



An Exelon/British Energy Company

**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

RATING:

RO - 3.7

SRO - 3.8

Validation Time

15 minutes

Time Critical

NO

Name

Social Security Number

Operator

Evaluator

DIRECTIONS TO TRAINEE:

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

X

Simulate

Replica

X

In-Plant

Satisfactory

Un-Satisfactory

Comments

Signatures

Evaluator's

Date

Operator's

Date

REFERENCE SECTION:

TASK CONDITIONS:

Reactor Recirculation Flow Has Been Reduced by 1.5×10^4 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,	Rev. 12
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

PERFORMANCE SECTION:

TASK CONDITIONS:

Reactor Recirculation Flow Has Been Reduced by 1.5×10^4 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 ÚS, I am directing you to perform a rod coupling check in accordance with Procedure 302.2, Control Rod Drive Manual Control System

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
1. 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"	
3. 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	
4. Obtains controlled copy of procedure	Obtains Procedure ABN-3200.06, step 3.5	
CUE: If Reactor Engineer contacted at this time – state that under current conditions it is permissible to follow the ABN actions.		
*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	

JPM 201.02

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
	Nuclear Instruments or the rod is full in.	
NOTE: (Floor Instructor): Direct console instructor to remove <u>MAL CRD8A</u> after rod has begun to move in. A response should be observed on the Nuclear Instruments near notch 44 on rod 14-15.		
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	
CUE: (Floor Instructor): Examiner acts as Reactor Engineer and informs operator that he has permission to proceed		
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	

COMPLETION TIME _____

TASK CONDITIONS:

Reactor Recirculation Flow Has Been Reduced by 1.5×10^4 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



An Exelon/British Energy Company

**JOB PERFORMANCE
MEASURE
259.0N**

Title: Start the Third Feedwater Pump 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 minutes

Time Critical

NO

Name

Social Security Number

Operator

Evaluator

DIRECTIONS TO TRAINEE:

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

X

Simulate

Replica

X

In-Plant

Satisfactory

Un-Satisfactory

Comments

Signatures

Evaluator's

Date

Operator's

Date

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 Unit Supervisor, I am directing you to start the 'B' Reactor Feedwater pump in accordance with Procedure 317, Feedwater System, section 7.0.

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 Unit Supervisor, I am directing you to start the 'B' Reactor Feedwater pump in accordance with Procedure 317, Feedwater System, section 7.0.

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL SAT/UNSAT</u>
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.	
CUE: 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	
*7. Confirms MRFV is CLOSED.	Confirms MRFV is CLOSED, indicating '0.0' valve position.	
8. Directs Equipment Operator to verify Feed pump status	Directs Equipment Operator to verify: <ul style="list-style-type: none"> • Oil level for motor bearings • Oil level for pump oil reservoir • Ventilation for pump motor 	

JPM 259.0N

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
CUE: Equipment Operator reports oil levels are acceptable and ventilation is running		
9. Verify Control Room indications.	Verify Control Room indications: <ul style="list-style-type: none"> • 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	

COMPLETION TIME_____

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 Unit Supervisor, I am directing you to start the 'B' Reactor Feedwater pump in accordance with Procedure 317, Feedwater System, section 7.0.



An Exelon/British Energy Company

**JOB PERFORMANCE
MEASURE
239.01**

Title: Bypass the Lo-Lo Isolation for the Main Steam Isolation Valves

Task: Defeat Reactor Isolation Interlock

2000501439

KA# 295031 EA1.05

RATING:

RO - 4.3

SRO - 4.3

Validation Time

12 minutes

Time Critical

NO

Operator

Name

Social Security Number

Evaluator

DIRECTIONS TO TRAINEE:

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

X

Simulate

Replica

X

In-Plant

Satisfactory

Un-Satisfactory

Comments

Signatures

Evaluator's

Date

Operator's

Date

REFERENCE SECTION:

TASK CONDITIONS:

Plant is in an ATWS condition, crew is preparing to lower Reactor level.
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 Unit Supervisor, 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.

PERFORMANCE SECTION:

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> 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. <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • 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 _____

TASK CONDITIONS:

Plant is in an ATWS condition, crew is preparing to lower level.
Bypassing of the MSIV Lo-Lo level isolation interlock has been directed by the EOPs

INITIATING CUES:

As Unit Supervisor, 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.



An Exelon/British Energy Company

**JOB PERFORMANCE
MEASURE
202.10**

Title: **Respond to a Tripped Recirc Pump with 5 Recirc Pumps Operating (Alternate Path)**

Task: Respond to a Tripped Recirc Pump with 5 Recirc Pumps Operating

2020401404

KA# 202001 A2.03

RATING:

RO - 3.6

SRO - 3.7

Validation Time - 15 min

Alternate Path - Yes

Time Critical

NO

Name

Social Security Number

Operator

Evaluator

DIRECTIONS TO TRAINEE:

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

X

Simulate

Replica

X

In-Plant

Satisfactory

Un-Satisfactory

Comments

Signatures

Evaluator's

Date

Operator's

Date

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

INITIATING CUE:

You are now to respond to any further alarms that are received.

PERFORMANCE SECTION:

TASK CONDITIONS:

Reactor power 100%, all system operating properly.

INITIATING CUE:

You are now to respond to any further alarms that are received.

START TIME _____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
CUE: PREINSERT CLF VLV NSS20 option 6 conditional on R3754.LE.0.2 if not already done. INSERT MALF RFC1E when instructed by the evaluator.		
1. Confirms discharge bypass valve for "E" loop open	At Panel 3F, confirms discharge bypass valve for "E" loop open.	
CUE (CI): MONV R3754 to verify that the discharge valve mechanically seizes at approx. 0.2. IF the conditional fails to take then seize the valve before it fully closes using CLF VLV NSS20, opt 6. CUE: The other RO will attend to all alarms <u>not</u> associated with your present task.		
2. Closes "E" pump discharge valve	At Panel 3F, takes "E" recirculation pump discharge valve control switch to close.	
3. 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.	

JPM 202.10

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
*5 Closes "E" pump suction valve	At Panel 3F, takes "E" recirculation pump suction valve control switch to close.	
*6. Dispatches Electrician.	Dispatches/directs Electrician to attempt to close the discharge valve IAW attachment 3200.02-01.	
<p>NOTE: Console Instructor (CI) will coordinate with/contact electrician directly.</p> <p>CUE: (CI) As electrician, acknowledge request to attempt to close the discharge valve and SET CLF VLV NSS20 to Option 3, "Close", when MONV R3754=0. Report that the valve is closed.</p> <p>NOTE: (CI) If requested after the valve is closed, report as the electrician that normal closing current was exhibited for the valve closure.</p>		
7. Determines loop configuration	Determines that the loop can either be placed in an "IDLE" or "ISOLATED" condition.	
<p>CUE: (Evaluator) As the US, direct the operator to place the loop in an "IDLE" configuration.</p>		
*8. Opens the suction valve	Re-opens the suction valve by taking its control switch to the OPEN position.	
9. Maintain reactor power below rod block setpoint	At Panels 3F and 4F, verifies below rod block on power operation curve.	
10. Maintains RPV level 155 to 165"	At Panel 5F/6F, ensures FWC system maintaining level.	

JPM 202.10

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
11. Monitor NIs for indication of power oscillation	At Panel 4F, monitors APRMs.	
12. 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.	
13. 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.	
14. 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) Acknowledge that no limitations exist and inform the candidate that another operator will maintain power at its present 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 the candidate that another operator will perform diagnosis		

COMPLETION TIME _____

TASK CONDITIONS:

Reactor power 100%, all systems operating properly.

INITIATING CUE:

You are now to respond to any further alarms that are received.



An Exelon/British Energy Company

**JOB PERFORMANCE
MEASURE
226.01**

Title: Manually Initiate Containment Spray			
Task: Manually Initiate Containment Spray			2260101002
KA# 226001 A4.01		RATING: RO - 3.5	SRO - 3.4
Validation Time	15 minutes	Time Critical	NO
Operator	Name		Social Security Number
Evaluator			
<u>DIRECTIONS TO TRAINEE:</u>			
<p>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.</p>			
<p><i>NOTE: Directions are only required once in a given JPM session.</i></p>			
Performance			
Perform	X	Simulate	
Replica	X	In-Plant	
Satisfactory		Un-Satisfactory	
Comments			
Signatures			
Evaluator's	Date	Operator's	Date

REFERENCE SECTION:

TASK CONDITIONS:

Reactor is in an ATWS condition
Torus pressure >12 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: (*)

3, 10,11

INITIATING CUES:

As the Unit Supervisor, I am directing you to manually initiate Containment Spray System I, placing one Containment Spray and ESW pump in operation IAW Support Procedure 29.

PERFORMANCE SECTION:

TASK CONDITIONS:

Reactor is in an ATWS condition
 Torus pressure >12 psig

INITIATING CUES:

As the Unit Supervisor, I am directing you to manually initiate Containment Spray System I, placing one Containment Spray and ESW pump in operation IAW Support Procedure 29.

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> 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.	
CUE: (Floor Instructor) 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>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<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.	
NOTE: Containment Spray pump 'B' may be started first. If 'B' is started first, it will trip. <u>IF 51A is started, THEN CLEAR CNS5; IF 51B is started, THEN CLEAR CNS7</u>		
7. Starts "A" 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	
NOTE: If Cont. Spray pump 'A' was 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.	
CUE: If the candidate reports the pump trip to the US, acknowledge the report and repeat the initiating cue.		
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

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
12. Monitors System parameters	Monitors Containment Spray System parameters for proper operation.	
13. Confirm RBCCW isolation valves are closed	On 1F/2F, Confirm the following RBCCW isolation valves are closed: <ul style="list-style-type: none"> • V-5-147 • V-5-148 • V-5-166 • V-5-167 	
14. Observes DW pressure	Maintains Containment pressure between 4-12 psig	
CUE: The Containment pressure may be too high for one containment spray pump to control it in the required range. The evaluator may stop the JPM when the pumps have been started and the RBCCW valves are closed.		

COMPLETION TIME _____

TASK CONDITIONS:

Reactor is in an ATWS condition
Torus pressure >12 psig

INITIATING CUES:

As the Unit Supervisor, I am directing you to manually initiate Containment Spray System I, placing one Containment Spray and ESW pump in operation IAW Support Procedure 29.



An Exelon/British Energy Company

JOB PERFORMANCE MEASURE

264.01

Title: Perform Normal Start of EDG from Control Room

Task: Manually Start the Emergency Diesel from the 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 TRAINEE:

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

X

Simulate

Replica

X

In-Plant

Satisfactory

Un-Satisfactory

Comments

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 at ~2800 KW and ~1000 KVARs.

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.

Load EDG to 2800 KW and adjust KVARs to 1000 KVARs

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.

Load EDG to 2800 KW and adjust KVARs to 1000 KVARs

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
1. 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. NOTE: that the EO may be sent to EDG building		
*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: <ul style="list-style-type: none"> • Achieves operating speed • Synchronizes with the bus • Load breaker closes 	

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> <u>SAT/UNSAT</u>
*11. Confirm EDG load	Confirm EDG load is 2750 KW. Place mode switch to TRANSFER and adjust load using the Governor Control switch to 2800 KW	
CUE: Inform candidate that 10 minutes have elapsed		
*12. Adjusts EDG KVAR load	Uses the VOLTAGE/KVAR Control switch to adjust KVAR loading to ~ +1000 KVAR lagging.	
13. Monitors EDG parameters.	Monitors EDG parameters.	
14. Dispatches EO to monitor EDG.	Dispatches EO to monitor EDG locally.	
CUE: All EDG parameters are in acceptable range.		

COMPLETION TIME_____

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.

Load EDG to 2800 KW and adjust KVARs to 1000 KVARs



An Exelon/British Energy Company

**JOB PERFORMANCE
MEASURE
261.01**

Title: Confirm Secondary Containment Initiations and Isolations (Alternate Path)

Task: Place the Standby Gas Treatment System in service manually

2610101003

KA# 290001 A2.03

RATING:

RO - 3.4

SRO - 3.6

Validation Time

18 minutes

Time Critical

NO

Name

Social Security Number

Operator

Evaluator

DIRECTIONS TO TRAINEE:

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

X

Simulate

Replica

X

In-Plant

Satisfactory

Un-Satisfactory

Comments

Signatures

Evaluator's

Date

Operator's

Date

REFERENCE SECTION:

TASK CONDITIONS:

During Spent Fuel operations on Reactor Building 119', Reactor Building ventilation monitor has alarmed (10F-1-f).
Secondary Containment Control has been entered

GENERAL TOOLS AND EQUIPMENT:

None

GENERAL REFERENCES:

2000-EMG-3200.11, Secondary Containment Control EOP, Support Procedure 49, Rev. 10

TASK STANDARD:

Standby Gas Treatment System I operating

CRITICAL ELEMENTS: (*)

2, 8

INITIATING CUES:

You have been directed to confirm all isolations and initiations pertaining to this alarm IAW Support Procedure 49.

PERFORMANCE SECTION:

TASK CONDITIONS:

During Spent Fuel operations on Reactor Building 119', Reactor Building ventilation monitor has alarmed (10F-1-f).
Secondary Containment Control has been entered

INITIATING CUES:

You have been directed to confirm all isolations and initiations pertaining to this alarm IAW Support Procedure 49.

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
1. Refer to Support Procedure 49	Support Procedure 49 obtained	
*2. Confirms SGTS fans have started	Verify Reactor Building HVAC has tripped and recognize SGTS has failed to start. Places switches for EF 1-8 & EF 1-9 to HAND on panel 11R	
3. Verify RBHVAC supply valves closed	Verifies V-28-1&2, 3&4, 5&6, 7&8, 9&10, 11&12, 13&14, 15&16, 36&37 and 38&39 are closed on panel 11R	
4. Verify reactor building isolation valves closed	Verifies V-28-21&22 are closed on panel 11R	
5. Verify RBHVAC supply fans are tripped	Verifies SF 1-12, 1-13, 1-14 are not running on panel 11R	
6. Verify operating RBHVAC exhaust fan has tripped .	Verifies EF 1-5 or 1-6 has tripped on panel 11R	

JPM 261.01

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL</u> SAT/UNSAT
7. Verify Drywell supply valves close	Verifies V-28-42 & 43 are closed on panel 11R	
CUE: After approximately 2 minutes, flow will be established, one fan will trip and the operator will then perform the following:		
*8. Confirms crosstie closed	Place switch for V-28-48 to close, on panel 11R	
9. Verify non-selected fan is OFF	Verifies non-selected fan is not running and places fan control switch to OFF on panel 11R	
10. Verify selected fan/train inlet and outlet valves close and running train orifice valve closes	Verify selected fan/train inlet and outlet valves close and running train orifice valve closes on panel 11R	

COMPLETION TIME _____

TASK CONDITIONS:

During Spent Fuel operations on Reactor Building 119', Reactor Building ventilation monitor has alarmed (10F-1-f).
Secondary Containment Control has been entered

INITIATING CUES:

You have been directed to confirm all isolations and initiations pertaining to this alarm IAW Support Procedure 49.

Title: Transfer Control to LSP 1A2.			
Task: Operate the Main Breaker to the Unit Substation 1A2 from LSP 1A2.			3080401415 3080404408
KA# 295016 AA1.07		RATING: RO - 4.2	SRO - 4.3
Validation Time	10 Minutes	Time Critical	No
Name			
Social Security Number			
Operator			
Evaluator			
<u>DIRECTIONS TO TRAINEE:</u>			
<p>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.</p> <p>Peer checking will not be provided during the performance of required tasks.</p> <p><i>NOTE: Directions are only required once in a given JPM session.</i></p>			
Performance			
Perform		Simulate	X
Replica		In-Plant	X
GRADE: Sat / Unsat		MODE: Evaluation / Training	
Comments			
Signatures			
Evaluator's	Date	Operator's	Date

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 _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL SAT/UNSAT</u>
1. Obtain controlled copy of procedure.	Obtain controlled copy of procedure 346.	
2. Verifies all prerequisites are met.	Verifies all prerequisites are met.	
CUE: Upon request, the evaluator will provide the following information: White "125 VDC ON" light lit on LSP-1A2.		
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: Communications are established.		
*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 RBCCW 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: Red ON light lit for 'A' 460V SWGR Room fans after 2 secs. 1-1 RBCCW pump red ON light lit. 'A' shutdown cooling pump green OFF light lit. 'A' CRD pump red ON light lit.		
7. Confirms closed main breaker 1A2M.	Confirms 1A2M shut on panel LSP-1A2.	
CUE: Red CLOSED light lit for 1A2M.		

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.

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 Security Number

Operator

Evaluator

DIRECTIONS TO TRAINEE:

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

Simulate

X

Replica

In-Plant

X

GRADE: Sat / Unsat

**MODE: Evaluation /
Training**

Comments

Signatures

Evaluator's

Date

Operator's

Date

Task Conditions:

Torus level is 173"
Drywell pressure 53 psig
Hydrogen concentration less than 1.5 %
CHRRMS indicates 1×10^3
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 Unit Supervisor directs you to prepare the Torus to be vented through the hardened vent per Support Procedure 35.

PERFORMANCE SECTION:

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL SAT/ UNSAT</u>
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 condition sheet		
*2. Confirms N ₂ purge valve, V-23-195, closed	Confirms closed N ₂ 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 N ₂ purge inlet valve, V-23-357	Unlocks N ₂ 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 vent through the hardened vent	Uses radio or page system to inform US the hardened vent path is lined up	

COMPLETION TIME _____

Task Conditions:

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

Initiating Cues:

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



An Exelon/British Energy Company

**JOB PERFORMANCE
MEASURE
279.06**

Title: Manually Scram the Reactor by Venting the Scram Air Header																			
Task: Manually Scram the Reactor by Venting the Scram Air Header			2790501401 2790504001																
KA# 212000 A4.11	RATING: RO - 3.7		SRO - 3.7																
Validation Time	12 minutes	Time Critical	NO																
<table border="1"> <thead> <tr> <th></th> <th>Name</th> <th>Social Security Number</th> </tr> </thead> <tbody> <tr> <td>Operator</td> <td></td> <td></td> </tr> <tr> <td>Evaluator</td> <td></td> <td></td> </tr> </tbody> </table>					Name	Social Security Number	Operator			Evaluator									
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<u>DIRECTIONS TO TRAINEE:</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.																			
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Evaluator's	Date	Operator's	Date																

TASK CONDITIONS:

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

INITIATING CUES:

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

START TIME _____

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARD</u>	<u>INITIAL SAT/ UNSAT</u>
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: <u>Control Room informs operator that all rods are inserted or no longer moving in.</u>		
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		

COMPLETION TIME _____

TASK CONDITIONS:

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

INITIATING CUES:

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