Assist NSO.
2. The Unit has been manually tripped per 1BOA PRI-5.
3. 0BOA PRI-5 and 1BOA PRI-5 have been entered due to a fire.
4. 1BOA PRI-5 step **6.d.** is being carried out by another NSO.

INITIATING CUE

1. The US has directed you to prepare Unit 1 for Remote Shutdown Panel operations per 1BOA PRI-5, step 6.

2. Inform the US when complete.