
ES-301 Control Room Systems and Facility Walk-Through Test Outline Form ES-301-2

Facility: Limerick Generating Station Exam Level: RO		Date of Examination: 10/07/02 Operating Test No.: _____	
B.1 Control Room Systems			
	System / JPM Title	Type Code*	Safety Function
a.	Manual Depressurization of RHR (Alternate Path – Drain Valve trips on thermals)	NAS	2
b.	Operate RCIC Full Flow test CST to CST (Alternate Path – Test valve pressure locks)	NAS	4
c.	Venting Primary Containment (OT-101) (Alternate Path – High Rad alarm annunciates)	NAS	5
d.	Control Rod Exercise Test (ST-6-107-760-*) (Alternate Path – Rod stuck)	NAS	1
e.	Shutdown D14 Diesel Generator	MS	6
f.	Bypass Isolations and Restore RECW (ON-113)	DS	8
g.	Establish Main Condenser Vacuum Using the 2 nd Stage SJAE	NSL	9
B.2 Facility Walk-Through			
a.	Install SLC Squib Valve Bypass Line	DR	1
b.	Defeat HPCI and RCIC High Temperature Isolation	DR	4
c.	Supply Emergency DIV 1 Power to RCIC Inboard Isolation Valve	DR	6
* 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			

Facility: Limerick Generating Station Exam Level: SRO(I)		Date of Examination: 10/07/02 Operating Test No.: _____	
B.1 Control Room Systems			
	System / JPM Title	Type Code*	Safety Function
a.	Manual Depressurization of RHR (Alternate Path – Drain Valve trips on thermals)	NAS	2
b.	Operate RCIC Full Flow test CST to CST (Alternate Path – Test valve pressure locks)	NAS	4
c.	Venting Primary Containment (OT-101) (Alternate Path – High Rad alarm annunciates)	NAS	5
d.	Control Rod Exercise Test (ST-6-107-760-*)(Alternate Path – Rod stuck)	NAS	1
e.	Shutdown D14 Diesel Generator	MS	6
f.	Bypass Isolations and Restore RECW (ON-113)	DS	8
g.	Establish Main Condenser Vacuum Using the 2 nd Stage SJAE	NSL	9
B.2 Facility Walk-Through			
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* 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			

Facility: Limerick Generating Station		Date of Examination: 10/07/02	
Exam Level: SRO(U)		Operating Test No.: _____	
B.1 Control Room Systems			
	System / JPM Title	Type Code*	Safety Function
a.	Operate RCIC Full Flow test CST to CST (Alternate Path – Test valve pressure locks)	NAS	4
b.	Venting Primary Containment (OT-101) (Alternate Path – High Rad alarm annunciates)	NAS	5
c.	Establish Main Condenser Vacuum Using the 2 nd Stage SJAE	NSL	9
d.			
e.			
f.			
g.			
B.2 Facility Walk-Through			
a.	Install SLC Squib Valve Bypass Line	DR	1
b.	Supply Emergency DIV 1 Power to RCIC Inboard Isolation Valve	DR	6
c.			
* 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			

EXELON NUCLEAR

TITLE: BYPASS RECW ISOLATION (Time Critical)

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

1. Reset the simulator to any full power IC
2. Insert Malfunction MNS161A - NSSSS Grp. 8 inadvertent isolation
3. Bypass the DWCW isolation
4. Bypass and restore Instrument Gas

EVALUATION METHOD :

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

5 MINUTES

IMPORTANCE RATING(S):

3.0/3.3

A2.03

SYSTEM NUMBER(S):

223002

REFERENCES:

ON-113 Rev. 20

TASK STANDARD(S):

RECW restored to both recirculation pumps within 10 minutes of SSV order.

EXELON NUCLEAR

TASK CONDITIONS:

1. RECW has been lost due to an inadvertent Group VIII A Inboard isolation and cannot be reset.
2. The plant is at power.
3. Instrument Gas is bypassed and restored.
4. DWCW is bypassed and restored.

INITIATING CUES: This Task is Time Critical.

You are directed by Shift Supervision to bypass the RECW Inboard isolation and restore RECW to the Recirc Pumps per ON-113 .

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
1. Obtain a current revision of ON-113	Current revision of ON-113 obtained.	
2. IF RECW is lost due to an inadvertent Group VIII A isolation AND isolation cannot be reset, THEN BYPASS the isolation as directed below AND RESTORE RECW to the Recirc Pump.	N/A	N/A
3. PLACE HS-13-*13 SEALS/OIL CLRS OUTBD ISOL BYPASS, to "BYPASS"	N/A	N/A
4. OPEN HV-13-*08 AND HV-13-*11 by placing HV-13-*08/*11, SUPPLY/ RETURN SEAL/OIL CLR, to "OPEN".	N/A	N/A
*5. PLACE HS-13-*12, SEALS/OIL CLRS INBD ISOL BYPASS, to "BYPASS".	<u>Within 10 minutes of start</u> , HS-13-112 keyswitch in Bypass position.	
*6. OPEN HV-13-*06, IN, AND HV-13-*07, OUT.	<u>Within 10 minutes of start</u> , HV-13-106 and HV-13-107 are Open.	
7. Acknowledge alarm F-5 on 118 services panel.	Alarm acknowledge Push-button depressed.	
8. Comply with Tech Spec 3.6.3 for an inoperable isolation valve.	Inform SSV that T.S. should be considered.	
9. IF it is determined associated instrumentation has failed, THEN REFER TO Tech Spec 3.3.2 for additional action.	N/A	N/A

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. RECW has been lost due to an inadvertent Group VIII A Inboard isolation and cannot be reset.
2. The plant is at power.
3. Instrument Gas is bypassed and restored.
4. DWCW is bypassed and restored.

INITIATING CUES: This Task is Time Critical.

You are directed by Shift Supervision to bypass the RECW Inboard isolation and restore RECW to the Recirc Pumps per ON-113

EXELON NUCLEAR

TITLE: UNLOAD AND SHUTDOWN D14 DIESEL GENERATOR

TASK PERFORMED BY: _____ EVALUATOR: _____.

EVALUATOR SIGNATURE: _____ DATE: _____.

DIRECTIONS TO EVALUATOR:

1. Reset the simulator to any IC.
2. Start the D14 diesel and load it using S92.1.O, increase KW to 2000-2500, and the KVAR to 1000.

EVALUATION METHOD :

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

15 MINUTES

IMPORTANCE RATING(S):

3.7/3.7

SYSTEM NUMBER(S):

264000 A4.04

REFERENCES:

1. S92.2.N, Rev. 22, SHUTDOWN OF THE DIESEL GENERATORS

TASK STANDARD(S):

D14 diesel is shutdown in accordance with s92.2.N, SHUTDOWN OF THE DIESEL GENERATORS

EXELON NUCLEAR

TASK CONDITIONS:

1. The D14 diesel generator was manually started and has been operating between 2000 and 2500 KV in parallel with the associated safeguard bus for one hour.
2. 201 Safeguard Transformer Local Tap Changer Selector is in MANUAL.
3. S92.2.N is completed up to step and including step 4.5.2

INITIATING CUES:

Shift Supervision directs you to unload and shutdown the D14 diesel generator from the MCR.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
(Cue: Provide a marked up copy of the current revision of the procedure)		
1. WHEN diesel has been operating above 1400 KW for a least 1 hour, THEN REDUCE load to 1400 KW.	KW lowered to 1400 KW as indicated on W/A G501-2.	
2. AFTER 5 minutes, THEN CONTINUE to reduce load. (CUE: 5 minutes has elapsed since reaching 1400 KW)	At least 5 minutes have elapsed prior to continuing to reduce load below 1400 KW.	
EVALUATOR NOTE:		
Steps 4 and 5 below may be performed concurrently to ensure EDG KVAR is maintained <75% KW.		
*3. Slowly REDUCE KW load by turning 165-A(B,C,D) G501/CS, "Diesel Generator Speed Governor Control Switch" to "LOWER."	Speed Governor Control Switch, 165-A G501/CS is placed to "LOWER" to slowly reduce KW load.	
*4. Slowly REDUCE KVARs load by turning 170A(B,C,D) G502/CS, "Diesel Generator Voltage Regulator" to "LOWER."	Voltage Regulator Control Switch, 170-A G502/CS is placed to "LOWER" to slowly reduce KVARs as indicated on VAR/A G501/2.	
*5. WHEN KW AND KVAR loads are near zero (100 and 300) KVAR, THEN OPEN appropriate Diesel Generator Breaker.	When KW and KVAR above zero, 152-115 O7 (D/G output breaker) is open	
6. PLACE 143-A(B)X103, "*01 Safeguard Transformer Tap Changer Selector: in "AUTO." (Cue: 201 safeguard Transformer Tap Changer selector is in Auto)	143-A(B)X103, "*01 Safe-guard Transformer Tap Changer Selector in "AUTO."	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
<p>7. IF shutting down engine from local panel, THEN PERFORM the following: <u>Otherwise, MARK</u> this step N/A.</p> <p style="margin-left: 20px;">a. PLACE LOCAL-REMOTE switch to "LOCAL"</p> <p style="margin-left: 20px;">b. PLACE ENGINE CONTROL CSL to "STOP" AND VERIFY diesel engine shuts down.</p> <p style="margin-left: 20px;">c. PLACE LOCAL-REMOTE switch to "REMOTE."</p> <p>(Cue: Diesel is <u>NOT</u> being shut down from the local panel.</p>	N/A	N/A
<p>*8. IF shutting down engine from Main Control Room, THEN TURN 101-A(B,C,D) G501/CS, "Diesel Generator Control" to "STOP" AND VERIFY diesel generator shuts down. <u>Otherwise, MARK</u> this step N/A.</p>	<p>Diesel Generator Control Switch 101-A G501/CS is placed in "STOP".</p>	
<p>9. Acknowledge and clear alarms on panel 120D14 windows C3, C4, and D2.</p>	<p>Panel 120D14 alarms on windows C3, C4, and D2 are acknowledged and cleared, and ARCs' referenced.</p>	
<p>10. IF diesel generator was running for greater than 1 hour, THEN PERFORM appropriate check for water in day tank: <u>Otherwise, MARK</u> this step N/A.</p> <p style="margin-left: 20px;">ST-6-092-611-*, D*1 Diesel Generator Day Tank Check for Water</p> <p style="margin-left: 20px;">ST-6-092-612-*, D*2 Diesel Generator Day Tank Check for Water</p> <p style="margin-left: 20px;">ST-6-092-613-*, D*3 Diesel Generator Day Tank Check for Water</p> <p style="margin-left: 20px;">ST-6-092-614-*, D*4 Diesel Generator Day Tank Check for Water</p> <p>(Cue: If asked, say, "I understand you want me to perform step 4.5.3 of S92.2.N (or ST-6-092-611-4) for D14.")</p>	<p>EO is directed to perform step 4.5.3 of S92.2.N or perform ST-6-092-611-1 for D14</p>	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
<p>11. WHEN ESW pumps are no longer required, THEN SHUTDOWN ESW pumps per S11.2.A, Emergency Service Water System Shutdown.</p> <p>(Cue: When a copy of S11.2.A is obtained, inform the operator, "You have met the termination criteria for this JPM.")</p>	<p>A copy of S11.2.A is obtained.</p>	

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. The D14 diesel generator was manually started and has been operating between 2000 and 2500 KV in parallel with the associated safeguard bus for one hour.
2. 201 Safeguard Transformer Local Tap Changer Selector is in MANUAL.
3. S92.2.N is completed up to step and including step 4.5.2

INITIATING CUES:

Shift Supervision directs you to unload and shutdown the D14 diesel generator from the MCR

EXELON NUCLEAR

TITLE: MANUAL DEPRESSURIZATION OF RHR (ALTERNATE PATH)

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

1. Reset to any IC >500 psig
2. Insert Malfunction MRH573B on the second attempt to close the HV-51-1F024A

EVALUATION METHOD :

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

10 MINUTES

IMPORTANCE RATING(S):

3.2/3.3

SYSTEM NUMBER(S):

203000A2.03

REFERENCES:

S51.4.A REV 08 MANUAL DEPRESSURIZATION OF RHR

TASK STANDARD(S):

HV-51-125A closed to terminate drainage from the "1A" RHR loop

EXELON NUCLEAR

TASK CONDITIONS:

1. 113 COOL A F-3, RHR HI/LO PRESSURE has annunciated
2. Affected RHR Loop not in operation AND is aligned per S51.1.A, Set Up Of RHR System For Automatic Operation On LPCI Mode
3. An equipment operator is standing by in the Aux. Equipment Room

INITIATING CUES:

You are directed by the CRS to depressurize "1A" RHR Loop per S51.4.A., Manual Depressurization of RHR.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

1. STEP	STANDARD	SAT/UNSAT
1. Obtain a copy of S51.4.A	Current revision of S51.4.A obtained	
2. For affected RHR Loop, crack OPEN HV-51*F024A, pull-to-stop, AND WAIT 10 seconds (CUE: If asked, Equipment operator reports RHR Loop pressure is 420 psig on PISH-51-*N653A, "**A RHR" on *0C617)	HV-51*F024A, "**A RHR" opened for 10 seconds	
3. CLOSE the following "Full Flow Test Return Valve," to depressurize loop to Suppression Pool HV-51-*F024A, "**A RHR" (CUE: Equipment operator reports RHR Loop pressure is 390 psig on PISH-51-*N653A, "**A RHR" on *0C617)	HV-51*F024A, "**A RHR" closed	
*4. For affected RHR Loop, crack OPEN , pull-to-stop, AND WAIT 10 seconds	HV-51*F024A, "**A RHR" opened for 10 seconds	
*5. CLOSE the following "Full Flow Test Return Valve," to depressurize loop to Suppression Pool:HV-51-*F024A, "**A RHR" (CUE: If asked, Equipment operator reports RHR Loop pressure is 340 psig on PISH-51-*N653A, "**A RHR" on *0C617 and lowering)	HV-51*F024A, "**A RHR" opened for 10 seconds. Candidate recognizes the failure of HV-51-1F024, "1A RHR" to close	
*6. IF the full flow test valve fails to close for any reason THEN CLOSE HV-51-*25A(B) immediately to avoid draining RHR to Suppression Pool	HV-51HV-51-125A closed	
(CUE: You may stop here, you have met the termination criteria for this JPM.)	N/A	N/A

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. 113 COOL A F-3, RHR HI/LO PRESSURE has annunciated
2. Affected RHR Loop not in operation AND is aligned per S51.1.A, Set Up Of RHR System For Automatic Operation On LPCI Mode
3. An equipment operator is standing by in the Aux. Equipment Room

INITIATING CUES:

You are directed by the CRS to depressurize "1A" RHR Loop per S51.4.A., Manual Depressurization of RHR.

EXELON NUCLEAR

TITLE: ESTABLISH MAIN CONDENSER VACUUM USING THE 2ND STAGE SJAE

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

1. Reset Simulator to IC 16, close air ejector valves, break condenser vacuum

EVALUATION METHOD :

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

20 MINUTES

IMPORTANCE RATING(S):

3.3/3.2

SYSTEM NUMBER(S):

271000A4.09

REFERENCES:

S07.1.I REV001, ESTABLISHING MAIN CONDENSER VACUUM USING THE SECOND STAGE
STEAM JET AIR EJECTOR

TASK STANDARD(S):

Air Ejector Second Stage placed in service in accordance with S07.1.I

EXELON NUCLEAR

TASK CONDITIONS:

1. All prerequisites of S07.1.1 are completed
2. S07.1.1 is complete up to and including step 4.16
3. An Equipment Operator is standing by to provide local Off-Gas Temperatures and valve manipulations

INITIATING CUES:

Shift Supervision directs you to place "1A" SJAE second stage in service in accordance with S07.11,
ESTABLISHING MAIN CONDENSER VACUUM USING THE SECOND STAGE STEAM JET AIR EJECTOR

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
(CUE: Provide a current revision of a S07.1.I marked up and completed up to step 4.16)	N/A	N/A
1. ENSURE PIC-007-*41A(B), PX, in "AUTO" (A) AND SET to 30% of scale (3.0 psig) at *0C673, OFF GAS.	PIC-007-*41A(B), PX, in "AUTO" (A) AND SET to 30% of scale	
*2. OPEN HV-007-*21A(B), "SJAE 2 nd Stage Disch. Isolation" (DISCH).	HV-007-*21A(B), "SJAE 2 nd Stage Disch. Isolation open	
*3. OPEN HS-007-*20A(B), SUCT, to open the following: HV-007-*020A(B), 2 ND STAGE STEAM HV-007-*20A(B), 2 nd STAGE SUCT	HV-007-*020A(B), 2 ND STAGE STEAM and HV-007-*20A(B), 2 nd STAGE SUCT are open	
4. NOTIFY equipment operator that approx 12,000 lbm/hr of steam will be taken for SJAE operation.	Equipment Operator notified that approx 12,000 lbm/hr of steam will be taken for SJAE operation	
*5. CRACK OPEN HV-007-*52A(B), "Aux Stm to *A(B) Air Eject," AND	HV-007-*52A(B), "Aux Stm to *A(B) Air Eject," cracked open	
*6. HV-007-*53A(B), "Aux Stm To *A(B) Air Eject," using keylocked switch HS-007-*52A(B), AUX STM SUP, at *0C652 until both valves indicate dual position.	HV-007-*53A(B), "Aux Stm To *A(B) Air Eject," cracked opened using keylocked switch HS-007-*52A(B), AUX STM SUP	
*7. OPEN HV-069-*47, "Offgas System Recycle to Mn. Cond. (MN COND).	HV-069-*47, "Offgas System Recycle to Mn. Cond Open	
*8. CONTINUE to slowly open HV-007-*52A(B).	HV-007-*52A(B) slowly opened	
*9. AND HV-007-*53A(B) using HS-007-*52A(B) while maintaining PV-C-007-*41A(B) closed	HV-007-*53A(B) slowly opened	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
<p>10. WHEN the temperature of the piping downstream of FG-069-*02 reaches 200°F THEN THROTTLE 069-*193, AND 069-*140 to maintain a nominal piping temperature of 200°F.</p> <p>(CUE: Equipment Operator reports 069-*193, AND 069-*140 throttled and temperature downstream of FG-069-*02 is 205°F and stable)</p>	069-*193, AND 069-*140 throttled	
<p>11. WHEN TIC-069-*31A(B), indicates 250°F THEN ENSURE closed 069-*118 AND 069-*003</p> <p>(CUE: TIC-069-*31B is 250 deg F and Equipment Operator reports 069-*118 and 069-*003 closed)</p>	069-*118 AND 069-*003 closed	
<p>12. ENSURE HV-007-*52A(B) AND HV-007-*53A(B) are full open.</p>	HV-007-*52A(B) AND HV-007-*53A(B) are full open	
<p>13. MONITOR the aftercondenser AND hold up pipe level for normal operation of the drains.</p>	N/A	N/A
<p>14. VERIFY STEAM TO *A(B) SJAE CONDENSER HI/LO PRESS annunciator clear at *04 COND.</p> <p>(CUE: You can stop here, you have met the termination criteria for this JPM)</p>	STEAM TO *A(B) SJAE CONDENSER HI/LO PRESS annunciator clear	
	N/A	N/A

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. All prerequisites of S07.1.1 are completed
2. S07.1.1 is complete up to and including step 4.16
3. An Equipment Operator is standing by to provide local Off-Gas Temperatures and valve manipulations

INITIATING CUES:

Shift Supervision directs you to place "1A" SJAE second stage in service in accordance with S07.11,
**ESTABLISHING MAIN CONDENSER VACUUM USING THE SECOND STAGE STEAM JET AIR
EJECTOR**

EXELON NUCLEAR

TITLE: Control Rod Exercise Test (ST-6-107-760-1)(Alternate Path)

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

1. Reset Simulator to IC 17
2. Ensure Rod Pattern supports Control Rod 14-51 and Control Rod 14-55 at position 48.
3. Insert Malfunction MRD016DB (Drift Out) for Control Rod 14-55 and is removed when drive water pressure is increased
4. Insert Override for annunciator 108 F4 Rod Drift to off

EVALUATION METHOD:

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

15 MINUTES

IMPORTANCE RATING(S):

201003

SYSTEM NUMBER(S):

A2.01 3.4/3.6

REFERENCES:

ST-6-107-760-1 Rev 46, Control Rod Exercise Test

TASK STANDARD(S):

Control Rod 51-46 exercised in accordance with ST-6-107-760-1

EXELON NUCLEAR

TASK CONDITIONS:

1. Control Rod Exercise Test is in progress
2. Control Rod 14-55 is the next rod to be tested

INITIATING CUES:

Shift Supervision directs you to continue the Control Rod Exercise Test ST-6-107-760-1 starting with control rod 14-55.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
1. Provide a current copy of ST-6-107-760-1, Control Rod Exercise	N/A	N/A
2. PERFORM the following: VERIFY on the 4 Rod Display that the selected Rod indicates position 48.	Control Rod 14-55 is at position 48	
3. IF 48 is not being indicated on the Four Rod Display, THEN VERIFY full-out indication is present on the Full Core Display AND PMS.	N/A	N/A
*4. INSERT the control rod one notch. VERIFY on the Four Rod Display that the selected Rod indicates position 46.	Insert pushbutton depressed, operator recognizes control rod does not move from position 48	
5. IF any control rod begins to insert AND settles back to position 48 THEN PERFORM the following.	Operator recognizes that control rod is still at position 48 and additional action is required	
6. ATTEMPT another single notch insert to position 46.	Insert pushbutton depressed	
7. IF successful THEN CONTINUE with step 4.4.1.2	Operator recognizes that control rod is still at position 48	
*8. RAISE CRD System Drive pressure by 25 psid, not to exceed 350 psid.	CRD System drive pressure is elevated by 25 psid (15-40)	
*9. ATTEMPT a single notch insert.	Insert pushbutton depressed candidate recognizes control rod moves to position 44-46	
*10. IF the rod double notches to position 44, THEN WITHDRAW the rod to position 48	control rod withdrawn to position 48	
11. IF rod fails to latch at position 46 AND CRD System Drive Pressure is less than 350 psid, THEN REPEAT step 4.4.1.1.e	N/A	N/A
12. ENSURE CRD System Drive pressure is approximately 260 psid.	CRD System Drive pressure is approximately 250 - 270 psid	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
13. IF rod failed to latch at notch position 46, THEN ENTER ON-104.	N/A	N/A
14. IF rod did latch at notch position 46 AND increased CRD System Drive pressure was required, THEN INITIATE A/R AND NOTIFY CRD System Manager for trending purposes. (Equipment Status Tagging is not required.) (CUE: WCS has initiated an A/R and contacted the system manager)	Control Rod Latched at position 46	
15. ANNOTATE cover sheet to indicate that raised pressure/flow adjustment/ ON-104 entry was required.	Cover sheet annotated raised pressure/flow adjustment	
16. ENSURE CRD System Drive pressure is approximately 260 psid.	CRD System Drive pressure is 260 psid	
(CUE: You can stop here, You have met the termination criteria for this JPM)		

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. Control Rod Exercise Test is in progress
2. Control Rod 14-55 is the next rod to be tested

INITIATING CUES:

Shift Supervision directs you to continue the Control Rod Exercise Test ST-6-107-760-1 starting with control rod 14-55.

EXELON NUCLEAR

TITLE: OPERATE RCIC FULL FLOW TEST CST TO CST (ALTERNATE PATH – TEST VALVE PRESSURE LOCK)

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

1. Reset to any power IC
2. Place Suppression Pool Cooling in service
3. Insert Override HS49-F022, RCIC Full Flow Test fails as is (Remove when turbine speed is reduced to 2500 rpm)

EVALUATION METHOD:

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

20 MINUTES

IMPORTANCE RATING(S):

3.4/3.3

SYSTEM NUMBER(S):

217000 A2.12

REFERENCES:

S49.1D REV 28, RCIC SYSTEM FULL FLOW FUNCTIONAL TEST AND TURBINE OIL PRIMING

TASK STANDARD(S):

RCIC place in service in accordance with S49.1D with discharge pressure 70 psig higher than reactor pressure

EXELON NUCLEAR

INITIATING CUES:

1. RCIC will be run for a 30 minute Post Maintenance Test (PMT)
2. All prerequisites for S49.1.D have been completed
3. RCIC System available for auto initiation per S49.1.A, Normal RCIC Line-up for Automatic Operation
4. Vibration Monitor System for RCIC is in operation
5. "1A" RHR is in suppression pool cooling to support RCIC run

TASK CONDITIONS:

Shift Supervision directs you to place Unit 1 RCIC in CST to CST full flow test, using the manual Quick Start per S49.1.D, RCIC SYSTEM FULL FLOW FUNCTIONAL TEST AND TURBINE OIL PRIMING.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
1. Provide marked up current revision of S49.1.D	N/A	N/A
2. IF Vibration Monitoring System is available, THEN VERIFY in service. (Cue: Vibration Monitoring is in operation)	N/A	N/A
3. PERFORM the following: ENSURE HV-55-*F071, "HPCI/RCIC Flush Line to Suppression Pool" (TEST OUTBOARD), closed.	HV-55-1F071HPCI/RCIC Flush Line to Suppression Pool valve closed	
4. ENSURE HV-55-*F008, "Test Loop Shutoff" (TEST ISOL), closed.	HV-55-*F008, Test Loop Shutoff (TEST ISOL), closed	
5. ENSURE HV-49-*F022, "RCIC Test Loop Isolation" (TEST ISOL), is closed.	HV-49-*F022, RCIC Test Loop Isolation (TEST ISOL), is closed	
*6. OPEN HV-55-*F011, "HPCI/RCIC Test Return to CST"(CONDENSATE RETURN).	HV-55-*F011, HPCI/RCIC Test Return to CST (CONDENSATE RETURN) OPEN	
*7. START *OP219, "Barometric Condenser Vacuum Pump" (VACUUM PUMP).	Barometric Condenser Vacuum Pump running	
*8. OPEN HV-50-*F046, "RCIC Lube Oil Cooling Water Supply" (COOLING WATER)	HV-50-*F046, "RCIC Lube Oil Cooling Water Supply" (COOLING WATER) open	
9. MONITOR Suppression Pool temperature per ST-6-060-390-*, Suppression Pool Temperature Check. (Cue: The PRO is performing ST-6-060-390-1)	N/A	N/A
10. IF required to limit Suppression Pool Temperature any time during this procedure, THEN PLACE Suppression Pool Cooling Mode of RHR System in service per S51.8.A, Suppression Pool Cooling Operation (Startup and Shutdown) and Level Control. (Cue: Suppression Pool Cooling is in service)	N/A	N/A

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
11. INFORM HP of changing radiological conditions due to RCIC system start (Cue:HP acknowledges that radiological conditions in the RCIC room may change due to RCIC run)	HP Contacted	
*12. IF a manual quick start is desired, THEN PERFORM the following: VERIFY FIC-49-*R600, "RCIC Pump Discharge Flow Controller" (FL), set to 600 gpm in "AUTO."	FIC-49-*R600, RCIC Pump Discharge Flow Controller (FL), set to 600 gpm in "AUTO."	
*13. OPEN HV-50-*F045, "RCIC Steam Supply" (INLET), at *0C648	HV-50-*F045, "RCIC Steam Supply" (INLET) open	
*14. WHEN RCIC turbine speed starts rising as indicated on SI-50-*01-1, "Turbine Speed" (S), THEN THROTTLE HV-49-*F022, "RCIC Full Flow Test" (TEST ISOL), open.	Operator recognizes HV-49-1F022 RCIC Full Flow Test" (TEST ISOL), fails to open	
*15. IF HV-49-*F022, TEST ISOL, will not open, THEN place FIC-49-*R600 in "MANUAL,"	FIC-49-*R600 is placed in MANUAL	
*16. AND PERFORM the following: LOWER output of FIC-49-*R600 to approximately 2500 rpm.	Reduce FIC-49-*R600 to approximately 2500 rpm	
*17. THROTTLE OPEN HV-49-*F022, TEST ISOL.	HV-49-*F022, TEST ISOL throttled open	
*18. Slowly RAISE output of FIC-49-*R600 AND MATCH setpoint to actual flow.	FIC-49-*R600 setpoint is set so that setpoint matches actual flow.	
*19. PLACE FIC-49-*R600 in "AUTO."	FIC-49-*R600 is in AUTO	
*20. ADJUST HV-49-*F022, "RCIC Full Flow Test" (TEST ISOL), as necessary to maintain pump discharge pressure at least 70 psig over reactor pressure AND pump flow rate of 600 gpm.	HV-49-*F022, "RCIC Full Flow Test" (TEST ISOL), adjusted so that pump discharge pressure at least 70 psig over reactor pressure AND pump flow rate of 550-650 gpm.	
21. ENSURE the following valves aligned as indicated	N/A	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
22. HV-50-*F004 "RCIC Barometric Condenser Drain to Isolation"(DRAIN OUTBOARD) CLOSED	HV-50-*F004 RCIC Barometric Condenser Drain to Isolation (DRAIN OUTBOARD) CLOSED	
23. HV-50-*F005 "RCIC Barometric Condenser Drain Isolation" (INBOARD TO RADWASTE) CLOSED	HV-50-*F005 RCIC Barometric Condenser Drain Isolation (INBOARD TO RADWASTE) CLOSED	
24. HV-49-*F026 "RCIC Steam Drain Line Isolation" (OUTBOARD TO COND) CLOSED	HV-49-*F026 RCIC Steam Drain Line Isolation (OUTBOARD TO COND) CLOSED	
25. HV-49-*F025 "RCIC Steam Drain Line Isolation Valve to Main Cond" (TRAP INBOARD) CLOSED	HV-49-*F025 "RCIC Steam Drain Line Isolation Valve to Main Cond" (TRAP INBOARD) CLOSED	

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

INITIATING CUES:

1. RCIC will be run for a 30 minute Post Maintenance Test (PMT)
2. All prerequisites for S49.1.D have been completed
3. RCIC System available for auto initiation per S49.1.A, Normal RCIC Line-up for Automatic Operation
4. Vibration Monitor System for RCIC is in operation
5. "1A" RHR is in suppression pool cooling to support RCIC run

TASK CONDITIONS:

Shift Supervision directs you to place Unit 1 RCIC in CST to CST full flow test, using the manual Quick Start per S49.1.D, RCIC SYSTEM FULL FLOW FUNCTIONAL TEST AND TURBINE OIL PRIMING.

EXELON NUCLEAR

TITLE: VENTING PRIMARY CONTAINMENT / ALTERNATE PATH

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

1. Reset to any Power IC
2. Insert Remote Function RCU092
3. Insert Remote Function RRT001 when venting is started

EVALUATION METHOD :

PERFORM

EVALUATION LOCATION:

SIMULATOR

APPROXIMATE COMPLETION TIME:

15 MINUTES

IMPORTANCE RATING(S):

3.4/3.6

SYSTEM NUMBER(S):

290001

REFERENCES:

OT-101, Rev 23. High Drywell pressure

TASK STANDARD(S):

Venting initiated per T-101 and terminated when South Stack Alarm annunciates

EXELON NUCLEAR

TASK CONDITIONS:

1. 100% Power
2. A loss of drywell cooling has resulted in drywell temperature and pressure increasing
3. Drywell pressure 1 psig
4. Drywell pressure must be lowered
5. RR-26-0R600, "Containment Leak Detector" (R), does not indicate Primary System leak (i.e. no rising trend)
6. OT-101 is complete up to and including step 3.9.3
7. Drywell temperature and pressure are on the safe side of Attachment 2

INITIATING CUES:

Shift Supervision has directed you to vent the drywell per OT-101, High Drywell Pressure, step 3.9.4 until Drywell pressure is .3 psig.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
(CUE: Provide a current marked up copy of OT-101)	N/A	N/A
*1. OPEN HV-57-*11, INBD	HV-57-*11, INBD opened	
*2. AND HV-57-*17, OUTBOARD, to vent Drywell to REECE	HV-57-*17, OUTBOARD, to vent Drywell to REECE opened	
3. MONITOR South Vent Stack to ensure compliance with ODCM	South Vent Stack monitored on RMMS	
4. MONITOR Drywell temperature AND pressure.	Drywell temperature AND pressure monitored on 10C601	
*5. IF Primary Containment steam leak is detected OR South Stack Hi/Hi-Hi Radiation alarm (003-F-1) is received while venting (CUE: These alarms can be cued by the evaluator if multiple exam are being given simultaneously)	Recognize South Stack Hi Radiation alarm annunciates	
*6. Drywell THEN CLOSE HV-57-*11, INBD	HV-57-*11, INBD, valve closed	
*7. AND HV-57-*17, OUTBOARD	HV-57-*17, OUTBOARD, valve closed	
(CUE: You may stop here, you have met the termination criteria for this JPM.)	N/A	N/A

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. 100% Power
2. A loss of drywell cooling has resulted in drywell temperature and pressure increasing
3. Drywell pressure 1 psig
4. Drywell pressure must be lowered
5. RR-26-0R600, "Containment Leak Detector" (R), does not indicate Primary System leak (i.e. no rising trend)
6. OT-101 is complete up to and including step 3.9.3
7. Drywell temperature and pressure are on the safe side of Attachment 2

INITIATING CUES:

Shift Supervision has directed to vent the drywell per OT-101, High Drywell Pressure, step 3.9.4 until Drywell pressure is .3 psig.

EXELON NUCLEAR

TITLE: HPCI/RCIC HIGH AREA TEMPERATURE ISOLATION BYPASS (T-249)

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

- 1. NONE

EVALUATION METHOD :

SIMULATE

EVALUATION LOCATION:

PLANT

APPROXIMATE COMPLETION TIME:

10 MINUTES

IMPORTANCE RATING(S):

3.8/3.6
3.3/3.7

SYSTEM NUMBER(S):

2.4.34
K.408

Generic
223002

REFERENCES:

- 1. Unit 1 T-249 HPCI/RCIC HIGH AREA TEMPERATURE ISOLATION BYPASS Rev. 1.
- 2. Unit 2 T-249 HPCI/RCIC HIGH AREA TEMPERATURE ISOLATION BYPASS Rev. 2.

TASK STANDARD(S):

HPCI/RCIC High area temperature isolations bypassed.

EXELON NUCLEAR

TASK CONDITIONS:

1. A LOCA has occurred on Unit ___.
2. RPV level is -180 inches.
3. T-111 has been entered.
4. A steam line break is not known to exist in HPCI/RCIC rooms.

INITIATING CUES:

You are directed by shift supervision to Bypass the HPCI and RCIC area high temperature isolations per T-249.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
<p>NOTE:</p> <p>IF this JPM is the <i>first</i> of multiple T-200 series JPMs being performed by a single candidate THEN step #1 applies.</p> <p>OTHERWISE mark step #1 N/A</p> <p>AND provide the following to the candidate :</p> <ol style="list-style-type: none"> a. INITIATING CUE(S) b. CUE: " You are now in possession of the T-249 equipment container. It contains all tools and equipment required by the procedure. You are to simulate their use during performance of the procedure." c. PROCEDURE COPY 		
<p>*1. The following is OBTAINED from Unit ___ T-200 locker.</p> <ul style="list-style-type: none"> • copy of T-249 • (4) PA2235 keys <p>(CUE: After the operator tells you what equipment he/she will take, inform them: "You have that equipment and procedure" and provide copy of T-249.)</p>	<p>A copy of T-249 and four (4) PA2235 keys OBTAINED.</p>	
<p>2. HPCI high area temperature isolation bypass.</p>	N/A	N/A
<p>3. PLACE the following keylock switches in "BYPASS":</p>	N/A	N/A
<p>*3a. B21B-S6B "HPCI Steam Line OBV Steam Leak" at *0C620 (Aux Equip Room)</p> <p>(CUE: Switch is in bypass)</p>	<p>B21B-S6B "HPCI Steam Line OBV Steam Leak" at *0C620 keylock switch in "BYPASS":</p>	
<p>*3b. B21B-S6D "HPCI Steam Line IBV Steam Leak" at *0C641 (Aux Equip Room)</p> <p>(CUE: Switch is in bypass)</p>	<p>B21B-S6D "HPCI Steam Line IBV Steam Leak" at *0C641 keylock switch in "BYPASS":</p>	
<p>4. RCIC HIGH AREA TEMPERATURE ISOLATION BYPASS</p>	N/A	N/A

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
5. PLACE the following keylock switches in "BYPASS"	N/A	N/A
*5a. B21B-S5A "RCIC Steam Line OBV steam Leak" at 10C621 (Aux Equip Room) (CUE: Switch is in bypass)	B21B-S5A "RCICI Steam Line OBV Steam Leak" at *0C620 keylock switch in "BYPASS":	
*5b. B21B-S5C "RCIC Steam Line IBV Steam Leak" at 10C640 (Aux Equip Room) (CUE: Switch is in bypass)	B21B-S5C "RCIC Steam Line IBV Steam Leak" at *0C620 keylock switch in "BYPASS":	

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. A LOCA has occurred on Unit ___.
2. RPV level is -180 inches.
3. T-111 has been entered.
4. A steam line break is not known to exist in HPCI/RCIC rooms.

INITIATING CUES:

You are directed by shift supervision to Bypass the HPCI and RCIC area high temperature isolations per T-249.

EXELON NUCLEAR

TITLE: BYPASSING SQUIB VALVES FOR SLC INJECTION

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

None

EVALUATION METHOD:

SIMULATE

EVALUATION LOCATION:

PLANT

APPROXIMATE COMPLETION TIME:

20 MINUTES

IMPORTANCE RATING(S):

3.7/3.9

SYSTEM NUMBER(S):

295037 EA 1.10

REFERENCES:

1. T-212 : Bypassing Squib Valves for SLC Injection, Rev. 18 Unit 1, Rev. 14 Unit 2

TASK STANDARD(S):

Establish a flowpath from the discharge of the SLC pumps to the vessel in accordance with T-212.

EXELON NUCLEAR

TASK CONDITIONS:

1. Unit ___ is in an ATWS.
2. SLC was manually initiated from the control room but the Squib valves failed to fire. All three SLC Injection Pumps are shut down.

INITIATING CUES:

You are directed by Shift Supervision to obtain the required equipment and perform T-212 on Unit ___ to inject SLC to the vessel beginning with step 4.3

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
<p>* 1. Obtain current revision of T-212.</p> <p>Cue: Once the trainee demonstrates the ability to locate the current revision of the procedure, provide him/her a copy.</p>	Current revision of T-212 obtained.	
<p>*2. Obtain the following equipment from the Unit * T-200 cabinet (506-R16-283/580-R17-283) (Attachment 1). BL-840 key required:</p> <p>- (1) 20 foot Hydraulic hose with female Parker fittings - (1) LV-*00 Key</p> <p>Cue: You have obtained the equipment.</p>	<p>The following equipment obtained from Unit * T-200 cabinet:</p> <p>- (1) 20 foot Hydraulic hose with female Parker fittings - (1) LV-*00 Key</p>	
<p>3. CONNECT hose between the following:</p>	N/A	N/A
<p>*4. Parker fitting at 48-*001 "SBLC Test Return Line Vent Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Hose fitting is connected.</p>	One end of 20 foot hose is connected at 48-*001	
<p>*5. Parker fitting at 48-*015 "SBLC Pps Disch Hdr Test Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Hose fitting is connected.</p>	The free end of the 20 foot hose is connected at 48-*015	
<p>*6. UNLOCK AND OPEN 48-*F021, "SBLC Test Return Line Vent Vlv" (500-R16-283/574-R17-283).</p> <p>Cue: Lock is removed, handwheel rotates counter clockwise and then comes to a stop.)</p>	48-*F021 unlocked and open.	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
<p>*7. OPEN 48-*001, "SBLC Test Return Line Vent Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Valve handwheel rotates counter clockwise and then comes to a stop.</p>	48-*001 open.	
<p>*8. UNLOCK AND OPEN 48-*014, "SBLC Pps Disch Hdr Test Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Lock is removed, handwheel rotates counter clockwise and then comes to a stop.)</p>	48-*014 unlocked and open.	
<p>9. OPEN 48-*015, "SBLC Pps Disch Hdr Test Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Valve handwheel rotates counter clockwise and then comes to a stop.</p>	48-*015 open.	
<p>10. OPEN the following:</p>	N/A	N/A
<p>*11. 48-*F017A, "A SBLC Pp Recirc Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Valve handwheel rotates counter clockwise and then comes to a stop.</p>	48-*F017A open.	
<p>*12. 48-*F017B, "B SBLC Pp Recirc Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Valve handwheel rotates counter clockwise and then comes to a stop.</p>	48-*F017B open.	
<p>*13. 48-*F017C, "C SBLC Pp Recirc Vlv" (500-R16-283/574-R17-283)</p> <p>Cue: Valve handwheel rotates counter clockwise and then comes to a stop.</p>	48-*F017C open.	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
<p>*14. START one of the following SLC Injection Pumps, by holding keylock switch at panel *0C603 (Main Control Room) in "RUN" for at least 1 second before releasing:</p> <ul style="list-style-type: none"> • *AP208, "SLC Injection Pump" • *BP208, "SLC Injection Pump" • *CP208, "SLC Injection Pump" <p>Cue: When the candidate notifies the MCR to start a SLC pump or a SLC pump is started by the candidate then say: "You can stop here, you have met the termination criteria for this JPM."</p>	<p>Recognize the need to start a SLC pump and notify control room operators that SLC is aligned per T-212 and that they need to start a SLC pump.</p>	

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. Unit ___ is in an ATWS.
2. SLC was manually initiated from the control room but the Squib valves failed to fire. All three SLC Injection Pumps are shut down.

INITIATING CUES:

You are directed by Shift Supervision to obtain the required equipment and perform T-212 on Unit ___ to inject SLC to the vessel beginning with step 4.3

EXELON NUCLEAR

TITLE: SUPPLY EMERGENCY DIV 1 POWER TO HV-49-*F007

TASK PERFORMED BY: _____ EVALUATOR: _____

EVALUATOR SIGNATURE: _____ DATE: _____

DIRECTIONS TO EVALUATOR:

*** NOTE: A locked valve log entry is required for opening terminal box *0TB49-*F007.
The instructor is responsible for ensuring that this entry is made.**

EVALUATION METHOD :

SIMULATE

EVALUATION LOCATION:

PLANT

APPROXIMATE COMPLETION TIME:

20 MINUTES

IMPORTANCE RATING(S):

K6.01 3.4/3.5

SYSTEM NUMBER(S):

217000

REFERENCES:

1. SE-1, Rev. 50, Remote Shutdown

TASK STANDARD(S):

Division 1 Power supplied to HV-49-*F007

EXELON NUCLEAR

TASK CONDITIONS:

1. A fire in the Main Control Room has required evacuation and control of the plant from the RSP
2. Division 3 power is not available
3. RCIC is required but has failed to inject
4. HV-49-*F007 has NO position indication
5. Personnel are stationed at the RSP

INITIATING CUES:

You are directed to supply Div 1 power to HV-49-___F007 in preparation for placing Unit ___ RCIC in service from the RSP in accordance with SE-1 section 4.3.7 Reactor Level Control.

EXELON NUCLEAR

Critical Element(s) indicated by "*" in Performance Checklist.

PERFORMANCE CHECKLIST:

STEP	STANDARD	SAT/UNSAT
1. Obtain current revision of SE-1 (Cue: Provide a copy of SE-1)	Current revision of SE-1 obtained.	
IF the following conditions exist: Div 3 power has been disrupted RCIC fails to inject on manual OR auto start signal HV-49-*F007 has NO position indication THEN PERFORM the following to supply Div 1 power to HV-49-*F007, AND PLACE RCIC in service:		
*2. OPEN D*34-R-E-13 (Cue: D*34-R-E-13 is open)	Breaker D*34-R-E-13 is open	
3. Obtain a screw driver AND LV-*00 key for next step	Screw driver and LV-*00 key in hand	
EVALUATOR NOTE: The instructor should notify the main control room that terminal box *0TB49-*R007 <u>will be opened</u> for training. Ensure locked valve entry made EVALUATOR NOTE: If the candidate requests cues for the following steps concerning the indication lights, when the cabinet is first opened, the top light is OUT, the bottom light is ON. After the transfer switch is placed to EMERGENCY, the lights reverse (top light ON, bottom light OUT).		
*4. UNLOCK AND OPEN terminal box *0TB49-*F007 (Unit 1: 402-R15-253, Unit 2: 475-R14-253).	Terminal box unlocked and opened using LV-*00 key.	
*5. PLACE 43-CB22313, "Manual Transfer Switch" (located in terminal box *0TB49-*F007), in "EMERGENCY" (Red handle down) (Cue: Switch is in EMERGENCY)	43-CB22313 Manual Transfer Switch in EMERGENCY	
*6. UNLOCK AND CLOSE D*14-R-C-31, "RCIC Main Steam Inbd PCIV" (EMERGENCY POWER). (Unit 1: 506-R11-283 Unit 2: 580-R17-283) (Cue: D*14-R-C-31 is unlocked and closed)	D*14-R-C-31 unlocked and closed	

EXELON NUCLEAR

STEP	STANDARD	SAT/UNSAT
*7. OPEN HV-49-*F007 (INBOARD) at *0C201. (Cue: HV-49-*F007 is OPEN)	Call Operators at RSP and request that they open HV-49-*F007	
*8. LOCK OPEN D*14-R-C-31 (Cue: breaker is locked open)	Breaker D*14-R-C-31 is locked open	
(Cue: "You can stop here, you have met the termination criteria of this JPM".)		

EXELON NUCLEAR

Comments:

Note: Any grade of UNSAT requires a comment.

JPM Overall Rating: _____
SAT/UNSAT

EXELON NUCLEAR

TASK CONDITIONS:

1. A fire in the Main Control Room has required evacuation and control of the plant from the RSP
2. Division 3 power is not available
3. RCIC is required but has failed to inject
4. HV-49-*F007 has NO position indication
5. Personnel are stationed at the RSP

INITIATING CUES:

You are directed to supply Div 1 power to HV-49-____F007 in preparation for placing Unit ____ RCIC in service from the RSP in accordance with SE-1 section 4.3.7 Reactor Level Control.