Facility: Oyster Creek NRC Date of Examination: Week of April 19, 2004
Exam Level (circle one): RO / SRO(I) / SRO(U) Operating Test No.: 2004NRC

Control Room Systems (8 for RO, 7 for SRO-I, 2 or 3 for SRO-U)

System / JPM Title	Type Code*	Safety Function
a. ~~Standby Liquid Control (SLC) / Initiate SLC (Alternate Path, fail pump or valve) [PRA related]~~ Delete Overlap with Scenario	211.01 D, S, **A**	1
b. ADS / Close a stuck open EMRV (Alternate Path – fail first step)	218.01 D, S, **A**	3
c. Recirculation system / Respond to a tripped recirc pump with 5 operating (Alternate Path – Discharge Valve will not close) Last NRC	202.10 D, S, **A**	4
d. Primary Containment / Bypass Isolation Interlock for Torus Vent valves and prepare to vent the Torus	223.01 D, S	5
e. AC Electrical / Transfer Bus 1A from Auxiliary Transformer to Start-up Transformer	262.07 D, S, L	6
f. Control Room Ventilation / Purge Control Room using Control Room HVAC System	288.02 D, S	~~8~~ 9 Plant Vent
g. Standby Gas Treatment system (SGTS) / Shutdown SGTS after Auto Initiation (Alternate Path – normal fan does not start)	261.03 N, S, **A**	9
h. For RO - Recirculation system / Conduct Recirc Pump Trip Logic functional test	202.11 D, S	7 ? 4

In-Plant Systems (3 for RO, 3 for SRO-I, 3 or 2 for SRO-U)

a. Fire Water system / Line-up Fire Water to the Core Spray System [PRA related]	286.04 M,R, L	2 Emergency
b. CRD/Initiate the Remote Shutdown Panel on Control Room Evacuation	308.01 D, R, L	~~2~~ 1 Emergency
c. TBCCW/Line-up TBCCW during SBO	274.01 D, R, L	8 Abnormal

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

AmerGen
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JOB PERFORMANCE MEASURE 218.01

Title: Close a stuck open EMRV			
Task: Diagnose and recover from a stuck open EMRV			2180401001
KA# 218000 A4.01	RATING:	RO - 4.4	SRO - 4.4
Validation Time	13 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	
Date	

REFERENCE SECTION:

TASK CONDITIONS:

Reactor power 100%, all system operating properly.

GENERAL TOOLS AND EQUIPMENT:

None

GENERAL REFERENCES:

Procedure, ABN-40, Stuck Open EMRV, Rev. 1

TASK STANDARD:

"A" EMRV Normal/Disable switch in "disable" , valve closed.

CRITICAL ELEMENTS: (*)

6

PERFORMANCE SECTION:

TASK CONDITIONS:

Reactor Power 100%, all systems operating properly.

INITIATING CUES:

Your task will be associated with ~~ADS/EMRV System operation~~; you are expected to respond to any further alarms that are received.

START TIME ___

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
CI: When directed by the Floor Instructor, activate MAL-NSS025A, 100%		
1. Obtain controlled copy of procedure	Refers to RAP B-3-g and B-4-g Verifies "A" EMRV is open.	
2. Obtains controlled copy of ABN 40 as directed by RAP	Obtains ABN 40	
3. Places Feed water Control in manual.	Depresses MANUAL button on Master Level Controller & verify red ~~light~~ manual LED lit	
4. Attempts to close "A" EMRV using ADS switch	On 1F/2F, places "A" Auto Depress Valve switch in "Off" observes that valve is still open.	
5. Cycles switch off to Manual to off 3 times.	Cycles "A" EMRV control switch to Manual to OFF 3 times. Observes valve is still open.	
CUE: (CI) Upon request discharge temperature is 300 ºF. Once the Disable Alarm comes in DELETE MAL-NSS025A		
*6. Places "A" EMRV Normal/Disable switch in "Disable"	Places "A" Normal/Disable switch in "Disable" at rear of 1F/2F Observes that "A" EMRV is closed.	
CUE: (CI) Upon request discharge temperature is 290 ºF and decreasing		

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
6. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): 100% Reactor Power

Setup:

1. initialize to any 100% power IC
2. RUN file SIMPROB.CAE

Malfunctions:

None

Remotes:

None

Overrides:

SWI-ADS001C, ON

Computer Aided Exercises:

SIMPROB.CAE

TASK CONDITIONS:

Reactor Power 100%

All systems operating satisfactory

INITIATING CUES:

Your task will be associated with ADS/EMRV System operation; you are expected to respond to any further alarms that are received.

AmerGen SM
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE 211.01

Title: Manual Initiation of the Standby Liquid Control System			
Task: Inject liquid poison into the reactor vessel using the Liquid Poison System			2110501401
KA# 211000 A4.02	RATING:	RO - 4.2	SRO - 4.2
Validation Time	8 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
Date

REFERENCE SECTION:

TASK CONDITIONS:

A failure to fully scram from 100% Rx power has occurred
Reactor power is ~45%
All recirc pumps have tripped
All methods to insert control rods have failed
Pressure is being maintained 850-1000 psig using Main Turbine
Power oscillations are occurring

GENERAL TOOLS AND EQUIPMENT:

Key for SLC Keylock switch [PA2235]

GENERAL REFERENCES:

EMG-3200.01B, RPV Control with ATWS, Rev. 12
Support Procedure 22, Initiating the Liquid Poison System,

TASK STANDARD:

Liquid poison entering reactor

CRITICAL ELEMENTS: (*)

4

INITIATING CUES:

As Unit Supervisor, I am directing you to inject liquid poison into the reactor with Standby Liquid Control System 1, ~~using Support Procedure 22~~.

PERFORMANCE SECTION:

START TIME _____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtains controlled copy of procedure	Support Procedure 22 obtained	
NOTE: When the keylock switch is placed in Sys 1 in the following step, pump NP02A will fail to start. [CLF PMP SLC1, shaft break, opt. 1]		
2. Starts poison pump NP02A	Rotates STANDBY LIQUID CONTROL keylock switch on 4F to Fire Sys 1 position	
3. Verify flow to reactor	Verifies the following for system **#1**: . "PUMP ON" light is lit (Panel 4F) . Squib for Sys 1 light is lit (Panel 4F) . Pump Disch Press > Reactor Pressure (Panel 4F) (pressure will not develop) . "FLOW ON" alarm **NOT** lit (G-1-b) . "SQUIB VALVE OPEN" alarm lit (G-2-b)	
*4. Responds to failure of pump NP02A to start	Places STANDBY LIQUID CONTROL keylock switch on 4F to Fire Sys 2 position	
5. Verify flow to reactor	Verifies the following for system **#2**: . "PUMP ON" light is lit (Panel 4F) (System 1 light goes out & System 2 light goes on) . Squib for Sys 2 light is lit (Panel 4F) . Pump Disch Press > Reactor Pressure (Panel 4F) . "FLOW ON" alarm lit (G-1-b) . "SQUIB VALVE OPEN" alarm lit (G-2-b)	

NOT critical *

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): IC-104

Includes the following:

Init to IC 94
Not necessary to insert SIMPROB
BYPASS Lo-Lo MSIV Closure using jumpers (IAW SP-16) [V-6-395 does not have to be byp
Insert File JPM211

Notes:

- file will freeze the simulator after 140 seconds
- go back to run
- reduce recirc flow to minimum (11.4), then trip all the recirc pumps
- place the mode switch to SHUTDOWN
- simulator is now ready for jpm use

Malfunctions: IC preset

Component Level Failures: IC Preset

CLF PMP SLC1, shaft break, Option 1 preinserted (Fails `A' SLC Pump)

Instructor Overrides: IC preset

Local Operator Actions: IC preset

Computer Aided Exercises: None

TASK CONDITIONS:

A failure to fully scram from 100% Rx power has occurred
Reactor power is ~45%
All recirc pumps have tripped
All methods to insert control rods have failed
Pressure is being maintained 850-1000 psig using Main Turbine
Power oscillations are occurring

INITIATING CUES:

As Unit Supervisor, I am directing you to inject liquid poison into the reactor with Standby Liquid Control System 1 using Support Procedure 22.

AmerGen SM
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**	
Grade: Sat/ Unsat		**Mode: Evaluation/ Training**	

Comments
Date

REFERENCE SECTION:

TASK CONDITIONS:

Reactor power 100%, all systems operating properly.

GENERAL TOOLS AND EQUIPMENT:

None

GENERAL REFERENCES:

ABN-02, Recirculation System Failures, Rev. 0

TASK STANDARD:

Four pumps running in automatic, the other loop idle.

CRITICAL ELEMENTS: (*)

5,6,8

PERFORMANCE SECTION:

TASK CONDITIONS:

Reactor power 100%, all system operating properly.

INITIATING CUE:

You are assigned as RO at Controls

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

START TIME _____ What Alarm or entry Cond is Must Operator Should respond to ?

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
CI: PREINSERT CLF VLV NSS020 option 6 conditional on R3754.LE.0.2 if not already done. **INSERT MALF RFC001E when instructed by the FI.**		
1. Confirms discharge bypass valve for "E" loop open	At Panel 3F, confirms discharge bypass valve for "E" loop open.	
CI: MONV R3754 to verify that the discharge valve mechanically seizes at approx. 0.2. IF the conditional fails to take then go ahead and seize the valve before it fully closes using CLF VLV NSS020, Mech Siezure.		
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-2, Section 3.1.2 obtained.	
4 Determines Discharge Valve will not close	At Panel 3F, Determines Discharge Valve will not close.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
***5 Closes "E" pump suction valve**	At Panel 3F, takes "E" recirculation pump suction valve control switch to close.	
CUE: (FI) Acknowledge as the US that a plant shutdown is required.		
***6. Dispatches Electrician.**	Dispatches/directs Electrician to attempt to close the discharge valve IAW attachment ABN-2-1.	
CUE: (CI) As electrician, acknowledge request to attempt to close the discharge valve and SET CLF VLV NSS020 to, "Close", when MONV R3754=0. Report that the valve is closed. **NOTE: (CI) If requested after the valve is closed, report as the electrician that normal closing current was exhibited for the valve closure.**		
7. Determines loop configuration	Determines that the loop can either be placed in an "IDLE" or "ISOLATED" condition.	
CUE:(FI) As US, direct operator to place the loop in an "IDLE" configuration.		
***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.	
11. Monitor NIs for indication of power oscillation	At Panel 4F, monitors APRMs.	
12. 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.	

NOTE: For SRO & Applicants – This is critical task to verify TS reqts

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
13. 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, 3.10.A. NOTE: For SRO	
14. 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.	
CUE: (FI) Acknowledge that no limitations exist and that another operator will maintain power at its present level.		
15. Monitors for Fuel Element Failure.	Monitors Off-Gas, MSL Radiation & Rx Coolant Activity.	
16. Notify system dispatcher of power limitations	(No notifications because no limitations)	
17. Notifies Chemistry if power changed by 289.5 MWth.	Notifies Chemistry if power changed by 289.5 MWth.	
Notifies designated Rx engineer	Notifies Rx engineer.	
CUE: (FI) Another operator will perform diagnosis		
18. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME _____

SIMULATOR SETUP

Initial Condition(s): **IC-65, 100% Reactor Power**

1. Initialize to IC 65 and perform switch check
2. Enter file SIMPROB
3. Execute VLV-NSS020, Mech Siezure. conditional on R3754 .LE. 0.2.

Malfunctions:

MAL-RFC001E Mech Siezure

Component Level Failures:

VLV-NSS020, Mech Siezure. conditional on R3754.LE.0.2

Command Files:

SIMPROB

TASK CONDITIONS:

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.

AmerGen SM
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE
274.01

Title: Line up the TBCCW Heat Exchangers to Service Water Following a Station Blackout			
Task: Perform Lineups of the TBCCW system			2740104001
KA#	RATING:		
Validation Time	10 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	
Date	

TASK CONDITIONS:

- Reactor Scram
- Loss of all Off-site and On-site AC Electrical Power.
- Breakers US1T and US2T are racked in.

GENERAL TOOLS AND EQUIPMENT:

MB1 key
Radio
Flashlight

GENERAL REFERENCES:

Station Procedure, ABN-37, STATION BLACKOUT, Rev 0

TASK STANDARD:

TBCCW valves lined up per ABN-37, Attachment -3, step 4.0

CRITICAL ELEMENTS: (*)

2, 3, 4 & 5

INITIATING CUES:

A Station Blackout has occurred, (total loss of off-site and on-site AC electrical power). The SM/US has directed you to line up TBCCW valves for TBCCW heat exchanger 1-1 per ABN 3200.37, Attachment -3, Step 4.0.

START TIME ___

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtain controlled copy of procedure.	Obtain controlled copy of ~~ABN-37~~ Attachment 3. ABN-37-3	
*2. Close V-3-58.	Closes V-3-58 in the Turbine Bldg. basement.	
CUE: V-3-58 closed.		
*3. Open V-3-59.	Opens V-3-59 in the Turbine Bldg. basement.	
CUE: V-3-59 open.		
*4. Close V-3-76 and V-3-77.	Closes V-3-76 and V-3-77 in the Turbine Bldg. basement.	
CUE: V-3-76 and V-3-77 are closed.		
*5. Open V-3-76 one turn open.	Throttles V-3-76 to a position not fully closed in the Turbine Bldg. basement.	
CUE: V-3-76 one turn open.		
6. Confirm V-3-74 is fully open.	Opens V-3-74 in the Turbine Bldg. basement.	
CUE: V-3-74 is full open.		
7. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

TASK CONDITIONS:

- Reactor Scram
- Loss of all Off-site and On-site AC Electrical Power.
- Breakers US1T and US2T are racked in.

INITIATING CUES:

A Station Blackout has occurred, (total loss of off-site and on-site AC electrical power). The SM/US has directed you to line up TBCCW valves for TBCCW heat exchanger 1-1 per ABN-37, Attachment 3, Step 4.0.

AmerGen
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JOB PERFORMANCE MEASURE

223.01

Title: **Bypass Isolation Interlock for Torus Vent Valves**			
Task: Bypass Isolation Interlock on Drywell and Torus Vent and Purge Valve			2230501501
KA# 295024 EA1.14	RATING:	RO - 3.4	SRO - 3.5
Validation Time 13 min	Alternate Path No	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**	
Grade: Sat/ Unsat		**Mode: Evaluation/ Training**	

Comments

Date:	

REFERENCE SECTION:

TASK CONDITIONS:

Reactor scrammed due to a LOCA
CHRRMS reading greater than 20,000 R/HR
All automatic actions due to LOCA have occurred

GENERAL TOOLS AND EQUIPMENT:

EOP BYPASS PLUGS

GENERAL REFERENCES:

EMG-3200.02, Primary Containment Control, Rev. 16
Support Procedure 32

TASK STANDARD:

Isolation for V-28-18 and V-28-47 have been bypassed

CRITICAL ELEMENTS: (*)

11, 12, 13, 14

PERFORMANCE SECTION:

TASK CONDITIONS:
Reactor scrammed due to a LOCA
CHRRMS reading greater than 20,000 R/HR
All automatic actions due to LOCA have occurred

INITIATING CUES:
As the US I am directing you to bypass Torus Vent Isolation logic for V-28-18 and V-28-47 using Support Procedure 32. Inform me when ready to vent.

START TIME_____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/ UNSAT
1 Obtain controlled copy of procedure	Support Procedure 32 obtained	
2. Verifies prerequisites	Verifies prerequisites	
CUE: Prerequisites are met		
3. Verifies Torus level is below 348 in.	At Panel 1F/2F, verifies Torus water level is below 348 in.	
4. Evacuates personnel from the Reactor Building	- Sound the Reactor Building Evacuation Alarm - Announces: "Primary Containment Venting will commence in approximately 5 minutes. All personnel evacuate the Reactor Building immediately."	
5. Starts SGTS	At Panel 11R, selects a SGTS fan and places it control switch in HAND.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/ UNSAT
6. Closes V-28-48	At Panel 11R, places the SGTS crosstie valve V-28-48 in the CLOSED position	
7. Confirms Reactor Bldg. Supply Fans secured	At Panel 11R, confirms the Reactor Bldg. Supply fans are secured	
8. Confirms Reactor Bldg. Exhaust Fans secured	At Panel 11R, confirms the Reactor Bldg. Exhaust fans are secured	
9. Confirm that the "Reactor Mode Selector Switch" is NOT in the "Run" position	Verifies 4F "Reactor Mode Selector Switch" is **NOT** in "Run"	
10.Obtains bypass plug	Obtains one(1) bypass plug from the EOP station in the control room.	
***11 Inserts bypass plug in 10XF.**	Inserts bypass plug in 10XF: - Opens EOP BYPASS PLUGS panel (rear of 10XF) - Inserts bypass plug in position BP5.	
***12 Inserts bypass plug in 11R.**	Inserts bypass plug in 11R: - Opens EOP BYPASS PLUGS panel (rear of 11R) - Removes bypass plug in position BP4 - Inserts bypass plug in position BP1.	
***13 Places the TORUS/ DW ISOLATION VALVE BYPASS keylock switch in the TORUS position**	At Panel 11F, places the TORUS/DRYWELL ISOLATION VALVE BYPASS PERMISSIVE keylock switch in the TORUS position.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/ UNSAT
***14 Places the DW/TORUS VENT & PURGE ISOL HI RAD BYPASS keylock switch channel 1 and 2 in BYPASS**	At Panel 11F , places the DRYWELL/TORUS VENT & PURGE ISOLATION HI RAD BYP Keylock switches in BYPASS	
15. Informs the US, Torus is ready to vent	Tells the US (Evaluator) that the torus is ready to vent via the torus vent valves.	
CUE: Acknowledge as the US when informed that the Torus is ready for venting.		
6. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): **IC-65, 100% Rx PWR**

Setup

1. Digital Feed and Recirc Flow control
2. Set Master Recirc flow controller to 44.44 cycles
3. Set Feedwater master controller to 163.5 inches, and in "Auto"
   Place the "A/B/C" MFRV and "A/C LFRV in "AUTO"
2. Initialize to IC 65 and perform switch check
3. Run SIMPROB.cae
4. Go to "RUN" and execute MAL-NSS004A, 100%, ACT
5. Run JPM22301.CAE
6. Take mode switch to shutdown
7. Open all EMRV's
8. Turn on Fuel Zones
9. "FREEZE" simulator when reactor pressure decreases to less than 130 psig

Malfunctions:

MAL-NSS004A, 100%

Overrides:

SWI-NSS066V, ON
SWI-NSS068V, ON

Remotes:

Computer Aided Exercises:

SIMPROB.CAE
JPM22301.CAE

TASK CONDITIONS:

Reactor scrammed due to a LOCA
CHRRMS reading greater than 20,000 R/HR
All automatic actions due to LOCA have occurred

INITIATING CUES:

As the US I am directing you to bypass Torus Vent Isolation logic for V-28-18 and V-28-47 using Support Procedure 32. Inform me when ready to vent.

AmerGen
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE 262.07

Title: **Manual Transfer of the 4160 VAC Bus 1A from the Auxiliary Transformer to the Startup Transformer**			
Task: Shift Station Loads between Aux. and S/U Transformers			2620101002
KA# 262001 A4.04	RATING:	RO - 3.6	SRO - 3.7
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	**X**	**Simulate**	
Replica	**X**	**In-Plant**	
Grade: Sat/ Unsat		**Mode: Evaluation/ Training**	

Comments
Date

REFERENCE SECTION:

TASK CONDITIONS:

Plant is at 100% Power
4160V 1A main breaker needs to be removed from service

GENERAL TOOLS AND EQUIPMENT:

None

GENERAL REFERENCES:

Procedure 337, 4160 Volt Electrical System, Section 3.4, Rev. 57

TASK STANDARD:

1A 4160-volt bus is energized from the startup transformer

CRITICAL ELEMENTS: (*)

7,9

PERFORMANCE SECTION:

TASK CONDITIONS:

Plant is at 100% Power
4160V 1A main breaker needs to be removed from service

INITIATING CUES:

As the US I am directing you to transfer 4160-volt bus 1A to the startup transformer in accordance with Ops Procedure 337.

START TIME ___

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtains controlled copy of procedure	Procedure 337, section 3.4 obtained	
2. Verifies all prerequisites	Verifies prereqs met	
CUE:(FI) As requested, individual prerequisites not verifiable in the Control Room can be verified met, Bank 5 voltage regulator is in service.		
3. Reviews all applicable precautions and limitations	Reviews all applicable precautions and limitations	
4. Verifies 4160 volt main breaker 1A control switch is in the "Closed" position	Verifies on panel 8F/9F red closed light is energized with red target for breaker 1A.	
5. Verifies that SU Breaker S1A racked in and open.	Verifies that the S1A breaker "OPEN" light and "BREAKER UP" light located on panel 8F/9F are energized.	
6. Verifies that the 34.5 kV breaker feed to bank No. 5 is in the closed position.	Verifies red light for Bank No. 5 feed on 12F is energized.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
***7. Puts synchroscope key into synchronizing switch for S1A on 8F/9F and turns on.**	At panel 8F/9F places key in S1A synchronizing switch and turns to "On"	
8. Verifies power is synchronized across S1A	At Panel 8F/9F, verifies synchroscope is stationary and pointing at 12 o'clock with both synch lights out.	
***9. Closes S1A**	Place S1A control switch on 8F/9F to "Close" position. Checks the breaker closed light is energized and breaker 1A opens.	
10. Turn synchronizing switch off and remove key from 8F/9F	On Panel 8F/9F, Places synchronizing switch in Off and removes key	
11. Matches main breaker targets	Operates main breaker 1A to the trip position to match mechanical indication	
12. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): **IC-65**

SET-UP ACTIONS:

1. Digital Feed and Recirc Flow control
   - Set Master Recirc flow controller to 44.44 cycles
   - Set Feedwater master controller to 163.5 inches, and in "Auto"
   - Place the "A/B/C" MFRV and "A/C LFRV in "AUTO"
2. Init to IC 65 and perform switch check
3. File SIMPROB
4. "FREEZE" simulator

Malfunctions:

Component Level Failures:

Instructor Overrides:

Local Operator Actions:

Monitored Variables:

Command Files:
SIMPROB

Computer Aided Exercises:

Remote Control Assignments:

TASK CONDITIONS:

Plant is 100% Power
4160V 1A main breaker needs to be removed from service

INITIATING CUES:

As the US I am directing you to transfer 4160-volt bus 1A to the startup transformer in accordance with Ops Procedure 337.

AmerGen
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE 202.11

Title: **CONDUCT RECIRC PUMP TRIP LOGIC SYS FUNCTIONAL TEST**			
Task: CONDUCT RECIRC PUMP TRIP LOGIC SYS FUNCTIONAL TEST			2020201004
KA#202001 K1.27	RATING:	RO - 4.1	SRO – 4.3
Validation Time: 20 min	Faulted: NO	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.

NOTE: Directions are only required once in a given JPM session.

Performance			
Perform	**X**	**Simulate**	
Replica	**X**	**In-Plant**	
Graded: SAT/UNSAT		**Mode: Evaluation/Training**	

Comments:

Date:	

REFERENCE SECTION:

TASK CONDITIONS:

- Plant is at 100% power
- Division I test was complete on the last shift.
- All system operable

GENERAL TOOLS AND EQUIPMENT:

Key for Division Normal - Test Keylock switch
Stopwatch – Student will be expected to record control number and calibration date.

GENERAL REFERENCES:

Recirculation Pumps Trip Circuitry Test Proc. 603.4.001, Rev. 9

TASK STANDARD:

Division II Surveillance completed.

CRITICAL ELEMENTS: (*)

4, 5, 6, 7, 9, 10, 11, 13, 14, 15

PERFORMANCE SECTION:

TASK CONDITIONS:

- Plant is at 100% power
- All system operable

INITIATING CUES:

- As US, I am directing you to complete the Recirculation Pumps Trip Circuitry Test Proc. 603.4.001 on Division II.

START TIME_____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtain controlled copy of procedure	Obtains controlled copy of Proc. 603.4.001	
2. Verifies all prerequisites are met	Verifies prerequisites met	
3. Reviews all applicable precautions and limitations	Reviews precautions and limitations	
***4. Places Division II in test**	Places Division 2 Normal - Test Keylock switch to the test position. - Verifies TEST-II alarm (E-3-b) annunciates.	
***5. Tests Channel A**	Momentarily depresses CHAN C TRIP pushbutton switch on 3F - Verifies ACTUATE C-II alarm (E-1-b) annunciates.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
***6. Tests Relay 6K12AA**	Simultaneously momentarily depress CHAN D TRIP pushbutton switch on 3F and start stopwatch. - Verifies ACTUATE D-II alarm (E-2-b) annunciates. - Verifies the Division II lamps for A, B, & E recirculation pumps light instantly.	
***7. Times trip**	When Division II lamps for Recirc Pumps C & D light then stop the stopwatch and record As-Found value.	
8.	If the As-Found value is not 10.5 +/- 0.5 seconds then adjust the relay 6K12AA.	
Relay adjustment will not be necessary.		
***9. Resets Channel C**	Momentarily depresses CHAN C RESET pushbutton switch on 3F - Verifies ACTUATE C-II alarm (E-1-b) has cleared. - Verifies the Division II lamps for all five recirculation pumps are NOT lit.	
***10. Tests Relay 6K10AA**	Simultaneously momentarily depress CHAN C TRIP pushbutton switch on 3F and start stopwatch. - Verifies ACTUATE C-II alarm (E-1-b) annunciates. - Verifies the Division II lamps for A, B, & E recirculation pumps light instantly.	
***11. Times trip**	When Division II lamps for Recirc Pumps C & D light then stop the stopwatch and record As-Found value.	
12.	If the As-Found value is not 10.5 +/- 0.5 seconds then adjust the relay 6K10AA.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
Relay adjustment will not be necessary.		
*13. **Resets Channel C**	Momentarily depresses CHAN C RESET pushbutton switch on 3F - Verifies ACTUATE C-II alarm (E-1-b) has cleared. - Verifies the Division II lamps for all five recirculation pumps are NOT lit.	
*14. **Resets Channel B**	Momentarily depresses CHAN D RESET pushbutton switch on 3F - Verifies ACTUATE D-II alarm (E-2-b) has cleared.	
*15. **Places Division II in Normal**	Places Division II Normal - Test Keylock switch to the Normal position. - Verifies TEST II alarm (E-3-b) has cleared.	
16. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): **100% Power**

Malfunctions:
NONE

Computer Aided Exercises:
SIMPROB.CAE

TASK CONDITIONS:

- Plant is at 100% power
- All system operable

INITIATING CUES:

- As US, I am directing you to perform Recirculation Pumps Trip Circuitry Test Proc. 603.4.001

AmerGen SM
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE 288.02

Title: Purge Control Room Using Control Room HVAC System			
Task: Purge Control Room Using Control Room HVAC System			2880101403
KA# 2900003 A2.04	RATING: RO - 3.1		SRO - 3.3
Validation Time 15 min	Alternate Path - No	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**	
Grade: Sat/ Unsat		**Mode: Evaluation/ Training**	

Comments

Date:	

REFERENCE SECTION:

TASK CONDITIONS:

- Reactor Power 100%
- "B" Control Room HVAC is tagged out of service
- A fire has been recently extinguished in the Control Room, fumes are still present
- All other plant systems are operating normally
- Immediate actions of ABN-29 are complete.

GENERAL TOOLS AND EQUIPMENT:

None

GENERAL REFERENCES:

ABN-29, Response to Fire: Rev 0

TASK STANDARD:

One complete purge has been performed and "B" 460 volt switchgear ventilation has been restarted.

CRITICAL ELEMENTS: (*)

2,3,4,5,7,8

PERFORMANCE SECTION:

TASK CONDITIONS:

- Reactor Power 100%
- "B" Control Room HVAC is tagged out of service
- A fire has been recently extinguished in the Control Room, fumes are still present
- All other plant systems are operating normally
- Immediate actions of ABN-29 are complete.

INITIATING CUES:

Control Room fire has been extinguished, with residual smoke existing., the Unit Supervisor has directed you to purge the Control Room and restore normal ventilation to the Control Room using HVAC System "A" per ABN-29

START TIME_____

PERFORMANCE CHECKLIST		STANDARD	INITIAL SAT/UN SAT
1.	Obtains controlled copy of procedure	Procedure ABN-29, Section 3.4.8	
*2.	Shuts down "B" 460 volt switchgear room ventilation system	Places "B" 460V SWGR Room Supply and Exhaust Fans, SF-1-21 and EF-1-21, in the OFF position.	

PERFORMANCE CHECKLIST		STANDARD	INITIAL SAT/UN SAT
*3.	Lines up the Control Room HVAC system for purging	Places the "A Control Rm HVAC Damper Control" switch in "Pur" on panel 11R	
*4.	Places the Normal/Reset/Bypass Switch in the "Bypass" position	Places "HVAC A Bypass Switch" on 11R in "Byp"	
*5.	Start CR HVAC A system fan	For HVAC "A", places "System Initiation" switch in "on" on panel 11R	
6.	Monitor "B" 460V Switchgear Room Temperature	In the "B" 460V switchgear room, have the EO monitor temperature and notify if it approaches 104° F.	
CUE:	(Console Instructor) EO reports 460V Switchgear Temperature 85.7°F and steady.		
	CUE: (Floor Instructor) Once EO reports back with temperature, inform operator that 15 minutes have passed & smoke has cleared.		
CI:	**When directed by the Floor Instructor, remove malfunction FPS3A,22**		
*7.	Reset fire alarms	Resets fire detection alarms on Control Module 6	
*8.	Reset Control Room HVAC A	On Panel 11R, take the Bypass switch to "Reset" and then to "Norm"	
9.	Return CR HVAC to "Nor"	Places Control RM HVAC A Damper Control switch in "Nor" on 11R	
11. Used procedure properly.		Used procedure properly according to its level of usage.	

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): **100% Power IC**

Turn off "B" Control Room HVAC
Tag the "B" Control Room HVAC out of service

Malfunctions:

FPS3A,22 for Panel A, Zone 1 alarm on Master Fire alarm panel in the Control Room

(NOTE: Remove Malfunction(s) when directed by the Evaluator)

Component Level Failures:

'nstructor Overrides:

SWI-TBS24A to "fail off"
SWI-TBS28A to "fail off"

Computer Aided Exercises:
Simprob. CAE

TASK CONDITIONS:

- Reactor Power 100%
- "B" Control Room HVAC is tagged out of service
- A fire has been recently extinguished in the Control Room, fumes are still present
- All other plant systems are operating normally
- Immediate actions of ABN-29 are complete.

INITIATING CUES:

Control Room fire has been extinguished, with residual smoke existing., the US has directed you to purge the Control Room and restore normal ventilation to the Control Room using HVAC System "A" per ABN-29, section 3.4.8

8. **When** the Control Room fire is extinguished,

then PERFORM the following:

NOTE: Shutting down 480V switchgear room ventilation will prevent smoke and fumes from being sucked in when the Control Room is purged. Ensure Standing Order 51 is adhered to.

A. **SHUT DOWN** the B 480V Switchgear Room ventilation system manually by placing the control switch for SF 1-21 and EF 1-21 in the OFF position on Panel 11R. [ ]

NOTE: Either Control Room HVAC System B or A may be used. Direction for System A is shown in parentheses.

B. **PLACE** CONT RM HVAC "B" ("A") DAMPER CONTROL switch on Panel 9XR (11R) in PUR. [ ]

C. **PLACE** HVAC "B" ("A") BYPASS switch in BYP. [ ]

D. **START** the "B" ("A") Control Room HVAC system. [ ]

E. **MONITOR** B 480V switchgear room temperature. If temperature approaches 104°F, it may be necessary to secure Control Room HVAC and restart B 480V Switchgear Room Ventilation, per step 8.I below. [ ]

NOTE: Venting the Control Room for 15 minutes will allow for approximately 3 changes of air, which will normally provide adequate ventilation.

F. **When** smoke is cleared from the Control Room,

then PERFORM the following:

1) **RESET** Fire Detection Alarms on Control Module 6 and FAMP. [ ]

AmerGen
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE 308.01

Title: Operate the Remote Shutdown Panel on Control Room Evacuation.			
Setup the Remote Shutdown Panel for operation upon Control Room Evacuation.			3080401401
KA# 295016 AA1.07	RATING:	RO - 4.2	SRO - 4.3
Validation Time	10 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	
Date	

Replaced this JPM during validation week per SRO's observed exam JPM validation

TASK CONDITIONS:

T = 0 minutes ; Reactor operating at 100% power
T = 10 minutes ; Toxic atmosphere
Control Room evacuated and all required and desired actions have been performed per ABN 3200.30
"B" Isolation condenser is in service
"B" CRD pump operating
V-11-34 is closed
V-14-35 is open

GENERAL TOOLS AND EQUIPMENT:

MB-1 key

GENERAL REFERENCES:

Procedure 346, Remote Shutdown, Rev. 9, Section 7

TASK STANDARD:

All controls and indications on the Remote Shutdown Panel are active

CRITICAL ELEMENTS: (*)

5,7,8,9,11

INITIATING CUES:

Toxic atmosphere has caused an evacuation of the control room. The US has directed you to place the Remote Shutdown Panel into operation in accordance with procedure 346, Section 7, Operation of the Remote and Local Shutdown Panels.

START TIME _____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtain controlled copy of procedure.	Procedure 346, section 7, obtained.	
2. Verifies prerequisites met.	Verifies prereqs met.	
UPON REQUEST: Individual prereqs not verifiable at location, can be verified as met.		
3. Reviews all applicable precautions and limitations.	Reviews all applicable precautions and limitations.	
4. Obtains keys for remote shutdown panel.	Unlock key ring to right of Remote Shutdown Panel.	
*5. Places the "CRD control transfer" keylock to the alternate position.	Inserts key and places CRD control transfer switch in "Alternate" position.	
CUE: CRD Control transfer keylock is in alternate.		
6. Confirms 1B2M closed.	"Red" indicating light lit for breaker 1B2M at the RSP.	
CUE: 1B2M breaker indicates closed (B CRD pump operating, no action required.		
*7. Lines up IC "B" valve control.	On Remote S/D panel, places control switch for V-14-35 in open and control switch for V-11-34 remains closed.	
CUE: V-14-35 control switch is in open and V-11-34 control switch is in close. UPON REQUEST: V-14-35 is open V-11-34 is closed		
*8. Places bypass switch on the breaker at USS 1B2 for RBCCW pump 1-2 to the bypass position.	Place the Normal/Bypass switch for RBCCW pump 1-2 to bypass.	
CUE: RBCCW pump 1-2 normal/bypass switch is in bypass.		

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
*9. Places train "A" and train "B" to the alternate position.	Insert keys and rotate Train "A" and Train "B" transfer switches to "Alternate".	
CUE: Red "On" status lights lit for "B" 460V SWGR Room and "A/B" battery room fans after two seconds UPON REQUEST: V-14-35 indicates open (red) V-11-34 indicates closed (green)		
10. Confirms all recirc pumps tripped.	Performance met by prereq of "All actions of ABN 3200.30 met".	
CUE: If requested by operator, evaluator reports as EO all recirc pump breakers verified open in 4160V switchgear room.		
*11. Activates RSP fuel zone level.	Place both fuel zone level On/Off switches to "On".	
CUE: All fuel zone meters at 155 TAF.		
12. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME _____

TASK CONDITIONS:

T = 0 minutes ; Reactor operating at 100% power
T = 10 minutes ; Toxic atmosphere

- Control Room evacuated and all required and desired actions
- have been performed per ABN 3200.30
- "B" Isolation condenser is in service
- "B" CRD pump operating
- V-11-34 is closed
- V-14-35 is open

INITIATING CUES:

Toxic atmosphere has caused an evacuation of the control room. The US has directed you to place the Remote Shutdown Panel into operation in accordance with procedure 346, Section 7, Operation of the Remote and Local Shutdown Panels.

AmerGen
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE 286.04

Title:	**Lineup Fire Protection to the Core Spray System**		
Task: Lineup Fire Protection to the Core Spray System			2860401403 2860404404
KA# 209001 G 009	RATING:	RO - 3.9	SRO - 3.7
Validation Time	6 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	

REFERENCE SECTION

TASK CONDITIONS:

Reactor scrammed
Both Core Spray Main pumps failed
LOCA in progress
RPV level 60"

GENERAL TOOLS AND EQUIPMENT:

None

Optional: Plant radio

GENERAL REFERENCES:

EMG 3200.01B, RPV Control with ATWS, Rev. 12
Support Proc. 20, Low Pressure Injection During An ATWS, Section 3.3, Rev. 12

TASK STANDARD:

Core spray system 1 injecting into the core with fire water

CRITICAL ELEMENTS: (*)

4 & 9

INITIATING CUES:

The FS/US has directed you to line up fire water to Core Spray System 1 per Support Procedure 20.

PERFORMANCE SECTION

START TIME _____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtain controlled copy of procedure.	Obtain controlled copy of Support Procedure 20.	
2. Confirms stopped the Core Spray Main and Booster Pumps in Core Spray System 1.	Communicates with Control Room to confirm all Core Spray System 1 pumps stopped.	
CUE: Control Room reports Core Spray System 1 pumps stopped.		
3. Place Core Spray System 1 Main Pump control switches in Pull-to-Lock position.	Communicates with Control Room to confirm Core Spray System 1 Main Pumps in Pull-to Lock.	
CUE: Control Room reports Core Spray System 1 Main Pumps in Pull-to- Lock.		
*4. Closes telltale drain valve V-20-91.	Closes handwheel for V-20-91 located on North side of reactor building 23'.	
CUE: V-20-91 closed.		
5. Confirm running all Diesel Fire Pumps by placing their control switches in MANUAL position (13R).	Communicates with Control Room to confirm all Diesel Fire Pumps are running.	
CUE: Control Room reports that both Diesel Fire Pumps running.		

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
6. Confirms open Core Spray 1 discharge valves V-20-12 and either V-20-15 or V-20-40.	Confirms valves open locally, Rx Bldg. 75' elev. OR communicates with Control Room to confirm discharge valves V-20-12 and either V-20-15 or V-20-40 are open.	
CUE: Upon request the evaluator will provide the following: V-20-12 and V-20-15 (or V-20-40) open.		
7. Confirms closed test discharge valve V-20-27.	Confirms valve closed locally, Rx Bldg. 75' elev. OR communcates with Control Room to confirm test discharge valve V-20-27 is closed.	
CUE: Upon request the evaluator will provide the following: V-20-27 closed.		
8. Closes Core Spray 1 suction valve V-20-32 and V-20-3	Communicates with Control Room to close suction valves V-20-32 and V-20-3.	
CUE: Control Room reports Green "Closed" indicating lights for V-20-32 and V-20-3.		
*9. Throttle open V-20-83, Fire Water Supply valve.	Opens valve V-20-83 locally, adjacent to V-20-91, at the North side of reactor	
CUE: Flow noise is heard from the system. (V-20-83 open)		
10. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

TASK CONDITIONS:

Reactor scrammed
Both Core Spray Main pumps failed
LOCA in progress
RPV level 60"

INITIATING CUES:

The FS/US has directed you to line up fire water to Core Spray System 1 per Support Procedure 20.

AmerGen
An Exelon/British Energy Company

JOB PERFORMANCE MEASURE
200.00Q

Title:	TERMINATION AND PREVENTION OF INJECTION	
Task:	ENTER AND CONTROL RPV LEVEL, PRESSURE AND POWER AS DIRECTED BY EMG-3200.01B, "RPV CONTROL-With ATWS	**2000501441**
KA# 295037 EA2.02	**RATING:** SRO 4.2 RO 4.1	
Validation Time: 3 minutes	**Faulted: NO**	**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.

NOTE: Directions are only required once in a given JPM session.

Performance			
Perform		**Simulate**	
Replica		**In-Plant**	
GRADE: SAT/UNSAT		**Mode: Training/Evaluation**	

Comments
Date:

REFERENCE SECTION

TASK CONDITIONS:

- The plant is in an ATWOS condition at approximately 40% power.
- RPV Control w/ ATWOS has been entered.
- All efforts to insert control rods have been unsuccessful
- Support Procedure 16 has been completed bypassing the LO-LO Water Level Interlocks.

INITIATING CUES:

As the US I am directing you to perform Support Procedure 17, Termination and Prevention of Injection.

GENERAL TOOLS AND EQUIPMENT:

GENERAL REFERENCES:

Support Procedure 17, "Termination and Prevention of Injection" - revision 12

TASK STANDARD:

All Core Spray Main Pumps in Pull-to-Lock, All FW pumps off, one (1) Condensate pump running, all Feed Reg. Valves closed.

CRITICAL ELEMENTS: (*)

7, 8, 9, and 10.

TASK CONDITIONS:

- The plant is in an ATWOS condition at approximately 40% power.
- RPV Control w/ ATWOS has been entered.
- All efforts to insert control rods have been unsuccessful
- Support Procedure 16 has been completed bypassing the LO-LO Water Level Interlocks.

INITIATING CUES:

As the US I am directing you to perform Support Procedure 17, Termination and Prevention of Injection.

PERFORMANCE SECTION

START TIME_____

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
1. Obtain controlled copy of procedure	Obtains controlled copy of Support Procedure 17.	
2. Verifies all prerequisites are met	Verifies all prerequisites are met	
CUE: Prerequisites have been met.		
3. Informs operator controlling reactor pressure of impending IC initiation.	Informs operator controlling pressure that the IC's will initiate when level reaches LO-LO level	
4. Overrides all core spray initiation logic.	Depresses OVERRIDE switches for all sensors that are lit or unlit and depresses all ACTUATED switches whether lit or unlit.	
5. Confirms all Core Spray Parallel Isolation Valves closed.	Confirms all Core Spray Parallel Isolation Valves closed by observing GREEN "CLOSED" indicating lights for V-20-15, 40, 21 & 41 lit.	
6. Confirms all Core Spray Booster Pumps tripped.	Confirms all Core Spray Booster Pumps tripped by observing the GREEN "OFF" indicating lights lit.	

PERFORMANCE CHECKLIST	STANDARD	INITIAL SAT/UNSAT
*7. Confirms all Core spray Main Pump control switches tin PULL-TO-LOCK	Places the control switches for all Core Spray Main Pumps into the PULL-TO-LOCK position.	
*8. Trips all operating Feedwater pumps.	Trips all operating Feedwater pumps by placing their respective control switches to the STOP position & returning to the NORMAL position.	
*9. Confirms one (1) Condensate pump running.	Trips two (2) of the running condensate pumps leaving one (1) running.	
*10. Place all Individual FRV controllers in MAN position and closes all FRV's.	Places all Individual FRV controllers in MAN position and closes all FRV's & LFRV's.	
11. Reports to US that SP 17 is complete.	Reports to US that SP 17 is complete.	
12. Used procedure properly.	Used procedure properly according to its level of usage.	

COMPLETION TIME_____

SIMULATOR SETUP

Initial Condition(s): **IC-65**

SETUP

1. Run Simprob.cae and ATWS.CAE
2. Complete Support Procedure 16 to bypass Lo-Lo interlocks.
3.

Malfunctions:

NONE

Command Files:

SIMPROB.CAE
ATWS.CAE

TASK CONDITIONS:

- The plant is in an ATWOS condition at approximately 40% power.
- RPV Control w/ ATWOS has been entered.
- All efforts to insert control rods have been unsuccessful
- Support Procedure 16 has been completed bypassing the LO-LO Water Level Interlocks.

INITIATING CUES:

As the US I am directing you to perform Support Procedure 17, Termination and Prevention of Injection.