

# JOB PERFORMANCE MEASURE 201.02

Title: Respond to an Uncoupled Rod at > 10% power						
Task: Respond to an uncoupled rod at > 10% power 2170401007						
KA# 201003 A2.02	F	RATING: RO - 3.7				
Validation Time	15 minu	ites	Time Critical	NO		
	Name		Social Se	curity Number		
Operator						
Evaluator				·		
DIRECTIONS TO TRAIN	<b></b>					
Before you start, I will state the task conditions and initiating cues and fully answer any questions. To complete this task successfully, you must perform or simulate each critical element correctly and demonstrate proper procedural adherence. Peer checking will not be provided during the performance of required tasks.  NOTE: Directions are only required once in a given JPM session.						
	Per	formance				
Perform		formance	Simulate			
Perform Replica	Y X	formance	Simulate In-Plant			
	X					
Replica	X		In-Plant			
Replica Satisfactory	X		In-Plant			
Replica Satisfactory	X		In-Plant			
Replica Satisfactory	X		In-Plant			
Replica Satisfactory	X		In-Plant			
Replica Satisfactory	X		In-Plant			
Replica Satisfactory	X	U	In-Plant			

#### JPM 201.02

#### REFERENCE SECTION:

#### TASK CONDITIONS:

Reactor Recirculation Flow Has Been Reduced by 1.5 X 10<sup>4</sup> to provide Additional Margin for Thermal Limits during rod maneuvers for core shaping per core engineering guidance. Control rod 14-15 was the last rod maneuvered from notch position 30 to 48 to complete shaping maneuver. Reactor Engineer is present in the control room.

## **GENERAL TOOLS AND EQUIPMENT:**

None

#### **GENERAL REFERENCES:**

Procedure 302.2, Control Rod Drive Manual Control System Rev. 18
ABN 3200.06, Abnormal Control Rod Motion,
RAP H-5-a, Rod Drift
Rev. 111

#### TASK STANDARD:

Rod 14-15 returned to position 48 and recoupled

## **CRITICAL ELEMENTS: (\*)**

2, 5, 9

#### **INITIATING CUES:**

Rod 14-15 has just been notched from position 30 to 48. As US, I am directing you to perform a rod coupling check in accordance with Procedure 302.2, Control Rod Drive Manual Control System

Reactor Recirculation Flow Has Been Reduced by 1.5 X 10<sup>4</sup> to provide Additional Margin for Thermal Limits during rod maneuvers for core shaping per core engineering guidance. Control rod 14-15 was the last rod maneuvered from notch position 30 to 48 to complete shaping maneuver. Reactor Engineer is present in the control room.

#### **INITIATING EUES:**

Rod 34-27 has just been notched from position 30 to 48. As US, I am directing you to perform a rod coupling check in accordance with Procedure 302.2, Control Rod Drive Manual Control System

## PERFORMANCE SECTION:

## **TASK CONDITIONS:**

Reactor Recirculation Flow Has Been Reduced by 1.5 X 10<sup>4</sup> to provide Additional Margin for Thermal Limits during rod maneuvers for core shaping per core engineering guidance. Control rod 14-15 was the last rod maneuvered from notch position 30 to 48 to complete shaping maneuver. Reactor Engineer is present in the control room.

## **INITIATING CUES:**

Rod 14-15 has just been notched from position 30 to 48. As US, I am directing you to perform a rod coupling check in accordance with Procedure 302.2, Control Rod Drive Manual Control System

START TIME	
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PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
Obtain current copy of procedure	Obtains Procedure 302.2 step 4.3.8	
*2 Perform coupling check	On panel 4F takes rod control switch to "Rod Out Notch" simultaneous with notch override switch to "Notch Override"	
Verifies rod is at notch     position 48 and coupled	On Panel 4F, observes control rod 14-15 indicates no numerical digital readout with BLACK backlighting and annunciator H-5-a, Rod Overtravel, alarms	
Obtains controlled copy of procedure	Obtains Procedure ABN-3200.06, step 3.5	
*5. Inserts control rod	Takes rod control switch to "Rod In" or the notch override switch to the "Emergency In" position on Panel 4F until a response is observed on the Nuclear Instruments or the rod is full in.	

## JPM 201.02

PE	ERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
NC	(Floor Instructor): Director	ect console instructor to remove MAL CRD8A	Ţ.
	A response should be observ 15	ed on the Nuclear Instruments near notch 44	on rod 14-
6	Ceases control rod motion	Releases rod control switch to allow it to spring - return to unlabeled mid position	
7	Notifies Reactor Engineering	Informs Reactor Engineering	
CL	E: (Floor Instructor): Ex- that he has permissio	aminer acts as Reactor Engineer and informs n to proceed	operator
8	Monitors nuclear instrumentation and withdraws rod 14-15 to Notch 48	Monitors reactor period and flux level, withdraws rod 14-15 to Notch 48	
*9	Perform coupling check	On panel 4F takes rod control switch to "Rod Out Notch" simultaneous with notch override switch to "Notch Override"	
10.	Verifies rod is at notch position 48 and coupled	On Panel 4F, observes control rod 14-15 indicates a continuous digital readout of "48" with RED backlighting	

COMPL	FTION	TIME	



# JOB PERFORMANCE MEASURE 259.0N

An Exelon/British Energy Compa	iny		259.0	· ·	
Title: Start the Third Fo	eedwater Pur	np from	Control Room		
Task: Start and Operate the	Reactor Feed	System.		2590101003	
KA# 259001 A4.02 RATING: RO- 3.9 SRO- 3.7					
Validation Time	15 minut	es	Time Critical	NO	
	Name		Social Seci	urity Number	
Operator				-	
Evaluator					
DIRECTIONS TO TRA	INEE:	<del></del>			
element correctly and demo provided during the perform NOTE: Directions are only r	ance of require	d tasks. a given J	PM session.		
	Per	formance	9		
Perform	X		Simulate		
Replica	X		In-Plant		
Satisfactory		U	n-Satisfactory		
Comments		<u>.</u>			
			· · · · · · · · · · · · · · · · · · ·		
·					
	Sig	natures			
Evoluctorio	Data		O	F .	

#### JPM 259.0N

#### REFERENCE SECTION:

#### TASK CONDITIONS:

Plant is at 70% power. The 'A' & 'C' Reactor Feedwater pumps are in service. The 'B' Reactor Feedwater pump is in standby

#### **GENERAL TOOLS AND EQUIPMENT:**

none

#### **GENERAL REFERENCES:**

Procedure 317, Feedwater System, section 7.0, Rev. 62

#### TASK STANDARD:

Third Feedwater pump in service.

## CRITICAL ELEMENTS: (\*)

5, 6, 7, 11, 13, 15, 17

## **INITIATING CUES:**

As the Control Room US I am directing you to start the 'B' Reactor Feedwater pump in accordance with Procedure 317, Feedwater System, section 7.0.

## JPM 259.0N

## PERFORMANCE SECTION:

## **TASK CONDITIONS:**

Plant is at 70% power.

The 'A' & 'C' Reactor Feedwater pumps are in service.

The 'B' Reactor Feedwater pump is in standby.

## **INITIATING CUES:**

As the Control Room US I am directing you to start the 'B' Reactor Feedwater pump in accordance with Procedure 317, Feedwater System, section 7.0.

## START TIME \_\_\_\_\_

PE	ERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
1.	Obtains current copy of procedure	Procedure 317, section 7.0 is obtained	
2.	Reviews Prerequisites	Reviews Prerequisites	
3.	Reviews Precautions and Limitations	Reviews Precautions and Limitations.	
CU	E. All Prerequisites are met		
4.	Confirms Heater Bank Inlet valve is OPEN	Confirms Heater Bank Inlet valve, V-2-8, is OPEN.	
*5.	Confirms Heater Bank Outlet valve is CLOSED.	Confirms Heater Bank Outlet valve V-2-11, is CLOSED.	
*6.	Confirms Controller for MRFV is in MAN	Confirms Controller for MRFV, V-ID11B, is in MAN	
<b>*</b> 7.	Confirms MRFV is CLOSED.	Confirms MRFV is CLOSED, indicating '0.0' valve position.	
8.	Directs Equipment	Directs Equipment Operator to verify:	
	Operator to verify Feed pump status	Oil level for motor bearings	
ĺ		Oil level for pump oil reservoir	
		Ventilation for pump motor	

## JPM 259.0N

PERFORMANCE CHECKLIST	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
CUE: Equipment Operator rep	orts oil levels are acceptable and ventilation is n	unning
9. Verify Control Room	Verify Control Room indications:	
indications.	Feed pump suction pressure	
	Feed pump discharge pressure	
10. Verify sufficient bus voltage.	Verifies that the bus voltage for the pump to be started is at least 4100V. At 8F/9F, verifies 4160V Bus 1B voltage is greater than 4100.	
*11. Start the pump	Place pump Start/Stop switch for 'B' Feed pump to START. Release the switch when pumps amps indicate breaker closure	
12. Secure Aux Oil pump	When proper operation of the Feed pump is verified, direct the Equipment Operator to secure the Aux Oil pump	
*13. Open the Heater Bank Outlet valve	At 5F/6F, open the Heater Bank Outlet valve, V-2-11, by holding the control switch to OPEN.	
14. Operate pump for 10 minutes	Operate the Feed pump for 10 minutes	
CUE: Inform the operator that	10 minutes has elapsed (time compression)	
*15. Open the MFRV	Slowly open the MFRV, V-ID11B, ensuring that flow in the other strings automatically compensate for the flow change.	
16. Verify the Min Flow valve closes	When flow in the string exceeds 0.5E6 lbm/hr, verify the Min Flow valve, V-2-19, closes	
*17. Place controller in AUTO	When S & V display are matched, place MFRV Controller in AUTO	

COMPL	ETION TIME	
OCIVII L		

Plant is at 70% power.

The 'A' & 'C' Reactor Feedwater pumps are in service.

The 'B' Reactor Feedwater pump is in standby.

# **INITIATING CUES:**

As the Control Room US I am directing you to start the 'B' Reactor Feedwater pump in accordance with Procedure 317, Feedwater System, section 7.0.



# JOB PERFORMANCE MEASURE 239.01

Title: Bypass the Lo-Lo	o Isolation for th	e Main	Steam Isolation \	/alves	
Task: Defeat Reactor Isolation Interlock 2000501439					
KA# 295031 EA1.05	R/	ATING:	RO - 4.3	SRO - 4.3	
Validation Time	12 minutes	S	Time Critical	NO	
	Name		Social Secu	irity Number	
Operator					
Evaluator -			.•		
DIRECTIONS TO TRA	AINEE:			<del></del>	
Before you start, I will state the task conditions and initiating cues and fully answer any questions. To complete this task successfully, you must perform or simulate each critical element correctly and demonstrate proper procedural adherence. Peer checking will not be provided during the performance of required tasks.  NOTE: Directions are only required once in a given JPM session.					
	Perfo	rmance			
Perform	Х	ormance	Simulate		
Replica			Simulate In-Plant		
Replica Satisfactory	Х		Simulate		
Replica	Х		Simulate In-Plant		
Replica Satisfactory	Х		Simulate In-Plant		
Replica Satisfactory	Х		Simulate In-Plant		
Replica Satisfactory	Х		Simulate In-Plant		
Replica Satisfactory	Х		Simulate In-Plant		
Replica Satisfactory	X	L	Simulate In-Plant		
Replica Satisfactory	X		Simulate In-Plant		

#### **ERENCE SECTION:**

## TASK CONDITIONS:

Bypassing of the MSIV Lo-Lo level isolation interlock has been directed by the EOPs

## **GENERAL TOOLS AND EQUIPMENT:**

**EOP Bypass Plugs** 

#### **GENERAL REFERENCES:**

2000-EMG 3200.01B, RPV Control with ATWS, Rev. 12 Support Procedure 16

#### TASK STANDARD:

Lo-Lo MSIV isolation bypassed

## CRITICAL ELEMENTS: (\*)

2, 3, 4, 5

## **INITIATING CUES:**

As US, I am directing you to bypass the Lo-Lo MSIV isolation per 2000-EMG-3200.01B, RPV Control – With ATWS, Level/Power Leg using Support Procedure 16.

# REFORMANCE SECTION:

ST	<b>ART</b>	TIME	

F			<del></del>
<u> </u>	PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
1.	Obtain controlled copy of procedure	Support Procedure 16 obtained	
*2.	Obtain bypass plugs	Obtains four(4) bypass plugs from the EOP Station	
*3.	Inserts bypass plugs in panel 6R	Opens EOP bypass panel in the rear of Panel 6R.  Inserts bypass plug in position BP1 Inserts bypass plug in position BP2	
*4.	Inserts bypass plugs in panel 7R	Opens EOP bypass panel in the rear of Panel 7R.  Inserts bypass plug in position BP1 Inserts bypass plug in position BP2	
*5.	Bypasses the INSTRUMENT AIR ISOLATION	At Panel 11F, places the INSTRUMENT AIR ISOLATION VALVE BYPASS switch in BYPASS	
6.	Informs LOS	Informs LOS that the Lo-Lo level MSIV Isolation interlock has been bypassed	

COMPLETION TIME\_\_\_\_

Bypassing of the MSIV Lo-Lo level isolation interlock has been directed by the EOPs

## **INITIATING CUES:**

As US, I am directing you to bypass the Lo-Lo MSIV isolation per 2000-EMG-3200.01B, RPV Control – With ATWS, Level/Power Leg using Support Procedure 16.



## JOB PERFORMANCE **MEASURE** An Exelon/British Energy Company 202.10

Title: Respond to a Tripp Path)	ped Recirc Pun	np with 5	Recirc Pumps Oper	ating (Alternate		
Task: Respond to a Tripp Operating	2020401404					
KA# 202001 A2.03		RATING: RO - 3.6				
Validation Time - 15 min	Alternate Pat	.h - Yes	Time Critical	NO		
	Name		Social Secu	rity Number		
Operator						
Evaluator						
DIRECTIONS TO TRA	AINEE:					
element correctly and demonstrate provided during the performand NOTE: Directions are only in the performance of the performanc	mance of require	ed tasks.	IPM session.	CONTINUE WILLIAM STATES		
Perform	Х		Simulate			
Replica	Х		In-Plant			
Satisfactory		U	In-Satisfactory			
Comments				<u>**1</u>		
	Sig	jnatures				
Evaluator's	Date		Operator's	Doto		

## **REFERENCE SECTION:**

## **TASK CONDITIONS:**

Reactor power 100%, all systems operating properly.

## **GENERAL TOOLS AND EQUIPMENT:**

None

## **GENERAL REFERENCES:**

2000-ABN-3200.02, Recirculation Pump Trip, Rev. 30

## TASK STANDARD:

Four pumps running in automatic, the other loop idle.

## **CRITICAL ELEMENTS: (\*)**

5,6,8

## PERFORMANCE SECTION:

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	$\neg$	ľ	$\mathbf{v}$				v	IA	u.	

Reactor power 100%, all system operating properly.

## **INITIATING CUE:**

Your task will be associated with Recirculation System operation; you are now to respond to any further alarms that are received.

START TIME \_\_\_\_\_

PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
CI: PREINSERT CLF VLV already done.	NSS20 option 6 conditional on R3754.LE.0.	2 if not
INSERT MALF RFC1E	when instructed by the evaluator.	
Confirms discharge     bypass valve for "E" loop     open	At Panel 3F, confirms discharge bypass valve for "E" loop open.	
	y that the discharge valve mechanically seiz iditional fails to take then seize the valve be VLV NSS20, opt 6.	
Closes "E" pump     discharge valve	At Panel 3F, takes "E" recirculation pump discharge valve control switch to close.	
Obtains controlled copy     of procedure	Procedure ABN 3200.02, Section 3.1 obtained.	
4 Determines Discharge Valve will not close	At Panel 3F, Determines Discharge Valve will not close.	

PERF	ORMANCE CHECKLIST	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
*5 CI val	oses "E" pump suction ve	At Panel 3F, takes "E" recirculation pump suction valve control switch to close.	
*6. Dis	spatches Electrician.	Dispatches/directs Electrician to attempt to close the discharge valve IAW attachment 3200.02-01.	
CUE:		knowledge request to attempt to close the .V NSS20 to Option 3, "Close", when MONV is closed.	discharge R3754=0.
NOTE	: (CI) If requested after normal closing curren	the valve is closed, report as the electriciant was exhibited for the valve closure.	n that
II	Determines loop onfiguration	Determines that the loop can either be placed in an "IDLE" or "ISOLATED" condition.	
CUE:	(Evaluator) As the US configuration.	i, direct the operator to place the loop in an	"IDLE"
*8. (	Opens the suction valve	Re-opens the suction valve by taking its control switch to the OPEN position.	
	Maintain reactor power pelow rod block setpoint	At Panels 3F and 4F, verifies below rod block on power operation curve.	
	aintains RPV level 155 165"	At Panel 5F/6F, ensures FWC system maintaining level.	
inc	onitor NIs for lication of power cillation	At Panel 4F, monitors APRMs.	

PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
Confirms one of the recirc pump suction temp indicators on 3F is selected to an operating loop	Selects an operating loop for one of the RECIRC PUMP SUCTION TEMPS.	
Verifies did not enter exclusion region of the power operation curve	At Panels 3F and 4F, monitors APRMs and total recirc flow; verifies not in exclusion region of power operation curve.	
Refer to Tech Spec for limitations on continued plant operations	Uses Tech Spec Sections 3.3.F to determine no limitation or informs Shift Supervisor to refer to TS 3.3.F.	
CUE: (Evaluator) Acknow candidate that ano	vledge that no limitations exist and inform the there operator will maintain power at its pres	ne ent level.
15. Notify system dispatcher of power limitations	(No notifications because no limitations)	
16. Notifies designated Reactor engineer	Notifies Reactor engineer.	
17. Diagnose the cause of the pump trip	Diagnose the cause of the pump trip IAW OPS-3024.22.	
CUE: (Evaluator) Inform diagnosis	the candidate that another operator will per	form

COMPLETION	TIME

Reactor power 100%, all systems operating properly.

## **INITIATING CUE:**

Your task will be associated with Recirculation System operation; you are now to respond to any further alarms that are received.



# JOB PERFORMANCE MEASURE 226.01

Title: Manually Initiate Containment Spray						
Task: Manually Initiate Conta	2260101002					
KA# 226001 A4.01	RATING:	RO - 3.5	SRO - 3.4			
Validation Time	15 minutes	Time Critical	NO			
	Name	Social Securi	ty Number			
Operator						
Evaluator .						
DIRECTIONS TO TRAIN	<u>EE:</u>					
Before you start, I will state the task conditions and initiating cues and fully answer any questions. To complete this task successfully, you must perform or simulate each critical element correctly and demonstrate proper procedural adherence. Peer checking will not be provided during the performance of required tasks.  NOTE: Directions are only required once in a given JPM session.						
	Performance					
Perform	Х	Simulate	-			
Replica	X	In-Plant				
Satisfactory		Jn-Satisfactory				
Comments						
	Signatures					
Evaluator's	Date	Operator's	Date			

#### JPM 226.01

#### REFERENCE SECTION:

## TASK CONDITIONS:

Reactor scrammed, all rods in FWC in "Auto", EPR controlling pressure Drywell temperature greater than 150 degrees F Torus pressure approaching 14 psig

# GENERAL TOOLS AND EQUIPMENT:

None

## **GENERAL REFERENCES:**

EMG-3200.02, Primary Containment Control - Pressure Rev. 16 Support Procedure 29

#### TASK STANDARD:

Spraying down the drywell at > 3000 gpm

# **CRITICAL ELEMENTS: (\*)**

<u>3, 10,11</u>

## **INITIATING CUES:**

As US, I am directing you to manually initiate Containment Spray System I, place one containment spray and ESW pump in operation and maintain 4-12 psig DW pressure IAW Support Procedure 29.

## PERFORMANCE SECTION:

#### TASK CONDITIONS:

Reactor scrammed, all rods in FWC in AUTO EPR controlling pressure Drywell temperature greater than 150 degrees F Torus pressure approaching 14 psig

## **INITIATING CUES:**

As GOS, I am directing you to manually initiate Containment Spray System I, one containment spray and ESW pump operation and maintain 4-12 psig DW pressure IAW Support Procedure 29.

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E	PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSA T
1.	Obtain controlled copy of procedure	Support Procedure 29, obtained	
2.	Verifies all prerequisites are met	Manual Initiation of drywell sprays has been directed by the EOPs.	
cu	E (Floor Instructor) F	Prerequisites met	
*3.	Selects system I containment spray.	Selects system I containment spray by confirming/placing SYSTEM 1 MODE SWITCH in DW SPRAY position.	
4.	Verifies selected System aligns properly	At Panel 1F/2F, verifies that the TORUS CLG DISCHARGE valve closes and the DW SPRAY valve opens	

# JPM 226.01

<u>I</u>	PERFORMANCE CHECKLIST	STANDARD	<u>INITIAL</u> sat/unsat
5.	Confirms Reactor Recirc Pumps Tripped.	Confirms ALL Reactor Recirculation Pumps Tripped on panel 3F.	
6.	Confirm the Drywell Cooling fans tripped.	Confirms the Drywell Cooling fans tripped on panel 11R.	
NO	TE: Containment Spray trip	pump 'B' may be started first. If 'B' is started	first, it will
7.	Starts "Ā" containment spray pump	Simultaneously place Containment Spray System 1 Pumps Manual Start Permissive keylock to Position 'A' and Containment Spray Pump 51A Control Switch to START on Panel 1F/2F	
NO	TE: If Cont. Spray pump 'A' v	vas started in this step, it will trip shortly after :	starting.
8.	Monitors system parameters	Recognizes that 'A' (or 'B') Containment Spray pump (if started) has tripped.	
CUI repe	En If the candidate reports the eat the initiating cue.	e pump trip to the US, acknowledge the report	and
9.	After trip of cont. spray pump starts another pump	After trip of cont. spray pump selects another pump ("B") and returns to step 3.3	
*10	Start 'B' containment spray pump	Simultaneously place Containment Spray System 1 Pumps Manual Start Permissive keylock to Position 'B' and Containment Spray Pump 51B Control Switch to START on Panel 1F/2F	
*11.	Starts an associated ESW pump	Starts ESW pump 52A or 52B after starting containment spray pump using its control switch	

# JPM 226.01

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
12. Monitors System parameters	Monitors Containment Spray System parameters for proper operation.	
13. Confirm RBCCW isolation valves are	On 1F/2F, Confirm the following RBCCW isolation valves are closed:	
closed	• V-5-147	1
,	• V-5-148	
	• V-5-166	
	• V-5-167	
14. Observes DW pressure	Maintains DW pressure between 4-12 psig	·
	·	

COMPL	ETION	TIME	

Reactor scrammed, all rods in FWC in AUTO EPR controlling pressure Drywell temperature greater than 150 degrees F Torus pressure approaching 14 psig

# **INITIATING CUES:**

As GOS, I am directing you to manually initiate Containment Spray System I, one containment spray and ESW pump operation and maintain 4-12 psig DW pressure IAW Support Procedure 29.



An Exelon/British Energy Company

# JOB PERFORMANCE MEASURE 264.01

		204.01	
Title: Perform Normal Sta	art of EDG from C	ontrol Room	
Task: Manually Start the Emer	Control room.	2640101002	
KA# 264000 A4.04	RATING:	RO- 3.7	SRO- 3.7
Validation Time	15 minutes	Time Critical	NO
	Name	Social Security Number	
Operator			
Evaluator			
DIRECTIONS TO TRAINE	E:		
Before you start, I will state the questions. To complete this tas element correctly and demonstr provided during the performance NOTE: Directions are only required.	sk successfully, you reate proper procedure etc. etc. proper procedure etc. etc. etc. etc. etc. etc. etc. etc	nust perform or simulated all adherence. Peer che	e each critical
Perform	Performanc		
Replica	X	Simulate In-Plant	
Satisfactory		In-Flam In-Satisfactory	
Comments		nr-causiaciory	
			,
	Signatures		
Evaluator's	Date	Operator's	Date

## REFERENCE SECTION:

## TASK CONDITIONS:

Plant is operating at power #1 EDG must be started and run after maintenance work

# GENERAL TOOLS AND EQUIPMENT:

none

## **GENERAL REFERENCES:**

Procedure 341, Emergency Diesel Generator Operation, section 5.0, Rev. 64

## TASK STANDARD:

#1 EDG supplying 4160V Bus 1C.

# **CRITICAL ELEMENTS: (\*)**

8, 9, 11, 12

## **INITIATING CUES:**

As the Unit Supervisor, I am directing you to start #1 EDG in accordance with Procedure 341, Emergency Diesel Generator Operation, section 5.0.

Plant is operating at power.

#1 EDG must be started and run after maintenance work.

#### **INITIATING CUES:**

As the Unit Supervisor, I am directing you to start #1 EDG in accordance with Procedure 341, Emergency Diesel Generator Operation, section 5.0.

## PERFORMANCE SECTION:

## TASK CONDITIONS:

Plant is operating at power.

#1 EDG must be started and run after maintenance work.

## **INITIATING CUES:**

As the Unit Supervisor, I am directing you to start #1 EDG in accordance with Procedure 341, Emergency Diesel Generator Operation, section 5.0.

		_
<b>START</b>	TIME	

PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
Obtains current copy of procedure	Procedure 341, section 5.0 is obtained	
2. Reviews Prerequisites	Reviews Prerequisites	
3. Reviews Precautions and Limitations	Reviews Precautions and Limitations.	
CUE: All Prerequisites are met		
*8. Start the #1 EDG	Places the EDG 1 NORMAL/START switch in the START position	
*9. Verify start condition.	Verify the UNIT IDLE & UNIT START lights have illuminated	
10. Verify the EDG syncs to the bus and picks up load.	Verifies that the EDG:  • Achieves operating speed  • Synchronizes with the bus  • Load breaker closes  • Picks up load	

JPM 264.01

PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
*11. Confirm EDG load	Confirm EDG load is $2750 \pm 50$ KW. If not, place mode switch to TRANSFER and adjust load using the Governor Control switch	•
*12. Adjusts EDG KVAR load	Uses the VOLTAGE/KVAR Control switch to control KVAR loading to ~ +1000 KVAR lagging (with a range of +200 to +2000 KVAR lagging)	
14. Monitors EDG parameters.	Monitors EDG parameters.	
15. Dispatches EO to monitor EDG.	Dispatches EO to monitor EDG locally.	
CUE: All EDG parameters are	in acceptable range.	

COMP	LETION	TIME	
			_



# JOB PERFORMANCE MEASURE 261.0N

All exelotive fillish energy compar	ıy		
Title: Confirm Seconda Path)	ry Containmen	t Initiations and Isolat	ions (Alternate
Task: Place the Standby G	as Treatment Syst	em in service manually	2610101003
KA# 290001 A2.03	RAT	ING: RO - 3.4	SRO - 3.6
Validation Time	18 minutes	Time Critical	NO
	Name	Social Secu	rity Number
Operator			
Evaluator			
DIRECTIONS TO TRAI	NEE:		
Before you start, I will state to questions. To complete this element correctly and demorprovided during the performant NOTE: Directions are only respectively.	task successfully, astrate proper processor ance of required ta	you must perform or simula edural adherence. Peer ch sks. iven JPM session.	ate each critical
	Perform		<u> </u>
Perform	X	Simulate	
Replica	X	In-Plant	
Satisfactory		Un-Satisfactory	
Comments			
	·		
· · · · · · · · · · · · · · · · · · ·		•	
	Signat	ures	
Evaluator's	Date	Operator's	Date

#### JPM 261.01

## **FERENCE SECTION:**

#### TASK CONDITIONS:

Reactor power 100%, all systems are operating properly. During Spent Fuel operations on Reactor Building 119', Area Radiation Monitors B9 & C9 have alarmed. Two minutes has elapsed

## **GENERAL TOOLS AND EQUIPMENT:**

None

#### **GENERAL REFERENCES:**

Procedure 330, Standby Gas Treatment System, Section 4, Rev. 40

## TASK STANDARD:

Standby Gas Treatment System I operating

## **CRITICAL ELEMENTS: (\*)**

7, 10

#### **INITIATING CUES:**

You have been directed to confirm all isolations and initiations pertaining to these alarms

## FORMANCE SECTION:

## TASK CONDITIONS:

Reactor power 100%, all systems are operating properly.

During Spent Fuel operations on Reactor Building 119', Area Radiation Monitors & C9 have alarmed.

Two minutes has elapsed

## **INITIATING CUES:**

You have been directed to confirm all isolations and initiations pertaining to these alarms

Ī	PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/UNSAT
1.	Refer to RAP 10F-3-m, 4-m	Alarm Response Procedure obtained	
2.	Verify Automatic actions	Verify Reactor Building HVAC has tripped and recognize SGTS has failed to start	
3.	Obtain controlled copy of procedure	Procedure 330, Section 4 obtained	
4.	Verifies all prerequisites met	Verifies prerequisites met	
5.	Reviews all applicable precautions and limitations	Applicable precautions and limitations reviewed	

# JPM 261.01

<u> </u>	PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
CU	E. If Requested, report the f	ollowing	
•	Turbine Exhaust Fan EF-1-7 running	and Radwaste Building Exhaust Fan EF-1-16	are
•	No significant painting, burni	ng or chemical release is occurring	
•	Reactor Building Truck venti	lation hose is NOT in use	
CU	E. If Requested, report the fo	ollowing	
•	Water Evaporator in the CRI	Prebuild room is NOT operating	
•	Reactor Building Truck ventil	ation hose is NOT in use	
6.	Confirm SGTS I is selected	On panel 11R, Confirm SGTS I is selected on the STANDBY GAS SELECT switch	
*7.	Start Exhaust Fan EF-1-8	On panel 11R, place EF-1-8 control switch to HAND	
8.	Verify proper start	On panel 11R, verify the following:	
		Exhaust Fan EF-1-8 STARTS	
		Inlet valve V-28-23 OPENS	,
		Orifice valve V-28-24 OPENS	
		Outlet valve V-28-26 OPENS	
9.	Verify flow established	When system flow is established, verify:	
		SGTS I orifice valve V-28-24 CLOSES	1
		SGTS II orifice valve V-28-28 OPENS	
*10.	Close SGTS Crosstie valve	On panel 11R, place SGTS Crosstie control switch to CLOSE and verify green CLOSE light illuminates	

ETION	TIME	

Reactor power 100%, all systems are operating properly.

During Spent Fuel operations on Reactor Building 119', Area Radiation Monitors B9 & C9 have alarmed.

Two minutes has elapsed

## **INITIATING CUES:**

You have been directed to confirm all isolations and initiations pertaining to these alarms



# JOB PERFORMANCE MEASURE 308.04

			· · · · · · · · · · · · · · · · · · ·
Title: Transfer Control t	o LSP 1A2.		
Task: Operate the Main Brea 1A2.	aker to the Unit Substati	on 1A2 from LSP	3080401415 3080404408
KA# 295016 AA1.07	RATING:	RO <sub>-</sub> - 4.2	SRO - 4.3
Validation Time	10 Minutes	Time Critical	No
	Name	Social Secu	urity Number
Operator			
Evaluator -			
DIRECTIONS TO TRAI	NEE:		
Peer checking will not be pro		PM session.	sks.
Perform		Simulate	х
Replica	ica In-Plant		Х
GRADE: Sat / Unsat	MC	DE: Evaluation / Training	
Comments			
, .			
	Signatures		
	.	_	
Evaluator's	Date	Operator's	Date

#### JPM 308.04

#### TASK CONDITIONS:

T=0 min.

Reactor operating at 100% power, with the 1-1 RBCCW pump, A CRD

pump operating.

T=10 min.

Control Room has been evacuated and all immediate actions

performed in accordance with ABN 3200.30, Control Room Evacuation.

The Remote Shutdown Panel has been manned.

4160V Bus 1C is energized from Bus 1A and Breaker 1A2P is closed.

White "125 VDC ON" light lit on LSP-1A2

#### **GENERAL TOOLS AND EQUIPMENT:**

MB-1 key

#### **GENERAL REFERENCES:**

Procedure 346, Operation of the Local and Remote Shutdown Panels, Section 11.0, Rev. 9

#### **TASK STANDARD:**

LSP 1A2 is activated with all indications functioning

CRITICAL ELEMENTS: (\*)

5,6

#### **INITIATING CUES:**

The US has directed you to place LSP-1A2 in service in accordance with procedure 346, Operation of the Remote and Local Shutdown Panels, Section 11.0.

START TIME	
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	PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1.	Obtain controlled copy of procedure.	Obtain controlled copy of procedure 346.	
2.	Verifies all prerequisites are met.	Verifies all prerequisites are met.	
CUI VD(	E: Upon request, the evaluator CON" light lit on LSP-1A2.	will provide the following information:	White "125
3.	Reviews all applicable precautions and limitations.	Reviews all applicable precautions and limitations.	
4.	Establish communication with the Remote Shutdown Panel.	From the 'A' 480 switch gear room establishes communication between LSP-1A2 and RSP using either a radio, phone or paging system.	
CUE	E: Communications are establis	shed.	
*5.	Places the Normal/Bypass switch for RBCCW pump 1-1 in the "Bypass" position.	At USS 1A2, places the Normal/Bypass switch for RBCCW pump 1-1 in BYPASS.	
CUE	: Normal/Bypass switch for RE	3CCW pump 1-1 is in bypass.	
*6.	Takes local control of LSP 1A2.	Uses local key from padlock to place the "Control Transfer Switch" to ALTERNATE on panel LSP 1A2.	
CUE ON		SWGR Room fans after 2 secs. 1-1 RBC o green OFF light lit. 'A' CRD pump red	
7.	Confirms closed main breaker 1A2M.	Confirms 1A2M shut on panel LSP-1A2.	
CUE	:: Red CLOSED light lit for 1A2	M.	

COMPLETION TIME	

#### **TASK CONDITIONS:**

T=0 min. Reactor operating at 100% power, with the 1-1 RBCCW pump, A CRD

pump operating.

T=10 min. Control Room has been evacuated and all immediate actions

performed in accordance with ABN 3200.30, Control Room Evacuation.

The Remote Shutdown Panel has been manned.

4160V Bus 1C is energized from Bus 1A and Breaker 1A2P is closed.

- White "125 VDC ON" light lit on LSP-1A2

#### **INITIATING CUES:**

The US has directed you to place LSP-1A2 in service in accordance with procedure 346, Operation of the Remote and Local Shutdown Panels, Section 11.0.



# JOB PERFORMANCE MEASURE 223.03

An Exelon/British Energy Company

Title: Line Up to Vent the Torus Through the Hardened Vent.					
Task: Vent the Drywell with Isolation Signals Present. 2230501411					
			2230504001		
KA# 295024A1.14	RATING:	RO - 3.5	SRO - 3.5		
Validation Time	12 minutes	Time Critical	NO		
	Name	Social Secu	ırity Number		
Operator					
Evaluator -					
DIRECTIONS TO TRAINER					
NOTE: Directions are only required once in a given JPM session.  Performance					
Perform		Simulate	X		
Replica In-Plant		X			
GRADE: Sat / Unsat	MO	DE: Evaluation / Training			
Comments					
Signatures					
Evaluatore	Data	Operator's	Date		

#### JPM 223.03

### Task Conditions:

Torus level is 173"
Drywell pressure 53 psig
Hydrogen concentration less than 1.5 %
CHRRMS indicates 1 x 10<sup>3</sup>
Exhaust fans 1-5 and 1-7 are operating

#### **GENERAL TOOLS AND EQUIPMENT:**

MB-1-key Radio

### **GENERAL REFERENCES:**

EMG-3200.02, Primary Containment Control, Rev 16 Support Procedure 35

### TASK STANDARD:

The Torus is lined up to be vented through the hardened vent

### CRITICAL ELEMENTS: (\*)

2,3,4

#### **Initiating Cues:**

The US directs you to prepare the Torus to be vented through the hardened vent per Support Procedure 35.

## PERFORMANCE SECTION:

# START TIME \_\_\_\_\_

	PERFORMANCE CHECKLIST	<u>STANDARD</u>	INITIAL SAT/ UNSAT
1.	Obtain controlled copy of procedure	Obtains support procedure 35	
CUE:	Steps 2.2 – 2.5 of SP-35,	are covered on the provided task conditio	n sheet
*2.	Confirms N₂ purge valve, V-23-195, closed	Confirms closed N <sub>2</sub> purge valve, V-23-195. (A rising stem gate valve located outside RX Bldg NE corner)	
CUE:	V-23-195 closed		
*3.	Unlock and close <b>N₂</b> purge inlet valve, V-23-357	Unlocks N <sub>2</sub> purge inlet valve and rotates operator 90 degrees clockwise. (Outside RX Bldg NE corner)	
CUE:	V-23-357 closed		
*4.	Unlock and open the hardened vent stack isolation valve, V-23-358	Unlocks hardened vent stack isolation valve, V-23-358, and rotates operator 90 degrees counterclockwise. (Outside RX Bldg NE corner)	
Cue:	V-23-358 open		
5.	Informs US the Torus is ready to vented through the hardened vent	Uses radio or page system to inform US the hardened vent path is lined up	

COMPLETION TIME	
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## **Task Conditions:**

Torus level is 173"
Drywell pressue 53 psig
Hydrogen concentration less than 1.5 %
CHRRMS indicates 1 x 10<sup>3</sup>
Exhaust fans 1-5 and 1-7 are operating

## **Initiating Cues:**

The GSS/GOS directs you to prepare the Torus to be vented through the hardened vent per Support Procedure 35.



# JOB PERFORMANCE MEASURE 279.06

Title: Manually Scram th	e Reactor by Venting	g the Scram Air I	-leader
Task: Manually Scram the Reactor by Venting the Scram Air			2790501401
Header			2790504001
KA# 212000 A4.11	RATING:	RO - 3.7	SRO - 3.7
Validation Time	12 minutes	Time Critical	NO
	Name	Social Sec	urity Number
Operator-			
Evaluator			
Before you start, I will state the questions. To complete this to element correctly and demonst provided during the performations.  **NOTE: Directions are only required.**	ask successfully, you mustrate proper procedural ance of required tasks.  Suired once in a given JPN	et perform or simulate dherence. Peer che disession.	e each critical
6.	Performance		X
Perform		Simulate	
Replica		In-Plant	
Satisfactory	L	n-Satisfactory	
Comments			
		······································	
	Signatures		
Evaluator's	Date	Operator's	Date

#### **TASK CONDITIONS:**

Plant has experienced a failure to scram and de-energizing the scram solenoids was unsuccessful in scramming the reactor

#### **GENERAL TOOLS AND EQUIPMENT:**

None

#### **GENERAL REFERENCES:**

EMG-3200.01B, RPV Control - with ATWS, Rev. 12 Support Procedure 21, Alternate Insertion of Control Rods, step 4.1

#### **TASK STANDARD:**

Rods no longer moving in and system air pressure restored

### **CRITICAL ELEMENTS: (\*)**

2, 3, 5 & 6

#### **INITIATING CUES:**

The US directs you to vent the scram air header using support procedure 21, step 4.1.

START TIME	
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PER	FORMANCE CHECKLIST	STANDARD	INITIAL SAT/ UNSAT
1.	Obtain controlled copy of procedure	Obtains support procedure 21, Step 4.1	
*2.	Close V-6-175, Scram Air Header Isolation.	Closes V-6-175, Scram Air Isolation, Rx Bldg 23' east side of drywell.	
CUE	: V-6-175 is closed		
*3.	Open V-6-409, Scram Air Header Vent Valve.	Opens V-6-409, Scram Air Header Vent, Rx Bldg 23' east side of drywell.	
CUE	: V-6-409 is open		
4.	Communicate with the Control Room.	Establishes communication with the Control Room via paging system, radio or telephone and reports scram air header vented. Requests to know when rods are finished moving in.	
CUE	: Upon request, the evaluator	will provide the following information:	
	Control Room informs operin.	ator that all rods are inserted or no long	ger moving
*5.	Close V-6-409, Scram Air Header Vent Valve	Closes V-6-409, (Scram Air Header Vent)	
CUE	: V-6-409 closed		
*6.	Open V-6-175, Scram Air Header Isolation Valve	Opens V-6-175, (Scram Air Isolation)	
CUE	V-6-175 open		

COMPL	ETION	TIME	

## TASK CONDITIONS:

Plant has experienced a failure to scram and de-energizing the scram solenoids was unsuccessful in scramming the reactor.

#### **INITIATING CUES:**

The US directs you to vent the scram air header using support procedure 21, step 4.1.