INITIAL SUBMITTAL OF WALKTHROUGH JPMS FOR THE DRESDEN INITIAL EXAMINATION - JUNE 2002

ES-301

Facility: Dresden Date of Examination: June 3, 2002 Exam Level (circle one) RO / SRO(I) SRO(U) Operating Test No.: ILT 01-1					
B.1	Control Room Systems				
	System / JPM Title	Type Code*	Safety Function		
а.	Standby Liquid Control System / Initiate SBLC Hard Card with RWCU valves failing to close automatically, DOP 1100-02; K/A: 211000A4.06, 3.9 / 3.9	N, A. S,	(1) Reactivity Control		
b.	Low Pressure Core Spray System / CS Pump Operability Test with pump failure to meet acceptance criteria, DOS 1400-5; K/A: 209000A4.01, 3.8 / 3.6	D, A. S,	(2) Reactor Water Inventory Control		
C.	Recirculation System / Startup of second Recirculation Pump with failure of discharge valve to open, DOP 0202-01; K/A: 202000A4.01, 3.7 / 3.7	N, A S, L	(4) Heat Removal from Reactor Core		
d.	Main and Reheat Steam System / Drain, Pressurize, and Open the Main Steam Lines, DOP 0250-01; K/A: 239001A4.01, 4.2 / 4.0	D, S. L	(3) Reactor Pressure Control		
e.	A. C. Electrical Distribution / Restoring Normal Feed to MCC 28-7/29-7 from Bus 29, DOP 6500-10; K/A: 262001A4.01, 3.4 / 3.7	N, S. L	(6) Electrical		
f.	Rod Worth Minimizer System / Take a Rod Out of Service, DOP 0400-02; K/A: 201006A4.06, 3.2 / 3.2	D, S	(7) Instrumentation		
g.	Standby Gas Treatment System / Start Standby Gas Treatment, DOP 7500-01; K/A: 261000A4.02, 3.1 / 3.1	D, S	(9) Radioactivity Release		
B.2	Facility Walk-Through				
а.	Isolation Condenser / Isolation Condenser Makeup Pump Start with Faulted Lube Oil Pressure, DSSP 100-CR; K/A: 295016AA1.09, 4.0 / 4.0	D, A	(4) Heat Removal from Reactor Core		
b.	Reactor Protection System / Transfer RPS to Reserve Power Supply, DOP 0500-03; K/A: 212000K4.03, 3.0 / 3.1	D	(7) Instrumentation		
C.	Instrument Air System / Unit 2/3 Instrument Air Cross-Connect Operation, DOP 4700-03; K/A: 295019AA1.02, 3.3 / 3.1	D, R	(8) Plant Service Systems		

NUREG-1021, Revision 8

Rev 1



Nuclear Generation Group

Job Performance Measure

Injection with SBLC

JPM Number: B.1.a

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

Date

Approved By:

Facility Representative

Date

7-75-07

Revision Record (Summary)

1. Revision 00, This JPM was created for use during the ILT Class 01-1 NRC Exam.

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 12.

NOTE: It is acceptable to use an IC similar to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

- 2. Insert the following malfunctions or remotes:
 - IMF RDFHYLK (this is a hydraulic lock of the CRDs)
 - IMF CIRWCUAP (this fails the RWCU inboard isolation valves open)
 - IMF CIRWCUBP (this fails the RWCU outboard isolation valves open)
- 3. Perform the following lineup on the simulator:
 - Depress the manual scram pushbuttons
 - Initiate ARI
 - Place the Mode Switch in SHUTDOWN

INITIAL CONDITIONS

- 1. You are the Unit 2 NSO.
- 2. The Unit Supervisor has ordered a manual scram the to a feedwater transient.
- 3. The reactor failed to scram when the manual push ruttons AND ARI pushbuttons were depressed and the Mode Switch was placed in Shutdown, placing the Unit in and ATWS condition.
- 4. Unit Supervisor has authorized Hard Cards and armounced that Transient Annunciator Response is in effect.
- 5. Torus temperature is 108°F AND rising.

INITIATING CUE

- 1. The Unit Supervisor has ordered you to inject SBLC.
- 2. Inform the Unit Supervisor when the task is complete.

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

Information for Evaluator's Use:

UNSAT requires written comments on respective ster

* Denotes CRITICAL steps.

Number any comments in the "Comment Number" common the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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.

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*1.	Place the SBLC INJECTION CONTROL keylock switch to SYS 1 & 2 or SYS 2 & 1 position.	OPERATES SBLC INJECTION CONTROL keylock switch.			-
*2.	Verify the following RWCU valves close: • 2-1201-1 • 2-1201-1A • 2-1201-2 • 2-1201-3 • 2-1201-7	Closes the following valves: • 2-1201-1 • 2-1201-1A • 2-1201-2 • 2-1201-3 • 2-1201-7			
Note:	The RWCU valves will have failed to close automatically and the student must close them manually				
3.	 Verify: Amber SQUIB A AND SQUIB B pilot lights NOT LIT. PUMP 1 AND PUMP 2 pilot lights lit. FLOW pilot light lit. SBLC SQUIB VLV CKT FAILURE annunciator alarms (902-5 H-6). 	VERIFIES SBLC System INJECTING.			
4.	Notifies Unit Supervisor that SBLC System is Injecting	Examinee notifies the Unit 2 Supervisor.	****		
CUE:	Report acknowledged.				
	The JPM is considered complete at this time.				

Examinee's Name:				· · · · · · · · · · · · · · · · · · ·	
Job Title:	RO 🗆	SRO			
JPM Title: JPM Number: Task Number an	<u>B.1.a</u>		iject SBLC into the	Revision Number: <u>(</u> reactor	<u>)0</u>
K/A Number and Impo	ortance: 2	11000A4.0	06; 3.9 / 3.9		
Suggested Testing E	nvironmei	nt: <u>Simula</u>	<u>ator</u>		
Actual Testing Envir	onment:	<u> </u>	Simulator	Plant	
Testing Method: □	Simulate Perform		ternate Path: 🔳	Yes 🖸 No	
Time Critical: 🛚	Yes	■ No			
Estimated Time to C	omplete:	8 minutes	Actual Time	Used: minutes	
References:					
1. DOP 1100-02, Inje	ection of St	tandby Liqi	uid Control, Rev 11		

Were all the Critical Elements performed satisfa	ctorily?	Yes	□ No
The examinee's performance was evaluated again and has been determined to be: Satisfactor	nst the standar	rds containe Unsatisfac	
Comments:		- Maria Stranger	
<u> </u>			
			· · · · · · · · · · · · · · · · · · ·
			····
Evaluator's Name:		(P	rint)
Evaluator's Signature		Da	tar

INITIAL CONDITIONS

- 1. You are the Unit 2 NSO.
- 2. The Unit Supervisor has ordered a manual scram due to a feedwater transient.
- 3. The reactor failed to scram when the manual pushbuttons AND ARI pushbuttons were depressed and the Mode Switch was placed in Shutdown, placing the Unit in and ATWS condition.
- 4. Unit Supervisor has authorized Hard Cards and announced that Transient Annunciator Response is in effect.
- 5. Torus temperature is 108°F AND rising.

INITIATING CUE

- 1. The Unit Supervisor has ordered you to inject SBLC.
- 2. Inform the Unit Supervisor when the task is complete.



Nuclear Generation Group

Job Performance Measure

Core Spray Pump Operability Test UNSAT

JPM Number: B.1.b

Revision Number: 02

Date: 03/13/02

Developed By:

Facility Author

Date

Approved By:

Facility Representative

Date

7-78-01

Revision Record (Summary)

1. **Revision 02,** This JPM was taken directly from the Dresden facility testing materials bank (S-1400-03) for use during the ILT Class 01-1 NRC Exam.

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 12.

NOTE: It is acceptable to use an IC similar to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

- 2. Start the LPCI room coolers.
- 3. Insert the following malfunctions or remotes:
 - IMF SER0089 OFF (prevents alarm 902-3 D-7 from alarming during this JPM)
 - IMF CSPPBDEG 10 (degrades the 2B CS pump 10%)
- 4. Have a copy of DOS 1400-05 marked up completed through step I.6

INITIAL CONDITIONS

- 1. The Unit 2 Core Spray operability surveillance is due and the 2A Core Spray pump test has been completed.
- 2. DOS 1400-05 has been completed up to and including Step I.6.
- 3. Unit 2 NLO is standing by in the corner room.
- 4. LPCI/Core Spray Roam Coolers are running.
- 5. The System Engineer is taking extra data at the Core Spray pumps.
- 6. You are the Unit 2 Assistant NSO.
- 7. 2B Core Spray System has been declared inoperable due to testing.

INITIATING CUE

- 1. The Unit Supervisor directs you to complete DOS 1400-05 for the 2B Core Spray pump, starting at step 1.7.a. up to and including Step 1.7.r
- 2. Leave the 2B Core Stray pump running for the System Engineer.
- 3. Complete Data Shee: 1 for this surveillance.
- 4. Inform the Unit 2 Supervisor when the task is complete.

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

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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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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:

Comment Number **STANDARD** ELEMENT **STEP** Note: Provide examinee with a marked up copy of DOS 1400-05 with Data sheet 1. Note: The examinee should begin the surveillance at Step I.7 1. Verify the following valve line up. MO 2-1402-4B, CLOSED Verifies Green Closed light • Verifies Green Open light • MO 2-1402-38B, OPEN • Verifies Green Open light • 2-1402-6B, OPEN MO 2-1402-25B, CLOSED • Verifies Green Closed light • Verifies Green Open light MO 2-1402-3B, OPEN • 2-1402-40B-SV, CLOSED • Contacts the NLO to verify position of valve. CUE: Unit 2, 2-1402-40B INST SV is closed. 2. Verify 2B CORE SPRAY Contacts NLO to verify proper MOTOR has adequate oil level. lubrication and records results on Data Sheet 1 CUE: Report as NLO that 2B CORE SPRAY motor oil level is at Oil Sightglass standstill line. Contacts NLO to verify proper 3. Verify 2B LPCI/CS Room room cooler operation. Cooler is operating properly. CUE: Unit 2B LPCI/CS room cooler is operating normally.

<u>STEP</u>	ELEMENT	<u>STANDARD</u>	SAT	UNSAT	Comment Number
4.	Directs EA to open 2-1402-40B-SV and report pressure.	Directs SV 1-1402-40B open.			
CUE:	Unit 2, 2-1402-40B INST SV is OPEN. Pressure is 7 psig.				
Note:	Evaluator may act as Verifier.				
5.	Calculates 2-1402-8B initial closed dp.	Obtains Disch. Pressure from 902-3 panel PI-2-1450-1B.	,		
		2-1450-1B. ~90 psig -2-1402-4(B. 7 psig	_		
		~83 dp Initial			
*6.:	Close PP DISCH VLV,MO 2- 1402-24B	Closes MO 1-1402-24B.			~~~
*7.	Start 2B CORE SPRAY Pump.	Starts 2B Care Spray Pump.			
Note:	May notify the NLO starting the pump and may flag annunciators H-13 and A-5				
8.	Verify alarms	902-3 B panel H-13 in alarm.	· · · · · ·		
	 902-3 H-13, LPCI/CS PP AT PRESS 902-3 A-5, CORE SPRAY PP RUNNING. 	902-3 A parel A-5 in alarm.			
Note:	If operator requests another NSO				
11000	to track the time the evaluator may perform this function.				

STEP	ELEMENT	<u>STANDARD</u>	SAT	UNSAT	Comment Number
*9.	Open FLOW TEST VLV MO 2-	MO 2-1402-4B Red Open light.			
	1402-4B	Tracks time throttled open.			
10.	Verify MIN FLOW VLV MO 2-1402-383 closes.	Verifies MO 2-1402-38B closes.			
Note:	May terminate surveillance as soon as candidate recognizes failure of pump. This could happen before the flow rate of 4600 to 4650 gpm is achieved.				
*11.	THROTTLE MO 2-1402-4B to obtain a :low rate of 4600 to 4650 gpm.	MO 2-1402-4B Throttled (double indication) to 4600 to 4650 GPM on FI 2-1450-4B.			
*12.	Recognizes that 2B CS pump will not meet Acceptance Criteria and reports to Unit Supervisor.	Unit Supervisor informed of Acceptance Criteria failure.			
CUE:	I understand 2B CS pump does not meet DOS 1400-05 Flow Rate Acceptance Criteria.				
	Leave the 2B Core Spray Pump running for the System Engineer. We will terminate the surveillance.				
	The JPM is considered complete at this time.				
	JPM Stop Time:				. # 1

Examinee's Name:					
Job Title: RO □ SRO □					
JPM Title: <u>Core Spray Pump Operability Test UNSAT</u> JPM Number: <u>B.1.b</u> Revision Number: <u>02</u> Task Number and Title: <u>209L004</u> , <u>Perform Core Spray pump test with torus available</u>					
K/A Number and Importance: <u>209000A4.01</u> ; <u>3.8 / 3.6</u>					
Suggested Testing Environment: Simulator					
Actual Testing Environment: □ Simulator □ Plant □ Control Room					
Testing Method:□ Simulate ■ Perform Alternate Path: ■ Yes □ No					
Time Critical: ☐ Yes ■ No					
Estimated Time to Complete: 26 minutes Actual Time Used: minutes					
References:					
1. DOS 1400-05, Core Spray System Pump Test with Torus Available, Rev. 26					

EVALUATION SUMMARY: Were all the Critical Elements performed satisfactorily?	0	Yes	J	No
The examinee's performance was evaluated against the state and has been determined to be: Satisfactory		ls containa Unsatisfac		is JPM,
Comments:				yen o.
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Evaluator's Name:	***	·	nnt)	
Evaluator's Signature:		Da	† ·	

#### INITIAL CONDITIONS

- 1. The Unit 2 Core Spray operability surveillance is due and the 2A Core Spray pump test has been completed.
- 2. DOS 1400-05 has been completed up to and including Step I.6.
- 3. Unit 2 NLO is standing by in the corner room.
- 4. LPCI/Core Spray Room Coolers are running.
- 5. The System Engineer is taking extra data at the Core Spray pumps.
- 6. You are the Unit 2 Assistant NSO.
- 7. 2B Core Spray System has been declared inoperable due to testing.

#### INITIATING CUE

- 1. The Unit Supervisor directs you to complete DOS 1400-05 for the 2B Core Spray pump, starting at step I.7.a. up to and including Step I.7.r
- 2. Leave the 2B Core Spray pump running for the System Engineer.
- 3. Complete Data Sheet 1 for this surveillance.
- 4. Inform the Unit 2 Supervisor when the task is complete.



# **Nuclear Generation Group**

**Job Performance Measure** 

Core Spray Pump Operability Test UNSAT

JPM Number: B.1.b

Revision Number: 02

Date: 03/13/02

Developed By:

Facility Author

Approved By:

**Facility Representative** 

3/13/or

Date

7-78-01

Date



# **Nuclear Generation Group**

## **Job Performance Measure**

Startup of second Recirculation Pump with failure of discharge valve to open

JPM Number: B.1.c

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

Date

Approved By:

**Facility Representative** 

Date

## **Revision Record (Summary)**

1. **Revision 00,** This JPM is new and was developed for the Dresden ILT Class 01-1 NRC Exam.

#### SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 5.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

- 2. Trip the 2B Recirc Pump
- 3. Close the 2B Recirc Pump discharge valve (MO 2-202-5B) and return C/S to NORMAL
- 4. Insert following Malfunctions and/or Remotes
  - IOR RRD5BCLS CLOSE
  - IOR RRD5BOPN OFF
  - IOR RRD5BJP5 OFF
  - IOR RRD5BJ1P OFF
- 5. Place the Recirc Pumps in individual manual control
- 6. Complete DOP 0202-01 up through Step G.4

#### INITIAL CONDITIONS

- 1. 2B Recirc Pump was inadvertently tripped one (1) had ago due to personnel error.
- 2. The immediate actions of DOA 0202-01 have been completed.
- 3. All prerequisites of DOP 0202-01 have been met.
- 4. Seal Purge to the 2B Recirc Pump has been established.
- 5. DOP 0202-01 has completed up to and including ster 5.4.

#### INITIATING CUE

- 1. You have been directed by the Unit 2 Supervisor to restart the 2B Recirc Pump IAW DOP 0202-01 starting at step G.5.
- 2. Inform the Unit 2 Supervisor when the task is complete.

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 at the rottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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The timeclock starts when the candidate acknowledges the initiating cue.

	JPM Start Time:				
<u>STEP</u>	ELEMENT	STANDARD	SAT	UNSAT	Comment
1.	Verify MO 2-202-5B, 2B PP DISCH VLV, is CLOSED <u>AND</u> C/S is in the NORM position.	MO 2-202-5B Red Closed light AND C/S is in the NORM position.			
*2.	Start the 2B MG by holding 2B MG SET DRIVE MOTOR switch in START for 3 seconds.	Turns 2B M-G Set Drive Motor Control switch to START and holds for 3 seconds.			
3.	Observe the following:	Observes or monitors the following:			
	<ul> <li>MG set Closed indicator comes on</li> <li>Speed meter rises to a peak of 60% to 80%.</li> <li>MG Field breaker CLOSES seven seconds after MG DRIVE MOTOR breaker closes.</li> <li>% Speed meter settles out and then decays to approximately 28%</li> </ul>	<ul> <li>2B M-G Set Drive Motor Blue On light illuminated.</li> <li>Monitors speed on Percent speed meter.</li> <li>MG Field breaker Blue Closed light illuminated.</li> <li>Monitors speed on Percent speed meter.</li> </ul>			
Note:	IF dual valve position indication is NOT obtained within 2 minutes of pump start, THEN trip the Recirc Pump.	i i i i i i i i i i i i i i i i i i i	3		

<u>STEP</u>	ELEMENT	<u>STANDARD</u>	SAT	UNSAT	Commer Number
4.	<ul> <li>While observing APRM response AND Recirc loop flow indications after each individual open step (jog), perform the following:</li> <li>Open, MO 2-202-5B, 2B PP DISCH VLV, just to the point of dual valve position indication.</li> </ul>	Attempts to OPEN MO 2-202-5B, 2B PP DISCH VLV by one of the following:  • Throttling open with 2B PP DISCH VLV Control switch. OR • Jog open by using 2B PP DISCH VLV Jog control.			
Note:	The MO 2-202-5B, 2B PP DISCH VLV, will <u>NOT</u> OPEN			<del></del>	
*5.	If dual valve position indication is <u>NOT</u> obtained within 2 minutes of pump start, <u>THEN</u> trip the recirc pump.	Trips 2B Recirc Pump within 2 minutes		<del></del>	
6	Reports to the Unit 2 Supervisor that the MO 2-202-5B, 2B PP DISCH VLV, did not have dual indication and the 2B Recirc Pump was tripped.	Unit 2 Supervisor notified.			
CUE:	Acknowledge report.				
	The JPM is considered complete at this time.				
	JPM Stop Time:				

Examinee's Name:					
Job Title: RO 🗆 SRO 🗅					
JPM Title: Startup of second Recirculation Pump with failure of discharge valve to open JPM Number: B.1.c Revision Number:00 Task Number and Title: 202L002, Perform a Unit 2 Recirculation system startup					
K/A Number and Importance: <u>202000A4.01</u> ; <u>3.7 / 3.7</u>					
Suggested Testing Environment: Simulator					
Actual Testing Environment:    □    Simulator    □    Plant      □    Control Room					
Testing Method: ☐ Simulate ☐ Perform Alternate Path: ☐ Yes ☐ No					
Time Critical: ☐ Yes ■ No					
Estimated Time to Complete: 14 minutes Actual Time Used: minutes					
References:					
1. DOP 0202-01, Reactor Recirculation System Startup, Rev. 33					

<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?	Yes		No
The examinee's performance was evaluated against the stand has been determined to be:   Satisfactory	s contain Unsatisfa		nis JPM,
Comments:	 		
	 		<del> </del>
	 	<del></del>	
	 ···········		
•	 		
	 	<del></del>	
Evaluator's Name:	 (l	Print)	
Evaluator's Signature:	D	ate:	

#### INITIAL CONDITIONS

- 1. 2B Recirc Pump was inadvertently tripped one (1) hour ago due to personnel error.
- 2. The immediate actions of DOA 0202-01 have been completed.
- 3. All prerequisites of DOP 0202-01 have been met.
- 4. Seal Purge to the 2B Recirc Pump has been established.
- 5. DOP 0202-01 has completed up to and including step G.4.

#### **INITIATING CUE**

- 1. You have been directed by the Unit 2 Supervisor to restart the 2B Recirc Pump IAW DOP 0202-01 starting at step G.5.
- 2. Inform the Unit 2 Supervisor when the task is complete.



**Nuclear Generation Group** 

Job Performance Measure

Draining and Pressurizing the Main Steam Lines

JPM Number: B.1.d

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

Date

Approved By:

**Facility Representative** 

Date

3-22-02

## **Revision Record (Summary)**

1. **Revision 00,** This JPM was taken directly from the Dresden facility testing materials bank (S-0250-01) for use during the ILT Class 01-1 NRC

Exam.

#### SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 5.

NOTE: It is acceptable to use an IC similar to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Close the following valves:

Add seven & scrom
reset to setup

- On the 902-3 panel:
  - All eight (8) MSIVs.
  - MSL DRN VLVs MO 2-220-1, MO 2-220-2, MO 2-220-3, and MO 2-220-4.
  - All four (4) MSL DRN VLVs MO 2-220-90 A (B), (C), and (D).
- On the 902-7 panel:
  - Main Steam Line Drain MO 2-3005.
  - CONTROL VLV ABOVE SEAT DRN.
- 3. Set Analog output of the 902-7 panel "Turbine Throttle Pressure" to 30 psig lower than reactor pressure.

#### INITIAL CONDITIONS

- 1. Unit 2 has just been stabilized following the initiation of a Group 1 isolation and subsequent scram during plant startup/heatup.
- 2. An IM has just notified the Shift Manager that he bumped the steam line pressure switch rack on the corner room landing causing the Group 1 isolation.
- 3. Reactor level is normal (+30"), the turbine stop valves are closed, and the scram and Group 1 isolations have been reset.
- 4. The Main Steam Lines were NOT flooded during the event.

#### INITIATING CUE

The Unit 2 Unit Supervisor has directed you to drain and pressurize the main steam lines in accordance with DOP 0250-01.

Notify the Unit 2 Supervisor when the task is complete.

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.

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Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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	<u>STANDARD</u>	SAT	UNSAT	Comment Number
Note:	Steps 1-3 are at the 902-3 panel				
*1.	OPEN MO 2-220-4, MSL DRN TO CONDR.	Opens MO 2-220-4			
*2.	OPEN Outboard MSIVs:	Opens all 4 outboard MSIVs			
	<ul> <li>AO 2-203-2A</li> <li>AO 2-203-2B</li> <li>AO 2-203-2C</li> <li>AO 2-203-2D</li> </ul>				
*3.	OPEN MSL DRN VLVs:	Opens all 3 MSL DRN VLVs			
	<ul> <li>MO 2-220-1</li> <li>MO 2-220-2</li> <li>MO 2-220-3</li> </ul>				
Note:	Steps 4-5 are at the 902-7 panel				
*4.	OPEN CONTROL VLVS ABOVE SEAT DRNS	Opens the CONTROL VLVS ABOVE SEAT DRNS.		<del></del>	
	<ul> <li>MO 2-3004A</li> <li>MO 2-3004B</li> <li>MO 2-3004C</li> <li>MO 2-3004D</li> </ul>		: :		
*5.	Open MO 2-3005, MSL LEAD DRN VLV.	Opens the MSL LEAD DRN VLV.			

Note: Step 6-8 are at the 902-3 panel

STEP	ELEMENT	<u>STANDARD</u>	SAT	UNSAT	Comment Number
*6.	OPEN MSL DRN VLVS	Opens the MSL TRN VLVS	**		
	<ul> <li>MO 2-220-90A</li> <li>MO 2-220-90B</li> <li>MO 2-220-90C</li> <li>MO 2-220-90D</li> </ul>				
Note:	Time compression is used for draining the steam lines.				
	When valves are open give the following cue.				
CUE:	Inform examinee that lines are drained.				
7.	Verify the following valves are CLOSED (Inboard MSIVs):	Verifies Inboard MSIVs are closed.			
	AO 2-203-1A AO 2-203-1B AO 2-203-1C AO 2-203-1D				
8.	Verify the following valves are OPEN (Outboard MSIVs):	Verifies Outboard MSIVs are open.			
	<ul> <li>AO 2-203-2A</li> <li>AO 2-203-2B</li> <li>AO 2-203-2C</li> </ul>				2004
	• AO 2-203-2D	7 · · · · · · · · · · · · · · · · · · ·			

Note: Steps 9-10 are at the 902-7 panel

			Ţ	UNSAT	Comment Number
<u>STEP</u>	ELEMENT	STANDARD	SAT	S	$\mathbf{C_0}$
*9.	Close CONTROL VLVS ABOVE SEAT DRNS	Closes the CONTROL VLVS ABOVE SEAT DRNS			
	<ul> <li>MO 2-3004A</li> <li>MO 2-3004B</li> <li>MO 2-3004C</li> <li>MO 2-3004D</li> </ul>				
*10.	Close MO 2-3005, MSL LEAD DRN VLV	Closes the MSL LEAD DRN VLV			
Note:	Step 11-13 are at the 902-3 panel				
11.	Verify OPEN the following MSL DRN VLVs to condenser:	Verifies the valves open			
	<ul> <li>MO 2-220-90A</li> <li>MO 2-220-90B</li> <li>MO 2-220-90C</li> <li>MO 2-220-90D</li> </ul>				
12	Verify OPEN MSL DRN VLVs:	Verifies the valves open			<del></del>
	<ul> <li>MO 2-220-1</li> <li>MO 2-220-2</li> <li>MO 2-220-3</li> </ul>	••			
*13.	Close MO 2-220-4 (MSL DRN VLV).	Closes the MSL DRN VLV			
		the state of the s			

STEP	ELEMENT	<u>STANDARD</u>	SAT	UNSAT	Commer Number
14.	Verify differential pressure is equalized to less than 70 psid across the MSIVs by comparing reactor pressure (902-5 panel) to turbine throttle pressure (902-7 panel).	Determines differential pressure less than 70 psid by comparing 902-5 panel PI-2-640-28 (RPV pressure) TO 902-7 panel PI-2-3040 (Turbine throttle pressure)	$\Lambda$ $\lambda$	d A	
Note:	Step 15 is at the 902-3 panel		T22	C),	ų
*15.	Open Inboard MSIVs	Opens the following valves:			
	AO 2-203-1A AO 2-203-1B AO 2-203-1C AO 2-203-1D	<ul> <li>AO 2-203-1A</li> <li>AO 2-203-1B</li> <li>AO 2-203-1C</li> <li>AO 2-203-1D</li> </ul>			
Note:	Steps 16 and 17 are at the 902-7 panel				
*16.	<ul> <li>OPEN CONTROL VLVS ABOVE SEAT DRNS.</li> <li>MO 2-3004A</li> <li>MO 2-3004B</li> <li>MO 2-3004C</li> <li>MO 2-3004D</li> </ul>	Opens the CONTROL VLVS ABOVE SEAT DRNS.			
*17.	Open MO 2-3005, MSL LEAD DRN VLV.	Opens the MSL LEAD DRN VLV.			
18.	Report to Unit 2 Supervisor that the main steam lines are drained and pressurized.	Examinee verbally reports to Unit 2 Supervisor that the main steam lines are drained and pressurized			

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE:	Report acknowledged.				
	The JPM is considered complete at this time.				
	JPM Stop Time:				

Examinee's Name:						
Job Title:	RO		SRO			
JPM Title:Draining JPM Number: B.1.d Task Number and Ti					Revisio	on Number: 00
K/A Number and Im	portanc	e: <u>2390</u>	001A4.r)	1; 4.2 / 4.0		
Suggested Testing	Enviro	nment:	: <u>Simul</u>	<u>ator</u>		
<b>Actual Testi</b> Control Room		ironme	ent:	☐ Simula	tor 🚨	Plant 🗖
Testing Method:				Faulted: lternate Path:	☐ Yes ☐ Yes	<del>-</del>
Time Critical:	☐ Yes		No			
Estimated Time to	Compl	<b>ete:</b> 32	2 minut	es Actual Ti	me Used:	minutes
References:						
1. DOP 0250-01, D	raining	and Pro	essurizin	g the Main Steam	m Lines, Rev	v. 9

<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?		Yes		No
The examinee's performance was evaluated against the st and has been determined to be:   Satisfactory		s contain Insatisfa		nis JPM,
Comments:				
			<del></del>	
	·	<del></del>		
				·····
			· <b>-</b>	
Evaluator's Name:	***	(1	Print)	
Evaluator's Signature:		D	ate:	

#### INITIAL CONDITIONS

- 1. Unit 2 has just been stabilized following the initiation of a Group 1 isolation and subsequent scram during plant startup/heatup.
- 2. An IM has just notified the Shift Manager that he bumped the steam line pressure switch rack on the corner room landing causing the Group 1 isolation.
- 3. Reactor level is normal (+30"), the turbine stop valves are closed, and the scram and Group 1 isolations have been reset.
- 4. The Main Steam Lines were NOT flooded during the event.

#### **INITIATING CUE**

The Unit 2 Unit Supervisor has directed you to drain and pressurize the main steam lines in accordance with DOP 0250-01.

Notify the Unit 2 Supervisor when the task is complete.



# **Nuclear Generation Group**

### **Job Performance Measure**

Restoring Normal Feed to MCC 28-7/29-7 from Bus 29

JPM Number: B.1.e

Revision Number: 00

Date: 03/13/02

Developed By:

**Facility Author** 

Date

Approved By:

**Facility Representative** 

Date

### Revision Record (Summary)

1. **Revision 00,** This IPM was created for use during the ILT Class 01-1 NRC

Exam.

#### SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 12

NOTE: It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Hold MCC 29-7/28-7 Feed from Bus 29 in TRIP until MCC 29-7/28-7 Feed from Bus 28 CLOSES.

#### INITIAL CONDITIONS

- 1. MCC 28-7/29-7 is powered from Bus 28.
- 2. Power has been restored to Bus 29.
- 3. You are the Unit 2 Assistant NSO.

#### INITIATING CUE

You have been directed by the Unit Supervisor to restore the normal feed to MCC 28-7/29-7 per DOP 6500-10

Notify the Unit 2 Supervisor when the task is complete.

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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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:				
<u>STEP</u>	ELEMENT	STANDARD	SAT	UNSAT	Comment
*1.	Open the feed breaker from Bus 28, MCC 29-7/28-7 FEED FROM BUS 28, by placing control switch in TRIP AND maintain switch in TRIP.	Opens the feed breaker AND maintains the switch in TRIP.	_		
* 2.	Close feed breaker from Bus 29, MCC 29-7/28-7 FEED FROM BUS 29.	Closes the feed breaker	<del></del>		
3.	Release feed breaker from Bus 28, MCC 29-7/28-7 FEED FROM BUS 28, control switch.	Releases feed breaker control switch		<del></del>	
4.	Notify the Unit 2 Supervisor that normal feed has been restored to MCC 28-7/29-7.	Unit 2 Supervisor notified.			
CUE:	Report acknowledged.				
	The JPM is considered complete at this time.				
	JPM Stop Time:				

Examinee's Name:
Job Title: RO 🗆 SRO 🖵
JPM Title: <u>Restoring Normal Feed to MCC 28-7/29-7 from Bus 29</u> JPM Number: <u>B.1.e</u> Revision Number: <u>00</u> Task Number and Title: 262L026, Restore Normal Feed to MCC 28-7/29-7 from Bus 29
K/A Number and Importance: <u>262001A4.01</u> ; <u>3.4 / 3/7</u>
Suggested Testing Environment: Simulator
Actual Testing Environment:  Simulator  Plant  Control Room
Testing Method:       □ Simulate       Faulted:       □ Yes       ■ No         ■ Perform       Alternate Path:       □ Yes       ■ No
Time Critical: ☐ Yes ■ No
Estimated Time to Complete: 12 minutes Actual Time Used: minutes
References:

1. Reference DOP 6500-10, Rev. 4

# **EVALUATION SUMMARY:** Were all the Critical Elements performed satisfactorily? Yes $\Box$ No The examinee's performance was evaluated against the standards contained in this JPM, and has been determined to be: Satisfactory ☐ Unsatisfactory Comments: Evaluator's Name: (Print) Evaluator's Signature: _____ Date: ____

### INITIAL CONDITIONS

- 1. MCC 28-7/29-7 is powered from Bus 28.
- 2. Power has been restored to Bus 29.
- 3. You are the Unit 2 Assistant NSO.

#### **INITIATING CUE**

You have been directed by the Unit Supervisor to restore the normal feed to MCC 28-7/29-7 per DOP 6500-10

Notify the Unit 2 Supervisor when the task is complete.



# **Nuclear Generation Group**

### **Job Performance Measure**

Take a Rod Out of Service

JPM Number: B.1.f

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

Date

Approved By:

**Facility Representative** 

Date

### Revision Record (Summary)

1. **Revision 00,** This JPM was taken directly from the Dresden facility testing materials bank (S-0400-03) for use during the ILT Class 01-1 NRC Exam.

### Job Performance Measure (JPM)

#### SIMULATOR SETUP INSTRUCTIONS

- 1. Reset the simulator to IC 12.
- 2. Select Control Rod B-10 and drive it to 00, ensure to deselect rod after driving the rod to position 00.
- 3. Insert the following malfunctions or remotes:
  - IRF RODB10DA (this disarms the accumulator for rod B-10)

#### INITIAL CONDITIONS

- Control rod B-10 was discovered uncoupled. All attempts to couple the rod per DOA 0300-5 were unsuccessful. The control rod was then inserted to position 00 and electrically disarmed. The Control rod was tagged and logged per DOS 0300-06 and a QNE has been notified.
- 2. You are the Unit 2 NSO.

#### **INITIATING CUE**

You have been directed by the Unit 2 Supervisor to take rod B-10 out of service on the Rod Worth Minimizer per DOP 0400-02, "Rod Worth Minimizer" Step G.3.c.(2).

Notify the Unit 2 Supervisor when the task is complete.

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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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.

IPM	Start	Time:
31 171	Diani	1 11110.

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE:	Provide examinee with a copy of DOP 0400-02.				
1.	A maximum of eight Control Rods may be taken Out-Of- Service.	Verifies eight at less rods OOS.			
*2.	From the primary display screen, touch the area marked SECONDARY FUNCTION	Selects SECONDARY FUNCTIONS in RWM screen.	<del></del>		
*3.	Touch the area marked ROD OUT OF SERVICE.	Selects ROD CUT OF SERVICE on RWM screen.			
*4.	Select the proper control rod on the touch screen by touching its position indication on the screen.	Control rod B-10 position indication outlined with blue box and shown on RWM screen as SELECTED.			
5.	Visually verify that the selection is correct.	Verifies rod B-10 is selected.			
*6.	If the selection is correct, confirm the request by touching the ENTER REQUEST box.	Touches ENTER REQUEST			
Note:	The rod is already at position 00 so the student will NOT need to move the rod.				
7.	Touch the EXIT FUNCTION box to return to the Main Display.	RWM returns to Main Display.			
Note:	The next step is optional				
8.	May select rod B-10 to ensure rod in and out blocks are applied.	Selects rod B-12 and acknowledges rod block alarm.			

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
9.	Notify Unit 2 Supervisor that rod B-10 has been taken Out-Of-Service.	Notifies Unit 2 Supervisor.			·
CUE:	Acknowledge report.				
	The JPM is considered complete at this time.				
]	JPM Stop Time:				

Examinee's Name:
Job Title: RO 🗆 SRO 🖵
JPM Title:Take a Rod Out of Service  JPM Number: B.1.f Revision Number:00  Task Number and Title: 201L027; Operate the RWM in the OOS mode.
K/A Number and Importance: 201006A4.06; 3.2/3.2
Suggested Testing Environment: Simulator
Actual Testing Environment:  □ Simulator □ Plant □ Control Room
Testing Method: ☐ Simulate     Perform
Time Critical: ☐ Yes ■ No
Estimated Time to Complete: 18 minutes Actual Time Used: minutes
References:
1. DOP 0400-02, Rod Worth Minimizer, Rev. 17

<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?		Yes		No
The examinee's performance was evaluated against the state and has been determined to be:    Satisfactory	ındar 🗀	ds contain Unsatisfa	ed in the	iis JPM,
Comments:			- <del></del>	
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	<u></u>			
	·			
Evaluator's Name:		(	(Print)	
Evaluator's Signature:		D	ate: _	

#### INITIAL CONDITIONS

- 1. Control rod B-10 was discovered uncoupled. All attempts to couple the rod per DOA 0300-5 were unsuccessful. The control rod was then inserted to position 00 and electrically disarmed. The Control rod was tagged and logged per DOS 0300-06 and a QNE has been notified.
- 2. You are the Unit 2 NSO.

#### INITIATING CUE

You have been directed by the Unit 2 Supervisor to take rod B-10 out of service on the Rod Worth Minimizer per DOP 0400-02, "Rod Worth Minimizer" Step G.3.c.(2).

Notify the Unit 2 Supervisor when the task is complete.

Nuclear

# **Nuclear Generation Group**

# Job Performance Measure

Start Standby Gas Treatment (SBGT)

JPM Number: B.1.g

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

Date

Approved By:

**Facility Representative** 

Date

# **Revision Record (Summary)**

1. **Revision 00,** This JPM was taken directly from the Dresden facility testing materials bank (S-7500-01) for use during the ILT Class 01-1 NRC Exam.

#### SIMULATOR SETUP INSTRUCTIONS

- 1. Reset the simulator to any IC with Reactor Building Ventilation operating in a normal lineup.
- 2. The 2/3A SBGT train is in STBY and the 2/3B SBGT train is in PRI.

#### INITIAL CONDITIONS

- 1. HPCI operability surveillance is about to be performed.
- 2. In order for this surveillance to be run, SBGT needs to be on.
- 3. No painting is in progress in the Reactor Building or Turbine Building and no painting has been done in the last 24 hours.

#### INITIATING CUE

- 1. The Unit 2 Supervisor has directed you to start the "A" train of the SBGT system in accordance with DOP 7500-01.
- 2. DOP 7500-M1/E1, U2 3 Standby Gas Treatment System Checklist is complete.
- 3. Operator Daily Surveillance Log for the shift is complete for all Process Radiation Monitors.

Notify the Unit 2 Supervisor when the task is complete.

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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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.

IPM	Start	Time:	
J I I V I	$\cup$ $\iota$ $\iota$ $\iota$	I IIIIC.	

<u>STEP</u>	<u>ELEMENT</u>		<u>STANDARD</u>	SAT	UNSAT	Comment Number
*1.	Place "A" SBGT SELECT SWITCH to PRI position.		"A" SBGT SELECT SWITCH in PRI.			
*2.	Place "B" SBGT SELECT SWITCH to STBY position.		"B" SBGT SELECT SWITCH in STBY.	·		
3.	<ul> <li>Verify the following:</li> <li>2/3 A(B)AIR HEATERS OFF.</li> <li>2/3 A(B) FANS OFF.</li> <li>Annunciator 923-5 A-6 and B-6 NOT in alarm state.</li> </ul>	I	Conditions VERIFIED.			
4.	Verify "B" SBGT SELECT SWITCH in STBY position.		VERIFIES "B" SBGT SELECT SWITCH in STBY position.			
*5.	Place "A" SBGT SELECT SWITCH to START position		STARTS "A" SBGT.			
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<u>STEP</u>	ELEMENT	<u>STANDARD</u>	SAT	UNSAT	Commen Number
6.	Verify the following on the "A" SBGT:	Equipment VERIFIED.			
	<ul> <li>INLET DAMPER 2/3 7505 A OPENS.</li> <li>OUTSIDE AIR DAM 2/3 7504 A CLOSES.</li> <li>2/3 "A" AIR HEATER ON.</li> <li>2/3 "A" FAN ON.</li> <li>SBGT TRN FAN DISCH MO 2/3 7507 A OPENS.</li> <li>Flow rate between 3900 to 4700 scfm on SBGT DISCH FLOW FI 7540-13.</li> </ul>				
7.	Verify the following on the "B" train:	Equipment VERIFIED.			
	<ul> <li>INLET DAMPER 2/3 7505 B CLOSE.</li> <li>OUTSIDE AIR DAM 2/3 7504 B OPEN.</li> <li>SBGT TRN FAN DISCH DAM MO 2/3 7507 B CLOSE.</li> </ul>				
8.	Directs an operator to inspect the "A" train for:	Directs an operator to inspect the "A" SBGT train.			
	<ul><li>Excessive vibration</li><li>High bearing temperature</li><li>Abnormal noise</li></ul>				
CUE:	Report as NLO that the 2/3A SBGT is running with no abnormal conditions				

<u>STEP</u>	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
9.	Notifies Unit 2 Supervisor that the 2/3 A SBGT train is running	Unit 2 Supervisor notified.			
CUE:	Report acknowledged.				
	The JPM is considered complete at this time.				
	JPM Stop Time:				

Examinee's Name:				-			
Job Title:	RO		SRO				
JPM Title: <u>Start Star</u> JPM Number: <u>B.1.g</u> Task Number and T	Revis	ion Nu	mber: <u>00</u>		System.		
K/A Number and Im	portanc	e: <u>2610</u>	000A4.02	2; 3.1/	3.1		
Suggested Testing	Enviro	nment:	Simul	ator		_	
Actual Testi	ng Env	ironme	ent:	0	Simulato Control		Plant
Testing Method:	☐ Sim		$\mathbf{A}$	terna	te Path: 🛭	1 Yes	■ No
Time Critical:	☐ Yes	=	l No				
Estimated Time to	Compl	ete: 16	5 minute	es A	Actual Tim	ne Used: _	minutes
References:							
1. DOP 7500-0, SB	GT Sys	tem Op	eration,	Rev.	16		
							. <del>-</del>
				i setje	* ************************************	•	
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<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?		Yes		No
The examinee's performance was evaluated against the stand has been determined to be:   Satisfactory		ds contain Unsatisfa		his JPM,
Comments:				
		<del>- · · · · · · · · · · · · · · · · · · ·</del>		<del></del>
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Evaluator's Name:		(I	Print)	
Evaluator's Signature:		Da	ate:	

#### **INITIAL CONDITIONS**

- 1. HPCI operability surveillance is about to be performed.
- 2. In order for this surveillance to be run, SBGT needs to be on.
- 3. No painting is in progress in the Reactor Building or Turbine Building and no painting has been done in the last 24 hours.

#### INITIATING CUE

- 1. The Unit 2 Supervisor has directed you to start the "A" train of the SBGT system in accordance with DOP 7500-01.
- 2. DOP 7500-M1/E1, U2/3 Standby Gas Treatment System Checklist is complete.
- 3. Operator Daily Surveillance Log for the shift is complete for all Process Radiation Monitors.

Notify the Unit 2 Supervisor when the task is complete.



# **Nuclear Generation Group**

# **Job Performance Measure**

Isolation Condenser Makeup Pump Start

JPM Number: B.2.a

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

3/13/02

Date

Approved By:

**Facility Representative** 

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### **Revision Record (Summary)**

1. **Revision 00,** This JPM was taken directly from the Dresden facility testing materials bank (P-1300-03) for use during the ILT Class 01-1 NRC Exam.

#### **MATERIALS**

1. Copy of DSSP 0100-CR, Attachment I

#### INITIAL CONDITIONS

- 1. Smoke in the Control Room has led to a control room evacuation.
- 2. The Unit 2 Isolation Condenser is in service and makeup to the shell side is required.
- 3. Valve 2-4399-74 valve (ISOL CDSR CLEAN DEMIN WTR FILL VLV) is open.
- 4. The 2/3 Makeup Demineralizers are secured.

#### **INITIATING CUE**

You have been directed by the Unit 2 Supervisor to start an isolation condenser makeup pump in accordance with DSSP 100-CR, Attachment I India).

Inform the Unit 2 Supervisor when the task is complete.

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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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
1.	Obtain CB-1 or CB master key for entry into the IC Makeup Pump Room.	CB-1 or CB master key obtained and IC Makeup Pump Room entered.			
*2.	Place REMOTE-OFF-RUN toggle switch on Engine Control Panel 2223-126A(B) in RUN.	The REMOTE-OFF-RUN toggle switch at Panel 2223-126A(B) is placed in RUN.	_		
CUE:	If operation of the correct switch was correctly described, then "the engine has started."				
3.	Verify engine starts and comes to stable speed using RPM meter on Local Panel 2223-126A(B).	Engine start verified using RPMmeter on Panel 2223-126A(B).			
Note:	The indicator to check is a LCD display. When the engine is running the parameters constantly scroll on the screen. With the engine shutdown the parameters will not be displayed.				
CUE:	If engine RPM is being checked correctly, then "meter is reading 900 rpm and steady."			•	
*4.	Verify engine oil pressure is ≥ 20 psi on Panel 2223-126A(B) indicator.	Engine oil pressure checked on Panel 2223-126A(B) indicator.			
CUE:	If indicator is being checked correctly, then "oil pressure is 15 psi and water temperature is 165°F."			<u>.</u> . 1	

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
Note:	With oil pressure less than 20 psi (on Panel 2223-126A(B) indicator), the examinee should immediately stop the 2/3-43122A(B), IC Makeup Pump and then start the 2/3-43122B(A), IC Makeup Pump.	·			
*5.	Place REMOTE-OFF-RUN toggle switch on Engine Control Panel 2223-126A(B) in OFF.	The REMOTE-OFF-RUN toggle switch at Panel 2223-126A(B) is placed in OFF.			
CUE:	If operation of the correct switch was correctly described, then "the engine has stopped."				
*6.	Place REMOTE-OFF-RUN toggle switch on Engine Control Panel 2223-126B(A) in RUN.	The REMOTE-OFF-RUN toggle switch at Panel 2223-126B(A) is placed in RUN.			
CUE:	If operation of the correct switch was correctly described, then "the engine has started."				
7.	Verify engine starts and comes to stable speed using RPM meter on Local Panel 2223-126A(B).	Engine start verified using RPM meter on Panel 2223-126A(B).			
CUE:	If engine RPM is being checked correctly, then "meter is reading 1900 rpm and steady."	· · · · · · · · · · · · · · · · · · ·	• ,		
*8.	Verify engine oil pressure is ≥ 20 psi on Panel 2223-126B(A) indicator.	Engine oil pressure checked on Panel 2223-126B(A) indicator.	· ·		

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
CUE:	If indicator is being checked correctly, then "oil pressure is 60 psi and water temperature is 160°F."				
9.	Monitor engine parameters to ensure limits are NOT exceeded.	Engine parameters monitored to ensure limits are NOT exceeded.		<del></del>	
CUE:	If indicators are being checked correctly, then				
	Lube oil pressure is 60 psi.				
	Water temp is 160°F.				
	Engine RPM is 1900.				
10.	Notify Unit 2 Supervisor that an IC Makeup Pump is running.	Unit 2 Supervisor notified.			
CUE:	Acknowledge report.				
	The JPM is considered complete at this time.				
)	PM Stop Time:	***********************		••••	ı

Examinee's Name:
Job Title: RO □ SRO □
JPM Title: <u>Isolation Condenser Makeup Pump Start</u> JPM Number: <u>B.2.a</u> Revision Number: <u>00</u> Task Number and Title: 207L009, Operate the IC makeup pumps locally
K/A Number and Importance: 295016AA1.09; 4.0/4.0
Suggested Testing Environment: Plant
Actual Testing Environment:  Simulator  Control Room
Testing Method: ■ Simulate Faulted: ■ Yes □ No □ Perform Alternate Path: □ Yes ■ No
Time Critical: ☐ Yes ■ No
Estimated Time to Complete: 11 minutes Actual Time Used: minutes
References:
1. DSSP 0100-CR, Rev. 22

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Were all the Critical Elements performed satisfactor	rily?	Yes 🗖	No
The examinee's performance was evaluated against and has been determined to be:   Satisfactory		ontained in th satisfactory	is JPM,
Comments:			
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			<del></del>
			<del></del>
		-	_
			<del></del>
Evaluator's Name:	.•	_ (Print)	
Evaluator's Signature:	•	Date:	-

#### **INITIAL CONDITIONS**

- 1. Smoke in the Control Room has led to a control room evacuation.
- 2. The Unit 2 Isolation Condenser is in service and makeup to the shell side is required.
- 3. Valve 2-4399-74 valve (ISOL CDSR CLEAN DEMIN WTR FILL VLV) is open.
- 4. The 2/3 Makeup Demineralizers are secured.

#### **INITIATING CUE**

You have been directed by the Unit 2 Supervisor to start an isolation condenser makeup pump in accordance with DSSP 100-CR, Attachment I (India).

Inform the Unit 2 Supervisor when the task is complete.



## **Nuclear Generation Group**

**Job Performance Measure** 

Transfer RPS to the Reserve Power Supply

JPM Number: B.2.b

Revision Number: 00

Date: 03/13/02

Developed By:

Facilify Author

3/13/02

Date

Approved By:

**Facility Representative** 

CO-86- 5

Date

### **Revision Record (Summary)**

1. Revision 00, This JPM was taken directly from the Dresden facility testing materials bank (P-0500-01) for use during the ILT Class 01-1 NRC Exam.

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## Job Performance Measure (JPM)

#### SIMULATOR SETUP INSTRUCTIONS

N/A – JPM is conducted in-plant

#### INITIAL CONDITIONS

- 1. Unit 2 was at 70% power when the 2A RPS MG Set tripped.
- 2. MCC's 25-2, 28-2 and 29-2 are ALL energized.
- 3. The Load Dispatcher has been notified that Unit 1 RPS is to be transferred and there is a possibility of a reactor scram.
- 4. The Gaseous Effluent Monitoring systems are in service.
- 5. Scram Fuse integrity is complete (2202-22A thru H)

#### INITIATING CUE

You have been directed by the Unit 2 Supervisor to transfer the Unit 2 RPS Bus B from its NORMAL to RESERVE power supply in accordance with DOP 0500-03, "RPS Power Supply Operation", Step G.3.

Inform the Unit 2 Supervisor when the task is complete.

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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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.

	TD3 6 G T	***************************************		**1
	JPM Start Time:			
STEP	<u>ELEMENT</u>	STANDARD Z	UNSAT	Comment Number
Note:	Provide examinee with a current copy of DOP 0500-03.			
	Steps 1 and 2 can be performed in reverse order.			
1.	Obtain key (#209 for Unit 2) for RPS Reserve Power Supply Key Operated Interlock from the WEC.	Key #209 obtained.		
2.	Verify all applicable prerequisites have been satisfied.	Prerequisites verified (supplied in Initial Conditions).		
	<ul> <li>Power available to MCC 25-2</li> <li>Load Dispatcher notified</li> <li>Gaseous Effluent Monitoring Systems in service</li> <li>Scram Fuse integrity is complete</li> </ul>			
*3.	Verify the following breakers are closed:			
	<ul> <li>MCC 25-2 Breaker A4, 2-500 RX PROTECTION SYS BUSES RESERVE FEED</li> </ul>	Breaker verified closed.		.:
	MCC 25-2 Breaker A5, 2-500 RX SAFETY SYS & INST BUS BACKUP TRANSFORMER	Breaker verified closed.		

STEP	<u>ELEMENT</u>	STANDARD	SAT	UNSAT	Comment Number	
Note:	The following is performed in the Auxiliary Electrical Equipment Room.					
4.	Verify POWER IN, RPS RESERVE FEED red indicating light ON at EPA Relay 2AB-1.	Red indicating light verified ON.				
5.	Verify the following indicating lights are OFF at EPA Relay 2AB-1.	Indicating lights verified OFF.				
	<ul><li>OVER VOLTAGE</li><li>UNDER VOLTAGE</li><li>UNDER FREQUENCY</li></ul>					
*6.	Close breaker on EPA Relay 2AB-1.	Breaker closed on EPA Relay 2AB-1.				
CUE:	The breaker is in the position you described.					
7.	Ensure POWER OUT, RPS BUS red indicating light ON at EPA Relay 2AB-1.	Red indicating light ON.				
CUE:	The light is in the condition you described.		:			
8.	Verify POWER IN, RPS RESERVE FEED red indicating light ON at EPA Relay 2AB-2.	Red indicating light ON.			·	
CUE:	The light is in the condition you described.	are construct to		. 1		

STEP	<u>ELEMENT</u>	STANDARD 5	UNSAT	Comment Number
9.	Verify the following indicating lights are OFF at EPA Relay 2AB-2.	Indicating lights verified OFF.		
	<ul><li>OVER VOLTAGE</li><li>UNDER VOLTAGE</li><li>UNDER FREQUENCY</li></ul>			
CUE:	The lights are in the condition you described.			
*10.	Close breaker on EPA Relay 2AB-2.	Breaker closed on EPA Relay	<del>-</del>	<del></del>
CUE:	The breaker is in the position you described.			
11.	Ensure POWER OUT, RPS BUS red indicating light ON at EPA Relay 2AB-2.	Red indicating light ON.	<u> </u>	<del></del>
CUE:	The light is in the condition you described.			
12.	Notify control room of supplying power to RPS Bus.	Control room notified of supplying power to RPS Bus B.	·	
CUE:	Report acknowledged.			
Note:	Step G.3.1 is skipped.			
13.	Bypass APRM #1	Contacts control room to have the control room bypass APRM #1		
CUE:	APRM # 1 is bypassed	en e	:	
*14.	Unlock FROM MCC 25-2 RPS BUS RESERVE breaker.	FROM MCC 25-2 RPS BUS RESERVE breaker unlocked.	: : :	<del></del>

STEP	ELEMENT	STANDARD	$\mathbf{SAT}$	UNSAT	Comment Number
CUE:	The breaker is in the condition you described.				
*15.	Open 2A M-G SET FEED TO 2B RPS BUS NORMAL breaker.	2B M-G SET FEED TO 2A RPS BUS NORMAL breaker opened.			
CUE:	The breaker is in the condition you described.				
*16.	Wait 1 second, then close FROM MCC 25-2 RPS BUS RESERVE breaker.	FROM MCC 25-2 RPS BUS RESERVE breaker closed after a 1 second wait.			
CUE:	The breaker is in the condition you described.				
*17.	Stop RPS MG A by taking MOTOR STARTING switch to TRIP.	RPS MG B stopped by taking MOTOR STARTING switch to TRIP.			
CUE:	The switch is in the condition you described.				
CUE:	If switch correctly positioned, then "the RPS MG has stopped."				
18.	Place VOLTMETER TRANSFER switch in BUS.	VOLTMETER TRANSFER switch placed in BUS.	· 	<del></del>	<del></del>
CUE:	The switch is in the condition you described.				
19.	Verify AC VOLTS is 111 to 123 volts.	AC VOLTS verified between 111 to 123 volts.	- <del>-</del>		
CUE:	If correct meter read, then "meter reads 120 volts," otherwise "meter reads as is."	at the Manne,	!		

nee could inform control ansfer of RPS Bus B is ete through step G.3.0 at ne and the rest of the ure needs to be completed control room.  Deccurs go to Step 22 of the ninee inquires if jumpers astalled provide the ng cue.  Inpers were installed.  control room to remove # 1 from bypass.  as Unit 2 NSO that:	Informs control room that APRM # 1 can be removed from bypass.			
ninee inquires if jumpers astalled provide the ing cue.  appers were installed.  control room to remove # 1 from bypass.				
astalled provide the ng cue.  appers were installed.  control room to remove # 1 from bypass.				
control room to remove # 1 from bypass.				
# 1 from bypass.				
as Unit 2 NSO that:				
#1 has been removed ypass.				
	Informs control room to complete step G.3.r	· ·	<del></del>	
as Unit 2 NSO that:				
3.r is complete.				
is B has been transferred	Unit 2 Supervisor notified.			
wledge report.				
- I				
	#1 has been removed ypass.  s control room to te step G.3.r as Unit 2 NSO that: 3.r is complete. Unit 2 Supervisor that as B has been transferred rve Power.  wledge report. M is considered complete ime.	Informs control room to complete step G.3.r  as Unit 2 NSO that:  3.r is complete.  Unit 2 Supervisor that as B has been transferred reve Power.  Wledge report.  M is considered complete ime.	Informs control room to complete step G.3.r  as Unit 2 NSO that:  3.r is complete.  Unit 2 Supervisor that as B has been transferred rive Power.  Wledge report.  M is considered complete ime.	Informs control room to complete step G.3.r  as Unit 2 NSO that:  3.r is complete.  Unit 2 Supervisor that is B has been transferred rive Power.  Wledge report.  M is considered complete ime.

Examinee's Name:
Job Title: RO 🗆 SRO 🖵
JPM Title: <u>Transfer RPS to the Reserve Power Supply</u> JPM Number: <u>B.2.b</u> Revision Number: <u>00</u> Task Number and Title: 212L001, Perform RPS Power Supply Operations
K/A Number and Importance: 212000K4.03; 3.0/3.1
Suggested Testing Environment: <u>In Plant</u>
Actual Testing Environment:    Simulator  Control Room
Testing Method: ■ Simulate □ Perform Alternate Path: □ Yes ■ No
Time Critical: ☐ Yes ■ No
Estimated Time to Complete: 29 minutes Actual Time Used: minutes
References:
1 DOP 0500-03 Reactor Protection System Power Supply Operation Rev. 18

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<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfac	torily?	Yes	۵	No
The examinee's performance was evaluated again and has been determined to be:   Satisfactory		rds contain Unsatisfa		is JPM,
Comments:	<del></del>			
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Evaluator's Name:		(I	Print)	
Evaluator's Signature:		Da	ate:	

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#### **INITIAL CONDITIONS**

- 1. Unit 2 was at 70% power when the 2A RPS MG Set tripped.
- 2. MCC's 25-2, 23-2 and 29-2 are ALL energized.
- 3. The Load Dispatcher has been notified that Unit 2 RPS is to be transferred and there is a possibility of a reactor scram.
- 4. The Gaseous Effluent Monitoring systems are in service.
- 5. Scram Fuse integrity is complete (2202-22A thru H)

#### INITIATING CUE

You have been directed by the Unit 2 Supervisor to transfer the Unit 2 RPS Bus B from its NORMAL to RESERVE power supply in accordance with DOP 0500-03.

Inform the Unit 2 Supervisor when the task is complete.



## **Nuclear Generation Group**

## **Job Performance Measure**

Crosstie Unit 2 and Unit 3 Instrument Air Headers

JPM Number: B.2.c

Revision Number: 00

Date: 03/13/02

Developed By:

Facility Author

Tate

Approved By:

**Facility Representative** 

<u>এ এ৯ ত্রু</u> Date

JPM Number B.2.c

### Job Performance Measure (JPM)

### **Revision Record (Summary)**

1. Revision 00, This JPM was taken directly from the Dresden facility testing

materials bank (P-4700-01) for use during the ILT Class 01-1 NRC

Exam.

### SIMULATOR SETUP INSTRUCTIONS

N/A - JPM is conducted in-plant

#### **INITIAL CONDITIONS**

- ... Unit 3 is shutdown for a refueling outage.
- 2. Unit 2 is at 100% power and is experiencing an Instrument Air transient causing the Unit 2 Instrument Air header pressure to drop slowly.
- 3. The Unit 2 Service Air to Instrument Air cross-tie valve is open and the Unit 2 Instrument Air header pressure is still dropping slowly.
- 4. The Shift Manager has given permission to carry out "cross-connect" operations.
- 5. The Instrument Air system is aligned in accordance with Figure 1, "Instrument Air Turbine Building Plan View" of DOP 4700-03.

#### INITIATING CUE

You have been directed by the Unit 2 Supervisor to cross-connect the Unit 2 and Unit 3 Instrument Air headers by opening BOTH the North and South Instrument Air header cross-tie valves in accordance with DOP 4700-03.

Appropriate portions of DOP 4700-03, steps G.1 through G.7 have been completed.

Inform the Unit 2 Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.									
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#### 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 at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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.

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JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment
1.	Proceed to Step G.8 in DOP 4700-03.	Proceeds to Step G.8.			
Note:	Steps 2 and 3 may be performed in any order.				
Note:	Valve 2-4705-330 is located north of the 2B Instrument Air Compressor.				
*2.	Open 2-4705-330, U2 INST AIR SYS XTIE VLV TO/FROM THE U3 INST AIR SYS.	Valve 2-4705-330 is OPEN.			
CUE:	The valve is in the position you described.				
Note:	Valve 3-4712-501 is located near the stairs to the TBCCW pumps.				
*3.	Open 3-4712-501, U2 INST AIR SYS XTIE VLV TO/FROM THE U3 INST AIR SYS.	Valve 3-4712-501 is OPEN.			
CUE:	The valve is in the position you described.				
4.	Notify the Unit 2 Supervisor that both the North and South Instrument Air header crosstie valves are open.	Unit 2 Supervisor notified.			
CUE:	Acknowledge report.				
	The JPM is considered complete at this time.				
JР	M Stop Time:				

Examinee's Name:							
Job Title: RO 🗆 SRO 🖵							
JPM Title: Crosstie Unit 2 and Unit 3 Instrument Air Headers  JPM Number: B.2.c Revision Number: 00  Task Number and Title: 278L005, Respond to instrument air system failure							
K/A Number and Importance: <u>295019AA1.02; 3.3/3.1</u>							
Suggested Testing Environment: In Plant							
Actual Testing Environment:  Simulator  Control Room							
Testing Method: ■ Simulate Faulted: □ Yes ■ No □ Perform Alternate Path: □ Yes ■ No							
Time Critical: ☐ Yes ■ No							
Estimated Time to Complete: 20 minutes Actual Time Used: minutes							
References:							

1. DOP 4700-03, Unit 2/3 Instrument Air Cross-Connect Operation, Rev. 10

<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?    Yes    No											
The examinee's performance was evaluated against the standards contained in this JPM, and has been determined to be:    Satisfactory    Unsatisfactory											
Comments:											
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Evaluator's Name:									(Print)		
Creativatar'a Cianatura									Doto		

INITIAL CONDITIONS

- 1. Unit 3 is shutdown for a refueling outage.
- 2. Unit 2 is at 100% power and is experiencing an Instrument Air transient causing the Unit 2 Instrument Air header pressure to drop slowly.
- 3. The Unit 2 Service Air to Instrument Air cross-tie valve is open and the Unit 2 Instrument Air header pressure is still dropping slowly.
- 4. The Shift Manager has given permission to carry out "cross-connect" operations.
- 5. The Instrument Air system is aligned in accordance with Figure 1, "Instrument Air Turbine Building Plan View" of DOP 4700-03.

INITIATING CUE

You have been directed by the Unit 2 Supervisor to cross-connect the Unit 2 and Unit 3 Instrument Air headers by opening BOTH the North and South Instrument Air header cross-tie valves in accordance with DOP 4700-03.

Appropriate portions of DOP 4700-03, steps G.1 through G.7 have been completed.

Inform the Unit 2 Supervisor when the task is complete.