

Facility: Nine Mile Point # 2
Exam Level (circle one): RO & SRO

Date of Examination: 7/29/2002
Operating Test No.: RO 1,2/SRO-I All

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
JPM 1 Recirc Flow Control/ Transfer Operating RCS HPU Subloops KA 202002 A4.02 2.8/2.8; Task 202-907-01-01; N2-OP-29 F.2.0	S/N	1
JPM 2 Feedwater Level Control/ Resetting Feedwater Level Setdown KA 259002 A4.10 3.1/2.9; Task 259-903-01-01; N2-OP-3 H.2.0	S/N/L	2
JPM 3 High Pressure Core Spray/ Add Water To Suppression Pool With CSH Pump (Alternate Path) CSH Pump Trip Continue Filling By Gravity Drain KA 209002 A4.09 3.4/3.5; Tasks 206-907-01-01, 206-906-01-01; N2-OP-33	S/N/A	3
JPM 4 Reactor Water Cleanup & PCIS/ Return Reactor Water Cleanup To Normal Following Reduction Of Feedwater Stratification Operation (Alternate Path, WCS Leak Requires Manual Isolation) KA 223002 A2.03 3.0/3.3; Task 204-911-01-01; N2-OP-37 F.7.0, N2-SOP-83	S/N/L/A	2
JPM 5 Reactor Protection System/ Perform RPS Weekly Manual Scram Surveillance Test For "C" And "B" Channels KA 212000 A4.02 3.6/3.7; Task 212-002-01-01; N2-OSP-RPS-W002	S/N	7
JPM 6 RCIC/ RCIC Injection With Oscillations Alternate Path, Requires Manual Speed/Flow Control (O2-OPS-SJE-217-2-05) KA 217000 A4.01 3.7/3.7; Task 217-915-01-01; N2-OP-35	S/D/A	4
JPM 7 AC Distribution/ Energize NNS-SWG-015 from ENS*SWG103 During Station Blackout Recovery (PRA) KA 262001 A2.07 3.0/3.2; Task 262-935-05-01; N2-SOP-3 Section D.10.0	S/N	6

B.2 Facility Walk-Through

JPM 8 AC Distribution RPS/ Reset EPA Breaker 2VBS*ACB2A With Overvoltage Condition Present (Alternate Path) KA 262001 A2.06 2.7/2.9; Task 212-901-01-04; N2-SOP-97 Section 4.2.3 Condition One	N/A	6
JPM 9 Control Rod Drive/Vent Scram Air Header in the Reactor Building (O2-OPS-PJE-200-2-04) KA 201001 A2.09 3.2/3.1; Task 200-960-05-04; N2-EOP-6 Att 14 Step 3.2.2	D/R	1
JPM 10 Spent Fuel Pool Cooling/ Lineup Service Water To Spent Fuel Pool Cooling Heat Exchanger With Control Room Evacuated KA 233000 A2.08 2.9/3.1; Task 233-923-04-01; N2-SOP-38 Section 4.5	N/R	9

* 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: Nine Mile Point # 2
 Exam Level (circle one): SRO

Date of Examination: 7/29/2002
 Operating Test No.: SRO Upgrade 1, 2 & 3

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
JPM 1 Recirc Flow Control/ Transfer Operating RCS HPU Subloops KA 202002 A4.02 2.8/2.8; Task 202-907-01-01; N2-OP-29 F.2.0	S/N	1
JPM 2 Feedwater Level Control/ Resetting Feedwater Level Setdown KA 259002 A4.10 3.1/2.9; Task 259-903-01-01; N2-OP-3 H.2.0	S/N/L	2
JPM 3 High Pressure Core Spray/ Add Water To Suppression Pool With CSH Pump (Alternate Path) CSH Pump Trip Continue Filling By Gravity Drain KA 209002 A4.09 3.4/3.5; Tasks 206-907-01-01, 206-906-01-01; N2-OP-33	S/N/A	3

B.2 Facility Walk-Through


JPM 8 AC Distribution RPS/ Reset EPA Breaker 2VBS*ACB2A With Overvoltage Condition Present (Alternate Path) KA 262001 A2.06 2.7/2.9; Task 212-901-01-04; N2-SOP-97 Section 4.2.3 Condition One	M/A	6
JPM 10 Spent Fuel Pool Cooling/ Lineup Service Water To Spent Fuel Pool Cooling Heat Exchanger With Control Room Evacuated KA 233000 A2.08 2.9/3.1; Task 233-923-04-01; N2-SOP-38 Section 4.5	N/R	9


* 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

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: Recirculation Flow Control, Transfer Operating RCS HPU Subloops Revision: 0
Task Number: 202-907-01-01-2 Startup the Hydraulic Power Unit from the Control Room and Transfer to Alternate Sub-Loop

Approvals:


General Supervisor
Operations Training (Designee) 1 6/5/02
Date


General Supervisor
Operations (Designee) 1 6/3/02
Date

NA EXAM SECURITY
Configuration Control
Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 min. Time Critical Task: No Alternate Path Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)
Simulator

Simulator Set-up (if required):
IC 13

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-OP-29, Rev 08, Sect. F 2.0
2. NUREG K/A 202002 A4.02

Tools and Equipment:

1. None

Task Standard:

Hydraulic Power Unit "A" has been transferred such that Subloop 1 is in "LEAD" operation.

Initial Conditions:

1. The Plant is operating at 25% power.
2. Routine equipment rotations are taking place at this time.

Initiating Cues:

“(Operator’s name), transfer HPU “A” operational Subloop from Subloop 2 to Subloop 1 per N2-OP-29, Section F.2.0. Because this is being done for routine equipment rotation GETARS trending is NOT required for this evolution.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-01/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-OP-29 obtained. Precautions & limitations reviewed & section F.2.0 referenced.	Sat/Unsat
3. Verify operational status of Subloop 2 HPU.	At P634, verify Subloop 2 HPU operational <u>AND</u> controlling Flow Control Valve.	Sat/Unsat
4. Verify Subloop 1 HPU readiness for operation.	Verify or if necessary, momentarily depress Subloop 1 “ READY ” pushbutton to obtain; <ul style="list-style-type: none"> • Subloop 1 “READY” light illuminated. • Subloop 1 “MAINTENANCE” light extinguished. 	Sat/Unsat
5. Start Subloop 1 HPU’s Pump/Fan Motor.	Momentarily depress Subloop 1 “ PUMP/FAN MOTOR ” pushbutton <u>AND</u> verify the following Subloop 1 indications are illuminated; <ul style="list-style-type: none"> • Subloop 1 “PUMP/FAN MOTOR” light. • Subloop 1 “PRESSURIZED” light OR local pressure gauge indicates 1850~1950 psi. 	Pass/Fail
CUE: <u>If asked, function as the AO and report local gauge pressure reading of approximately 1900 psig for Subloop 1.</u> <u>If asked, function as the AO and report local gauge pressure for the standby subloop is reading 0 psig</u>		

Performance Steps	Standard	Grade
<p>6. Place Subloop 1 HPU into "LEAD" operation.</p> <p>CUE: <u>If asked, function as the AO and report local gauge pressure is still reading of approximately 1900 psig.</u></p>	<p>Depress Subloop 1 "LEAD" pushbutton and verify the following indications illuminated;</p> <ul style="list-style-type: none"> • Subloop 1, "LEAD" light. • Subloop 1, "OPERATIONAL" light. • Subloop 1, "PRESSURIZED" light OR local pressure gauge indicates 1850~1950 psi. • Subloop 2, "PUMP/FAN MOTOR STOP" light. • Subloop 2, "READY" light. 	<p>Pass/Fail</p>
<p>•7. Respond to Annunciator 602105 "RECIRC FCV "A" MOTION INHIBIT".</p> <p>CUE: <u>Inform Candidate that another Operator has responded to the ARP and the alarm cleared immediately following its receipt.</u></p> <p>CUE: <u>As the system engineer acknowledge the report of annunciator 602105 receipt during the Subloop transfer.</u></p>	<p>References the next step in the procedure and calls the system engineer so that the event can be trended.</p>	<p>Sat/Unsat</p>
<p>•8. Ensure Subloop 2 is in the "Standby" mode.</p> <p>CUE: <u>If asked, function as the AO and report local gauge pressure for Subloop 2 is reading approximately 0 psig.</u></p>	<p>If the "MAINTANANCE" light came on for the idle Subloop AFTER the Subloop transfer, perform the following;</p> <ul style="list-style-type: none"> • Depress the "READY" pushbutton to place Subloop 2 in "STANDBY". • Initiate a PID to correct the potential nitrogen bladder leakage. 	<p>Sat/Unsat/ NA</p>
<p>•9. Notify the SSS of the condition of Hydraulic Power Unit "A".</p> <p>CUE: <u>As the SSS, acknowledge the Candidates report concerning the status of HPU "A".</u></p>	<p>Notifies the SSS of the following:</p> <ul style="list-style-type: none"> • HPU "A" Subloop 1 is in OPERATION. • HPU "A" Subloop 2 is in STANDBY. 	<p>Sat/Unsat Sat/Unsat</p>

Terminating Cue: Hydraulic Power Unit "A" Subloop 1 is in "operation" and Subloop 2 is in "standby".

RECORD STOP TIME _____

Initial Conditions:

1. The Plant is operating at 25% power.
2. Routine equipment rotations are taking place at this time.

Initiating Cues:

“(Operator’s name), transfer HPU “A” operational Subloop from Subloop 2 to Subloop 1 per N2-OP-29, Section F.2.0. Because this is being done for routine equipment rotation GETARS trending is NOT required for this evolution.”

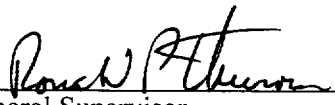
NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

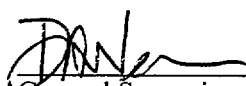
Title: Resetting Feedwater Level Setdown.

Revision: 0

Task Number: 259-903-01-01-2 – Reset a Level Setpoint Setdown.

Approvals:

 16/5/02
General Supervisor Date
Operations Training (Designee)

 16/3/02
General Supervisor Date
Operations (Designee)

NA Exam Security
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: X Perform Simulate

Evaluation Location: Plant X Simulator

Expected Completion Time: 12 min. Time Critical Task: No Alternate Path Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____

Date: _____

Recommended Start Location: (Completion time based on the start location)
Simulator

Simulator Set-up (if required):
IC 13

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-OP-3, Sect. H.2.0
2. NUREG K/A 259002 A4.10

Tools and Equipment:

1. None

Task Standard:

Reset Feedwater Level Setdown at 25% power following an inadvertent actuation of the circuit by I&C.

Initial Conditions:

1. A Plant shutdown is in progress and Reactor Power is currently 25%.
2. I&C has caused an inadvertent actuation of the Feedwater Level Setdown Setpoint.
3. All surveillance testing and Plant power changes have been halted at this time.

Initiating Cues:

“(Operator’s name), reset the Feedwater Level Setdown Setpoint in accordance with N2-OP-3, Section H.2.0.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-OP-3 obtained. Precautions & limitations reviewed & section H.2.0 referenced.	Sat/Unsat
3. Confirm level setpoint Setdown and Reactor Pressure Vessel (RPV) water level.	Level setpoint setdown AMBER light is LIT .	Sat/Unsat
4. Place Feedwater Level Control System in Master Manual.	Places the FWLC System in MASTER MANUAL by performing the following; <ul style="list-style-type: none"> Depress MANUAL (M) pushbutton on 2FWS-HIC1600 FEEDWATER MASTER CONTROLLER, and Observing the Auto (A) Green light extinguishes and the Manual (M) Amber light is illuminated. 	Pass/Fail Sat/Unsat
5. Restore <u>AND</u> Maintain Reactor Pressure Vessel water level between 178.3” and 187.3”.	Using the open/close detent pushbuttons on 2FWS-HIC1600 ; <ul style="list-style-type: none"> Slowly RESTORE RPV water level to between 178.3” and 187.3” 	Pass/Fail Pass/Fail

Performance Steps	Standard	Grade
Evaluator Note: Candidate is expected to restore and maintain water level between 178.3" and 187.3".	Control RPV water level between 178.3" and 187.3" without causing a High Water Level Trip at 202.8" AND without causing a Low Water Level Scram at 159.3 "	Pass/Fail
6. Reset the Feedwater Level Control System Setdown Setpoint.	Resets the Feedwater Level Control System Setdown Setpoint by; <ul style="list-style-type: none"> • Depressing the Setdown Setpoint Reset pushbutton, and • Confirms the Amber light is extinguished. 	Pass/Fail Sat/Unsat
7. Null the appropriate Controller.	Using the thumbwheel on 2FWS-HIC1600 null the Controller by; <ul style="list-style-type: none"> • Moving the RED indicating needle into the green band indicated on the dial. 	Pass/Fail
8. Return Feedwater Level Control System to Automatic operation.	Places the FWLC System in MASTER AUTOMATIC by performing the following; <ul style="list-style-type: none"> • Depress AUTOMATIC (A) pushbutton on 2FWS-HIC1600 FEEDWATER MASTER CONTROLLER, and • Observing the Auto (A) Green light illuminates and the Manual (M) Amber light is extinguished. 	Pass/Fail Sat/Unsat
9. Monitor Reactor Pressure Vessel Water Level.	Observes and monitors Reactor Pressure Vessel (RPV) WATER LEVEL .	Sat/Unsat
10. Notify the SSS that FWLC System has been transferred.	Notifies the SSS of the following: <ul style="list-style-type: none"> • Feedwater Level Control System Setdown Setpoint has been RESET. • FWLC has been placed in MASTER AUTOMATIC at 2FWS-HIC1600. • Reactor Vessel Water level IS remaining constant at this time. 	Sat/Unsat Sat/Unsat Sat/Unsat
CUE: <u>As the SSS, acknowledge the Candidates report concerning the FWLC System.</u>		
Terminating Cue: Feedwater Level Control System Setpoint has been reset in accordance with N2-OP-3, Section H.2.0.		

RECORD STOP TIME _____

Initial Conditions:

1. A Plant shutdown is in progress and Reactor Power is currently 25%.
2. I&C has caused an inadvertent actuation of the Feedwater Level Setdown Setpoint.
3. All surveillance testing and Plant power changes have been halted at this time.

Initiating Cues:

“(Operator’s name), reset the Feedwater Level Setdown Setpoint in accordance with N2-OP-3, Section H.2.0.”

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: Add Water to the Suppression Pool Using the HPCS System

Revision: 0

Task Number: 206-907-01-01-2 Add Water to the Suppression Pool using the HPCS Pump. **AND**
206-906-01-01-2 Add Water to the Suppression Pool via the HPCS System (Gravity Drain)

Approvals:

Ronald P. Thurman 16/5/02
General Supervisor Date
Operations Training (Designee)

D. A. [Signature] 16/3/02
General Supervisor Date
Operations (Designee)

NA EXAM Security
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 min. Time Critical Task: No Alternate Path Task: Yes

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____

Date: _____

Recommended Start Location: (Completion time based on the start location)
Simulator

Simulator Set-up (if required):
IC 13

Malfunction **CS05** – to trip CSH Pump five (5) seconds after the pump start – **ET063**.

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a “•”.
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-OP-33, Section H.3 and Section H.2
2. NUREG K/A 209002 A4.15

Tools and Equipment:

1. None

Task Standard:

Using the High Pressure Core Spray System raise Suppression Pool water level to 199.9 feet.

Initial Conditions:

1. Reactor Power is 25%.
2. Suppression Pool water level is currently 199.7 feet.

Initiating Cues:

“(Operator’s name), in accordance with N2-OP-33, Section H.3, raise the water level in the Suppression Pool to 199.9 feet using the High Pressure Core Spray System.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-OP-33 obtained. Precautions & limitations reviewed & section H.3.0 referenced.	Sat/Unsat
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CUE: Tell candidate that Subsection F.1.0 has been completed.

3. Verify operational status of the CSH System with the SSS.	Request Operational status of the CSH System.	Sat/Unsat
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CUE: Responding as the SSS, state that the CSH System HAS been declared inoperable.

4. Start CSH*P1.	Verify pump suction aligned to the CST. Places control switch for CSH*P1 in the “START” position. • Checks for “RED” light (Breaker closed). • Checks CSH pump motor amps.	Sat/Unsat Pass/Fail
5. Verify open CSH*MOV105, Minimum Flow Bypass Valve.	• Checks valve “RED” light on.	Sat/Unsat

Performance Steps	Standard	Grade
• 6. Monitor CST AND Suppression Pool levels.	Monitors Suppression Pool water level on either SPDS or 2CMS-LI11B or A .	Sat/Unsat
	Monitors Panel 851, CNS-LI-08A & B for CST water level.	Sat/Unsat
7. Respond to CSH*P1 trip.	Notify SSS that CSH*P1 has tripped on an electrical fault.	Sat/Unsat
	Place control switch for CSH*P1 in the "PULL-TO-LOCK" position.	Sat/Unsat
	Verify system flow and pressure	Sat/Unsat
	Dispatch an AO to investigate the cause of the electrical fault on CSH*P1.	Sat/Unsat
CUE: <u>As the SSS, acknowledge the candidates' report that CSH*P1 has tripped.</u>		
CUE: <u>As the SSS, direct the candidate to continue filling the Suppression Pool using the CSH System and raise pool level to 199.9 feet.</u>		
9. Review/utilize the correct section of the procedure.	References section H.2.0	Sat/Unsat
10. Verify suction flow path.	Verify open CSH*MOV101, PUMP SUCTION FROM CST's .	Sat/Unsat
11. Monitor and maintain CSH discharge pressure to ensure system operability.	Throttle OPEN CSH*MOV111, TEST RETURN TO SUPPRESSION POOL .	Pass/Fail
	<ul style="list-style-type: none"> • Monitor 2CSH*PI117 • Throttle OPEN CSH*MOV111 • Maintain System pressure ≥ 65 psig. 	
•12. Monitor CST AND Suppression Pool levels.	Monitors Suppression Pool water level on either SPDS or 2CMS-LI11B or A .	Sat/Unsat
	Monitors Panel 851, CNS-LI-08A & B for CST water level.	Sat/Unsat

Performance Steps	Standard	Grade
CUE: <u>At the Examiners discretion, cue the operator that Suppression Pool Level is at 199.9 feet.</u>		
12. Secure filling the Suppression Pool.	Check either SPDS or 2CMS-LI11B to ensure Suppression Pool water level is 199.9 feet and holding. Closes CSH*MOV111, TEST RETURN TO SUPPRESION POOL.	Sat/Unsat Pass/Fail
CUE: <u>As the SSS, acknowledge the candidates report concerning the closure of CSH*MOV111 and the operability concerns.</u>	Notifies the SSS that CSH*MOV111 is closed, Suppression Pool level is 199.9 feet AND the operability concern per DER 2-98-0557 no longer exists, but the pump trip has left the CSH System inoperable.	Sat/Unsat
Terminating Cue: Suppression Pool water level at 199.9 feet as read on SPDS or 2CMS-LI11B and the fill lineup secured.		

RECORD STOP TIME _____

Initial Conditions:

1. Reactor Power is 25%.
2. Suppression Pool water level is currently 199.7 feet.

Initiating Cues:

“(Operator’s name), in accordance with N2-OP-33, Section H.3, raise the water level in the Suppression Pool to 199.9 feet using the High Pressure Core Spray System.”

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Return Reactor Water Cleanup to Normal following reduction
of Feedwater Stratification Operation.

Revision: 0

Task Number: 204-911-01-01-2 Transfer the WCS Return to the Feedwater System

Approvals:

Ronald P. Thompson 6/5/02
General Supervisor Date
Operations Training (Designee)

DAN 6/3/02
General Supervisor Date
Operations (Designee)

NA EXAM Security
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 min. Time Critical Task: No Alternate Path Task: Yes

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)
Simulator

Simulator Set-up (if required):

IC 13
Place fourth Filter Demin in service
Close WCS*MOV404A
Appendix "R" Breakers "SHUT" – Remote CU05 SHUT
Open WCS*MOV107 to the Main Condenser and establish 20 gpm blowdown flow
Throttle WCS*MOV200 to obtain F/D flows of 175 gpm
Insert Malfunction CU08, WCS fails to isolate – QUEUED
Activate Malfunction CU07 at 80% when closing WCS*MOV107 to secure blowdown flow

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-OP-37, Rev 08, Sect. F.7.0, N2-SOP-83, ARP 602320 and 602313
2. NUREG K/A 223002 A2.03

Tools and Equipment:

1. None

Task Standard:

WCS Pumps are tripped and the WCS Primary Containment Isolation Valves are closed.

Initial Conditions:

1. Reactor Startup in progress with power at 25%.
2. Reactor Water Cleanup System (WCS) is operating with two (2) pumps and four (4) filter/demins to reduce Feedwater Stratification.
3. Reject flow to the Main Condenser is 20 gpm.

Initiating Cues:

“(Operator’s name), return the Reactor Water Cleanup System to NORMAL operations and secure reject flow to the Main Condenser in accordance with N2-OP-37, Section F.7.0.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-OP-37 obtained. Precautions & limitations reviewed & section F.7.0 referenced.	Sat/Unsat
3. Establish “ NORMAL ” WCS flow to the Feedwater headers.	Monitor WCS differential flow indications on Panels P632 and P642. • 2WCS-FI1620 A & B	Sat/Unsat
	SLOWLY open 2WCS*MOV404A.	Pass/Fail
	Notify CSO to log TIME and DATE for the valve opening.	Sat/Unsat

Performance Steps	Standard	Grade
4. Secure "REJECT" flow to the Main Condenser from the WCS System.	Slowly lower reject flow as indicated on G33-R606 to zero (0) using the manual control of Reject Flow, 2WCS-FIC135 on P602.	Pass/Fail
NOTE: <u>When the Candidate starts closing 2WCS*MOV107, activate malfunction CU07, WCS leak outside Primary Containment, at 80% using F3. CU08, Failure of WCS to Isolate, malfunction is already active as it was queued at the beginning of this JPM.</u>	Close 2WCS*MOV107, REJECT TO MAIN CONDENSER.	Pass/Fail
5. Respond to Annunciator 602320, RWCU DIFF FLOW TIMER BYPASS.	Suspend any operational evolutions that may be causing a perturbation in cleanup system flow UNTIL this annunciator clears.	Sat/Unsat
CUE: <u>When candidates checks flow timer at P642, inform candidate that the timer is functioning the same way as the P632 timer.</u> (E31-R621B Timer at P642 is not functional in the simulator).	Prepare to respond to a cleanup isolation per the appropriate sections of N2-OP-37.	Sat/Unsat
NOTE: <u>This annunciator indicates that WCS differential flow has exceeded its setpoint of 150.5 gpm and that E31-R621A and/or B have started timing out. At the end of 45 seconds, if differential flow has not dropped below 150.5 gpm, a full WCS isolation SHOULD occur.</u>		
•6. When Annunciator 602313, RWCU DIFFERENTIAL FLOW HIGH actuates, determines WCS Isolation should have occurred and did not.	Observes 2WCS*MOV102 AND 2WCS*MOV112 DID NOT close by observing RED lights "ON" and GREEN lights "OFF".	Pass/Fail
CUE: <u>As SSS, concur with recommendation to isolate WCS.</u>	Informs SSS that WCS has failed to isolate.	Sat/Unsat
NOTE: <u>Candidate will either close Isolation Valves based on entry into N2-SOP-83 or Annunciator response for 602313. IF N2-SOP-83 is used as the basis for</u>		

Performance Steps	Standard	Grade
<u>closing the valves, the candidate is expected to followup in the Annunciator Response Procedure.</u>		
<p>•7. Manually closes 2WCS*MOV102 AND/OR 2WCS*MOV112 per N2-SOP-83 (or Annunciator 602313, RWCU DIFFERENTIAL FLOW HIGH response).</p> <p>NOTE: <u>Candidate is to be graded as "Pass" for the critical step if either valve is closed to isolate the leak. The expectation is that both valves will be manually closed.</u></p>	<p>Manually closes 2WCS*MOV102 AND/OR 2WCS*MOV112</p> <ul style="list-style-type: none"> • Obtain KEYS and inserts into keylock switches • Rotates keylock switches to CLOSE position. • Observes GREEN Lights "ON" and RED light "OFF" when valve is full closed. 	Pass/Fail
<p>•8 Followup actions for Annunciator 602313, RWCU DIFFERENTIAL FLOW HIGH, if valves were closed using N2-SOP-83.</p> <p>CUE: <u>If asked what is supplying WCS pump seals, reply that the Control Rod Drive System is supplying WCS Pump seals.</u></p>	<p>Confirms Isolation valves 2WCS*MOV102 AND 2WCS*MOV112 closed.</p> <p>Verifies 2WCS-P1A <u>AND</u> 2WCS-P1B have tripped.</p> <ul style="list-style-type: none"> • Pump GREEN light "ON", <u>AND</u> • Actuation of Annunciator 602314, RWCU PUMP 1A/1B AUTO TRIP. 	Sat/Unsat
<p>•9. Provide vent path for WCS Pump seals, to protect the WCS Pump suction piping from over-pressurization.</p>	<p>Throttle open 2WCS-MOV110, FILTER DEMIN BYPASS VALVE.</p>	Pass/Fail
<p>•10.Report condition of the WCS System to SSS.</p>	<p>Reports the following to the SSS the WCS System has been manually isolated.</p>	Sat/Unsat

Terminating Cue: **WCS System is isolated, the WCS Pumps are tripped and 2WCS*MOV110 is throttled open.**

RECORD STOP TIME _____

Initial Conditions:

1. Reactor Startup in progress with power at 25%.
2. Reactor Water Cleanup System (WCS) is operating with two (2) pumps and four (4) filter/demins to reduce Feedwater Stratification.
3. Reject flow to the Main Condenser is 20 gpm.

Initiating Cues:

“(Operator’s name), return the Reactor Water Cleanup System to NORMAL operations and secure reject flow to the Main Condenser in accordance with N2-OP-37, Section F.7.0.”

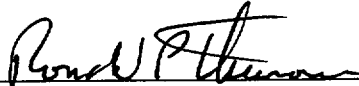
NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE


Title: Reactor Protection System Weekly Manual Scram Test

Revision: 0

Task Number: 212-002-01-01 – Place a RPS Channel in the Tripped Condition

Approvals:

 16/5/02
General Supervisor Date
Operations Training (Designee)

 16/3/02
General Supervisor Date
Operations (Designee)

NA EXAM Security
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: ☒ Perform ☐ Simulate

Evaluation Location: ☐ Plant ☒ Simulator

Expected Completion Time: 15 min. Time Critical Task: No Alternate Path Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)
Simulator

Simulator Set-up (if required):
IC 13

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-OSP-RPS-W002, Sects. 8.3 and 8.4
2. NUREG K/A 2129000 A2.03, A4.02

Tools and Equipment:

1. None

Task Standard:

Complete the RPS Weekly Manual Scram surveillance test for the "C" and "B" RPS channels.

Initial Conditions:

1. Reactor Power is 25%.

Initiating Cues:

“(Operator’s name), Surveillance Test N2-OSP- RPS-W002 is in progress and has been completed through step 8.2.12. The person performing the test is ill and you need to continue its performance until the replacement arrives. Here is the surveillance, continue at step 8.3 and complete through step 8.4, the “C” and “B” RPS channels. By the time you are finished with these two channels the replacement will have arrived.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-01/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-OSP-RPS-W002 obtained.	Sat/Unsat
	General Test Methods, Precautions & limitations reviewed & sections 8.3 and 8.4 referenced.	Sat/Unsat
3. Request assistance for backpanel readings during this surveillance.	Requests the SSS supply an individual to check backpanel reading on 2CEC*PNL609 and 2CEC*PNL611.	Sat/Unsat

CUE: Respond to the Candidates request and say that you will be providing the requested information from 2CEC*PNL609 and 2CEC*PNL611.

4. Verify Plant conditions for performing the manual scram Channel “C” test.	Verify that there is <u>NO</u> half scram on RPS “B” side.	
	<ul style="list-style-type: none"> • RPS B AUTO TRIP, annunciator 603410, <u>NOT</u> in alarm. • RPS B MANUAL TRIP, annunciator 603411, <u>NOT</u> in alarm. • PILOT SCRAM VALVE SOLENOIDS B, D, F & H are illuminated. 	Sat/Unsat Sat/Unsat Sat/Unsat

Performance Steps	Standard	Grade
5. Notify CSO of RPS Weekly Manual Scram Surveillance Test for RPS "C".	<p>Notify CSO prior to the start of the surveillance.</p> <p>Ensures the CSO is aware that the surveillance WILL generate a HALF SCRAM on the "A" side of RPS.</p>	<p>Sat/Unsat</p> <p>Sat/Unsat</p>
6. Initiate a half scram.	<p>Arm the REACTOR SCRAM A2 pushbutton by rotating the sleeve clockwise.</p> <ul style="list-style-type: none"> Verify annunciator 603113, RPS A MANUAL SCRAM SWITCH ARMED, has alarmed. <p>Depress AND hold the REACTOR SCRAM A2 pushbutton.</p> <ul style="list-style-type: none"> Verify annunciator 603110, RPS A AUTO TRIP, has alarmed. Verify annunciator 603111, RPS A MANUAL TRIP, has alarmed. 	<p>Pass/Fail</p> <p>Sat/Unsat</p> <p>Pass/Fail</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p>
7. Verify Status of Indicating Lights.	Check and verify that the indicating lights for the PILOT SCRAM VALVE SOLENOIDS A, C, E & G are extinguished.	Sat/Unsat
<p>CUE: When asked the status of the <u>REACTOR SCRAM TRIP LOGIC A2 indicating light on 2CEC*PNL609</u>, reply that;</p> <p><u>"REACTOR SCRAM TRIP LOGIC A2 indicating light on 2CEC*PNL609 is extinguished."</u></p>		
8. Reset the half scram.	Place the REACTOR SCRAM RESET LOCIC "C" switch on P603 to the RESET position and then let it return to NORMAL .	Pass/Fail
9. Verify computer printouts for the TRIPPED condition.	<p>Verify that the "SEQUENCE OF EVENTS" printer, printed the following for the "TRIPPED" condition:</p> <ul style="list-style-type: none"> RPSUC01, RPS A MANUAL TRIP, printed out as "TRIPPED". RPSUC03, RPS A AUTO TRIP, printed out as "TRIPPED". 	<p>Sat/Unsat</p> <p>Sat/Unsat</p>

Performance Steps	Standard	Grade
	<p>Verify that the "PLANT COMPUTER" printer, printed the following for the "TRIPPED" condition:</p> <ul style="list-style-type: none"> • RPSUC01, RPS A MANUAL TRIP, printed out as "TRIPPED". • RPSUC03, RPS A AUTO TRIP, printed out as "TRIPPED". 	<p>Sat/Unsat</p> <p>Sat/Unsat</p>
10. Verify annunciators and computer printouts for the RESET condition.	<p>Verify annunciator 603110, RPS A AUTO TRIP, has extinguished.</p> <p>Verify annunciator 603111, RPS A MANUAL TRIP, has extinguished.</p> <p>Verify that the "SEQUENCE OF EVENTS" printer, printed the following for the "RESET" condition:</p> <ul style="list-style-type: none"> • RPSUC01, RPS A MANUAL TRIP, printed out as "ALMCLR". • RPSUC03, RPS A AUTO TRIP, printed out as "ALMCLR". <p>Verify that the "PLANT COMPUTER" printer, printed the following for the "RESET" condition:</p> <ul style="list-style-type: none"> • RPSUC01, RPS A MANUAL TRIP, printed out as "ALMCLR". • RPSUC03, RPS A AUTO TRIP, printed out as "ALMCLR". 	<p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p>
<p>11. Verify Status of Indicating Lights.</p> <p>CUE: <u>When asked the status of the REACTOR SCRAM TRIP LOGIC A2 indicating light on 2CEC*PNL609, reply that;</u></p> <p><u>"REACTOR SCRAM TRIP LOGIC A2 indicating light on 2CEC*PNL609 is illuminated."</u></p>	<p>Check and verify that the indicating lights for the PILOT SCRAM VALVE SOLENOIDS A, C, E & G are illuminated.</p>	<p>Sat/Unsat</p>
12. Disarm the RPS Channel A2 manual scram pushbutton.	<p>Disarm the REACTOR SCRAM A2 pushbutton by rotating the sleeve counter-clockwise.</p> <p>Verify annunciator 603113, RPS A MANUAL SCRAM SWITCH ARMED, has extinguished.</p>	<p>Sat/Unsat</p> <p>Sat/Unsat</p>

Performance Steps	Standard	Grade
13. Verify Plant conditions for performing the manual scram Channel "B" test.	<p>Verify that there is <u>NO</u> half scram on RPS "A" side.</p> <ul style="list-style-type: none"> • RPS A AUTO TRIP, annunciator 603110, <u>NOT</u> in alarm. • RPS A MANUAL TRIP, annunciator 603111 <u>NOT</u> in alarm. • PILOT SCRAM VALVE SOLENOIDS A, C, E & G are illuminated. 	<p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p>
14. Notify CSO of RPS Weekly Manual Scram Surveillance Test for RPS "B".	<p>Notify CSO prior to the start of the surveillance.</p> <p>Ensures the CSO is aware that the surveillance <u>WILL</u> generate a HALF SCRAM on the "B" side of RPS.</p>	<p>Sat/Unsat</p> <p>Sat/Unsat</p>
15. Initiate a half scram.	<p>Arm the REACTOR SCRAM B1 pushbutton by rotating the sleeve clockwise.</p> <ul style="list-style-type: none"> • Verify annunciator 603413, RPS B MANUAL SCRAM SWITCH ARMED, has alarmed. <p>Depress <u>AND</u> hold the REACTOR SCRAM B1 pushbutton.</p> <ul style="list-style-type: none"> • Verify annunciator 603410, RPS B AUTO TRIP, has alarmed. • Verify annunciator 603411, RPS B MANUAL TRIP, has alarmed. 	<p>Pass/Fail</p> <p>Sat/Unsat</p> <p>Pass/Fail</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p>
16. Verify Status of Indicating Lights.	<p>Check and verify that the indicating lights for the PILOT SCRAM VALVE SOLENOIDS B, D, F & H are extinguished.</p>	<p>Sat/Unsat</p>
<p>CUE: <u>When asked the status of the REACTOR SCRAM TRIP LOGIC B1 indicating light on 2CEC*PNL611, reply that;</u></p> <p><u>"REACTOR SCRAM TRIP LOGIC B1 indicating light on 2CEC*PNL611 is extinguished."</u></p>		

Performance Steps	Standard	Grade
17. Reset the half scram.	Place the REACTOR SCRAM RESET LOCIC "B" switch on P603 to the RESET position and then let it return to NORMAL .	Pass/Fail
18. Verify computer printouts for the TRIPPED condition.	<p>Verify that the "SEQUENCE OF EVENTS" printer, printed the following for the "TRIPPED" condition:</p> <ul style="list-style-type: none"> • RPSUC02, RPS B MANUAL TRIP, printed out as "TRIPPED". • RPSUC04, RPS B AUTO TRIP, printed out as "TRIPPED". <p>Verify that the "PLANT COMPUTER" printer, printed the following for the "TRIPPED" condition:</p> <ul style="list-style-type: none"> • RPSUC02, RPS B MANUAL TRIP, printed out as "TRIPPED". • RPSUC04, RPS B AUTO TRIP, printed out as "TRIPPED". 	<p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p>
19. Verify annunciators and computer printouts for the RESET condition.	<p>Verify annunciator 603410, RPS B AUTO TRIP, has extinguished.</p> <p>Verify annunciator 603411, RPS B MANUAL TRIP, has extinguished.</p> <p>Verify that the "SEQUENCE OF EVENTS" printer, printed the following for the "RESET" condition:</p> <ul style="list-style-type: none"> • RPSUC02, RPS B MANUAL TRIP, printed out as "ALMCLR". • RPSUC04, RPS B AUTO TRIP, printed out as "ALMCLR". <p>Verify that the "PLANT COMPUTER" printer, printed the following for the "RESET" condition:</p> <ul style="list-style-type: none"> • RPSUC02, RPS B MANUAL TRIP, printed out as "ALMCLR". • RPSUC04, RPS B AUTO TRIP, printed out as "ALMCLR". 	<p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p> <p>Sat/Unsat</p>

Performance Steps	Standard	Grade
20. Verify Status of Indicating Lights.	Check and verify that the indicating lights for the PILOT SCRAM VALVE SOLENOIDS B, D, F & H are illuminated.	Sat/Unsat
CUE: <u>When asked the status of the REACTOR SCRAM TRIP LOGIC B1 indicating light on 2CEC*PNL611, reply that;</u> <u>“REACTOR SCRAM TRIP LOGIC B1 indicating light on 2CEC*PNL611 is illuminated.”</u>		
21. Disarm the RPS Channel B1 manual scram pushbutton.	Disarm the REACTOR SCRAM B1 pushbutton by rotating the sleeve counter-clockwise.	Sat/Unsat
	Verify annunciator 603413, RPS B MANUAL SCRAM SWITCH ARMED , has extinguished.	Sat/Unsat
22. Notify the SSS of surveillance status.	Notifies the SSS that N2-OSP-RPS-W002, Sections 8.3 and 8.4 for the “B” and “C” RPS Channels have been completed.	Sat/Unsat
CUE: <u>As the SSS, acknowledge the Candidates report and tell him/her that the replacement for the performance of this test has arrived.</u>		

Terminating Cue: **The RPS Weekly Manual Scram surveillance test for the “C” and “B” RPS channels has been completed and all half scram signals are reset.**

RECORD STOP TIME _____

Initial Conditions:

1. Reactor Power is 25%.

Initiating Cues:

“(Operator’s name), Surveillance Test N2-OSP- RPS-W002 is in progress and has been completed through step 8.2.12. The person performing the test is ill and you need to continue its performance until the replacement arrives. Here is the surveillance, continue at step 8.3 and complete through step 8.4, the “C” and “B” RPS channels. By the time you are finished with these two channels the replacement will have arrived.”

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: RCIC Injection With Oscillations (Faulted)

Revision: 2

Task Number: 2179150101 - Perform a manual startup of RCIC from the Control Room

Approvals:

[Signature] / 6/5/02
General Supervisor Date
Operations Training (Designee)

[Signature] / 6/3/02
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 min. Time Critical Task: No Alternate Path Task: Yes

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator's Signature: _____

Date: _____

Recommended Start Location: (Completion time based on the start location)

Simulator

Simulator Set-up (if required):

1. RPV pressure >300 psig
2. Malfunction RC04, Queued off Event Trigger 049 [Relatives]
Event Trigger 050
3. RPV water level < 125 inches and lowering.

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self-verification shall be demonstrated.
3. During Training JPM:
 - Self-verification shall be demonstrated.
 - Additional verification shall be demonstrated.

References:

1. N2-OP-35, Section F.2.0
2. NUREG K/A 217000 A4.01 3.7/3.7

Tools and Equipment:

None

Task Standard:

RCIC Flow Controller in Manual and injecting to RPV at approximately 600 gpm.

Initial Conditions:

1. Reactor pressure is (report digital pressure reading on P603)
2. RPV level is lowering.

Initiating Cues:

“(Operator’s name), initiate RCIC per N2-OP-35, Section F.2.0, inject into the RPV and establish rated flow.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary.</i>	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-OP-35 obtained. Precautions & limitations reviewed and Section F.2.0 referenced.	Sat/Unsat
3. Initiate RCIC.	At P601, rotate RCIC manual initiation pushbutton collar to armed position.	Pass/Fail
	Depress RCIC manual initiation pushbutton.	Pass/Fail
4. Verify RCIC System response.	Verifies RCIC has started properly by verifying the following: <ul style="list-style-type: none"> • Gland Seal System Air Compressor STARTS. • 2ICS*MOV116, Lube Oil Cooling Water Supply, OPENS. • 2ICS*MOV120, Turbine Steam Supply Valve, OPENS. • 2 ICS*MOV126, RCIC Pump discharge to the Reactor, OPENS. • 2ICS*MOV143, RCIC Pump minimum flow to the Suppression Pool. OPENS and then CLOSES once discharge flow is greater than 220 gpm. • 2 ICS*AOV 156 and 157, RCIC Injection Outboard and Inboard Isolation Valves, OPEN once System Pressure is greater than Reactor Pressure. 	Sat/Unsat Sat/Unsat Sat/Unsat Sat/Unsat Sat/Unsat Sat/Unsat

Performance Steps	Standard	Grade
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5. Observe and respond to failure of the RCIC System flow controller in "AUTO".	Recognizes as RCIC Flow is increasing that the flow to the Reactor Vessel is OSCILLATING .	Pass/Fail
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Places 2ICS*FC101, RCIC Flow Controller in "MANUAL" and ESTABLISHES approximately 600 gpm flow rate.	Pass/Fail
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6. Report system response.

Reports to the SSS;

- | | |
|---|-----------|
| • RCIC is injecting to the Reactor Vessel at 600 gpm in the MANUAL mode. | Sat/Unsat |
| • The Flow Controller, 2ICS*FC101, IS NOT in the AUTOMATIC mode due to flow oscillations during startup of the RCIC System. | Sat/Unsat |
| • Current Reactor Vessel Level. | |

CUE: As the SSS, respond to the Candidates report on the RCIC System.

CUE: If asked, tell the Candidate that RCIC flow is still required, and to monitor the RCIC System for any further signs of malfunctions.

Terminating Cue: The RCIC System is injecting in the manual mode at rated flow conditions.

RECORD STOP TIME _____

Initial Conditions:

1. Reactor pressure is (report digital pressure reading on P603)
2. RPV level is lowering.

Initiating Cues:

“(Operator’s name), initiate RCIC per N2-OP-35, Section F.2.0, inject into the RPV and establish rated flow.”

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: Energizing 2NNS-SWG015 from 2ENS*SWG103

Revision: 0

Task Number: 262-935-05-01-2 Energize 2NNS-SWG015 from an EDG during Station Blackout conditions. (PRA)

Approvals:

[Signature] 1 6/5/02
General Supervisor
Operations Training (Designee) Date

[Signature] 16/3/02
General Supervisor
Operations (Designee) Date

NA EXAM SECURITY
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: ☒ Perform _____ Simulate

Evaluation Location: _____ Plant ☒ Simulator

Expected Completion Time: 12 min. Time Critical Task: No Alternate Path Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)
Simulator

Simulator Set-up (if required):

IC 13

Insert Malfunctions **ED02A** and **ED02B** by queuing them.

Manually **SCRAM** the Reactor using the Mode Switch.

Let conditions stabilize and then save the setup to a clean IC

Perform SOP-03, D.2.4 Fault Identification.

Perform SOP-03, D.9.5 to energize ENS*SWG103 from Division III Emergency Diesel Generator

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-SOP-3, Section D.10.3
2. NUREG K/A 2629001 A2.07
3. PRA Task 262-935-05-01

Tools and Equipment:

1. None

Task Standard: Energize 2NNS-SWG015 from 2ENS*SWG103.

Initial Conditions:

1. The Reactor has just been manually scrammed.
2. A Station Black Out (SBO) is in progress.
3. 2NNS-SWG015 is required for this SBO recovery.
4. N2-SOP-3, Section D.2.4, Fault Identification is complete.
5. ENS*SWG103 is energized from the Division III Emergency Diesel Generator, per N2-SOP-3, D.9.5

Initiating Cues:

“(Operator’s name), energize 2NNS-SWG015 from 2ENS*SWG103 in accordance with N2-SOP-03, Section D.10.3.”

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-SOP-3 obtained. Section D.10.3 is referenced.	Sat/Unsat
3. Secure Normal electrical feed to 2NNS-SWG015.	Disconnect 2NNS-SWG015 from 2NPS-SWG003. • Verifies Breaker 15-3 in the “ Pull-to-Lock ” position.	Sat/Unsat
4. Bypass the Division II LOCA signal.	Obtain a PA2235 KEY from the CSO’s desk. At P852, place the Division II LOCA Signal Bypass Switch to the “ON” position. • Verifies annunciator 852236 EDG 3 LOCA Bypass switch “ON”.	Sat/Unsat Pass/Fail Sat/Unsat

Performance Steps	Standard	Grade
6. Verify status of Breaker 103-8 on 2ENS*SWG103 .	Dispatch an AO to 2ENS*SWG103 , in the Control Building 261' elevation. • Verify reset on 86-2ENSY12 .	Sat/Unsat
CUE: <u>When dispatched as the AO wait one minute and report that "86-ENSY12 is reset."</u>		
7. Close emergency feed breaker from 2ENS*SWG103 .	Close Breaker 103-8, 2ENS*SWG103 Feeder Breaker to 2NNS-SWG015 . • Observe RED light " ON ".	Pass/Fail Sat/Unsat
8. Close emergency supply breaker to 2NNS-SWG015 .	Close Breaker 15-8, 2NNS-SWG015 Supply Breaker from 2ENS*SWG103 . • Observe RED light " ON ". • Observe 4KV normal Bus NNS-015 at about 4200 VAC.	Pass/Fail Sat/Unsat Sat/Unsat
9. Reports electrical status of 2NNS-SWG015 to the SSS.	Reports the following to the SSS; • 2NNS-SWG015 is being supplied from 2ENS*SWG103 • Current voltage reading on 2NNS-SWG015 is about 4200 VAC.	Sat/Unsat Sat/Unsat
CUE: <u>As the SSS, acknowledge the Candidates report and tell him/her that is all for now.</u>		
Terminating Cue: 2NNS-SWG015 is re-energized from 2ENS*SWG103.		

RECORD STOP TIME _____

Initial Conditions:

1. The Reactor has just been manually scrammed.
2. A Station Black Out (SBO) and recovery is in progress.
3. 2NNS-SWG015 is required for this SBO recovery.
4. N2-SOP-3, Section D.2.4, Fault Identification is complete.
5. ENS*SWG103 is energized from the Division III Emergency Diesel Generator, per N2-SOP-3, D.9.5

Initiating Cues:

“(Operator’s name), energize 2NNS-SWG015 from 2ENS*SWG103 in accordance with N2-SOP-03, Section D.10.3.”

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: Reset EPA Breaker 2VBS*ACB2A with an Overvoltage condition present. Revision: 0

Task Number: 212-901-01-04-2 Reset a Reactor Protection System Electrical Protection Assembly (EPA)

Approvals:

Ronald W. Thurmon 1/6/5/02
General Supervisor Date
Operations Training (Designee)

DAN 16/3/02
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: Perform X Simulate

Evaluation Location: X Plant Simulator

Expected Completion Time: 10 min. Time Critical Task: No Alternate Path Task: Yes

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)
EPA Breaker 2VBS*ACB2A

Simulator Set-up (if required):

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-SOP-97, Section 4.2.3, Condition 1
2. NUREG K/A 262001 A2.06

Tools and Equipment:

1. None

Task Standard:

Reset and close EPA Breaker 2VBS*ACB2A.

Initial Conditions:

1. The Plant is operating at 100% power.
2. EPA Breaker 2VBS*ACB1A is closed.
3. EPA Breaker 2VBS*ACB2A is tripped.

Initiating Cues:

"(Operator's name), reset EPA Breaker 2VBS*ACB2A in accordance with N2-SOP-97, Section 4.2.3."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

- | | | |
|--|---|-----------|
| 2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure. | N2-SOP-97 obtained.
Section 4.2.3 is referenced. | Sat/Unsat |
| 3. Observe and record the status of EPA Breaker 2VBS*ACB2A. | Observe <u>AND</u> record, which targets of the protective relays, has TRIPPED . | Sat/Unsat |

CUE: When asked by the Candidate which of the protective relays has tripped, reply that:
"The Undervoltage target and Underfrequency target lights are OUT.
The Overvoltage target light is LIT."

- | | | |
|----------------------------------|--|-----------|
| 4. Reset EPA Breaker 2VBS*ACB2A. | Simulate a RESET of EPA Breaker 2VBS*ACB2A. | |
| | • Simulate placing the OUTPUT breaker (handle) in the RESET position. | Pass/Fail |
| | • AND THEN simulate placing the OUTPUT breaker (handle) in the ON position. | Pass/Fail |

CUE: Inform the Candidate that the EPA Breaker 2VBS*ACB2A has re-tripped, again on an overvoltage condition.

Alternate Path

5. Reset EPA Breaker 2VBS*ACB2A, bypassing the protective relay.

CUE: Cue the Candidate, as each step occurs:

- Tamper Proof is removed
- Red Knife Switch is open
- TS 3.3.8.2 has been referenced and it is acceptable to proceed.
- EPA Breaker remains closed

Simulate **REMOVING** the tamper proof cover for the **OVERVOLTAGE TEST SW**, located to the right of the Overvoltage Relay.

Pass/Fail

Simulate **BYPASSING** the protective function by simulating **OPENING** the **"RED" KNIFE SWITCH 90°**.

Pass/Fail

Notifies SSS to refer to Tech Spec 3.3.8.2

Pass/Fail

Simulate a **RESET** of EPA Breaker 2VBS*ACB2A.

Pass/Fail

- Simulate placing the **OUTPUT** breaker (handle) in the **RESET** position.

- **AND THEN** simulate placing the **OUTPUT** breaker (handle) in the **ON** position.

6. Report EPA Breaker 2VBS*ACB2A status to the Control Room.

Notify the Control Room;

Sat/Unsat

- The EPA Breaker 2VBS*ACB2A is **RESET** and **ON**.
- The **RED KNIFE SWITCH** for **OVERVOLTAGE** is **"OPEN"**.

CUE: Acting as the SSS, acknowledge the Candidates report and say that ITS is being investigated at this time.

Terminating Cue: EPA Breaker 2VBS*ACB2A has been "RESET" and is "ON" with the Overvoltage relay function bypassed using the "red" Knife Switch.

RECORD STOP TIME _____

Initial Conditions:

1. The Plant is operating at 100% power.
2. EPA Breaker 2VBS*ACB1A is closed.
3. EPA Breaker 2VBS*ACB2A is tripped.

Initiating Cues:

“(Operator’s name), reset EPA Breaker 2VBS*ACB2A in accordance with N2-SOP-97, Section 4.2.3.”

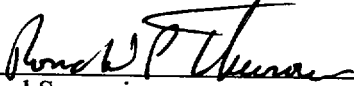
NIAGARA MOHAWK POWER CORPORATION
OPERATOR JOB PERFORMANCE MEASURE

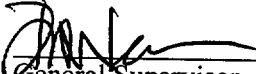
Title: Vent the Scram Air Header

Revision: 6

Task Number: 200-960-05-01-2 Manually Vent the Scram Air Header per EOP-6, attachment 14.

Approvals:

 / 6/5/02
General Supervisor Date
Operations Training (Designee)

 / 6/3/02
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: _____ Perform _____ X _____ Simulate

Evaluation Location: X Plant _____ Simulator

Expected Completion Time: 10 minutes Time Critical Task: No Alternate Path Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator's Signature: _____

Date: _____

Recommended Start Location: (Completion time based on the start location)

Reactor Building El. 261' by access

Simulator Set-up (if required):

None

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self-verification shall be demonstrated.
3. During Training JPM:
 - Self-verification shall be demonstrated.
 - Additional verification shall be demonstrated.

References:

1. N2-EOP-6, Attachment 14, "Alternate Rod Insertions", Section 3.2.2
2. NUREG K/A: 201001 A2.09

Tools and Equipment:

L660 key for EOP box. (If procedure obtained locally)

NRC EXAM JPM # 9

O2-OPS-PJE-200-2-04

Task Standard: CRD Scram Air Header depressurized by locally isolating instrument air makeup and venting the air header.

Initial Conditions:

1. A failure to SCRAM has occurred.
2. All scram solenoid power lights are OFF.
3. Numerous scram valves have failed to open.
4. Annunciator 603306 "CRD scram valve pilot air header pressure "high/low" is extinguished.
5. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), using EOP-6, Attachment 14 Section 3.2.2, vent the Scram Air Header manually from the Reactor Building."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary.</i>	Proper communications used for repeat back.(GAP-OPS-O1/Operations Manual)	Sat/Unsat

RECORD START TIME _____

2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N2-EOP-6, Attachment 14 obtained. Section 3.2.2 referenced.	Sat/Unsat
3. Isolate instrument air makeup. CUE: <u>Once the Candidate has located the appropriate valve, simulate V595 unlocked and shut.</u>	Locate 2RDS-V595 in the RB 261' elevation, by RDS flow control valves. (On ARI solenoid valve rack) • BREAK lock wire and • ROTATE handwheel for 2RDS-V595 clockwise to the shut position.	Pass/Fail
4. Vent air header. CUE: <u>Once the Candidate has located the appropriate valve, simulate V43 open and air header depressurizing.</u>	Locate 2RDS-V43 in the RB 261' elevation, east end of 2NHS-MCC012. • ROTATE the handwheel for 2RDS-V43 counter-clockwise to the open position.	Pass/Fail

Performance Steps	Standard	Grade
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5. Verify Annunciator 603306 in alarm.	Contact the Control Room.	Sat/Unsat
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CUE: <u>Acting as the Control Room contact person tell the Candidate that, "Annunciator 603306, CRD SCRAM VALVE PILOT AIR HDR PRESSURE HIGH/LOW is energized."</u>	Verify annunciator 603306, CRD SCRAM VALVE PILOT AIR HEADER PRESSURE HIGH/LOW is energized.	Sat/Unsat
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6. Check Control Rod Positions.	Contact the Control Room.	Sat/Unsat
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Cue: <u>Acting as the Control Room contact person tell the Candidate that, "all Control Rods are fully inserted."</u>	Verify the status of CONTROL ROD POSITIONS.	Sat/Unsat
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Terminating Cue: All Control Rods fully inserted with the Control Rod Drive Scram Air Header isolated and vented.

RECORD STOP TIME _____

Initial Conditions:

1. A failure to SCRAM has occurred.
2. All scram solenoid power lights are OFF.
3. Numerous scram valves have failed to open.
4. Annunciator 603306 "CRD scram valve pilot air header pressure "high/low" is extinguished.
5. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), using EOP-6, Attachment 14 Section 3.2.2, vent the Scram Air Header manually from the Reactor Building."

NINE MILE POINT NUCLEAR STATION
OPERATOR JOB PERFORMANCE MEASURE

Title: Align Service Water to Spent Fuel Pool Cooling Heat Exchanger "A" Revision: 0
Task Number: 233-923-04-01-2 Restoration of Spent Fuel Pool Cooling System during Control Room evacuation per N2-SOP-38.

Approvals:

Ronald P. Thurman 6/15/02
General Supervisor
Operations Training (Designee) Date

[Signature] 16/3/02
General Supervisor
Operations (Designee) Date

MA EXAM SECURITY
Configuration Control Date

Performer: _____ (RO/SRO)

Trainer/Evaluator: _____

Evaluation Method: Perform X Simulate

Evaluation Location: X Plant Simulator

Expected Completion Time: 15 min. Time Critical Task: No Alternate Path Task: No

Start Time: _____ Stop Time: _____ Completion Time: _____

JPM Overall Rating: Pass Fail

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)
Plant - North Auxiliary Bay 240' elevation.

Simulator Set-up (if required):

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SSS / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SSS / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SSS, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the independent/peer verifier.

Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
2. During Evaluated JPM:
 - Self verification shall be demonstrated.
3. During Training JPM:
 - Self verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

1. N2-SOP-38, Section 4.5.1
2. NUREG K/A 233000 A2.08

Tools and Equipment:

1. None

Task Standard:

Align and supply Service Water to Spent Fuel Pool Heat Exchanger "A".

Initial Conditions:

1. The Main Control Room has been evacuated.
2. Spent Fuel Pool Cooling Pump 2SFC*P1A is running.
3. Reactor Building Closed Loop Cooling Water System (CCP) has been lost.
4. The SSS has authorized performance of this evolution
5. A second operator is standing by in the Division I Switchgear Room to assist.

Initiating Cues:

"(Operator's name), Line-up Service Water to supply Spent Fuel Pool Cooling Heat Exchanger "A", in accordance with N2-SOP-38, Section 4.5."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-01/Operations Manual)	Sat/Unsat

RECORD START TIME _____

- | | | |
|--|---|-----------|
| 2. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure. | N2-SOP-38 obtained.
Section 4.5.1 is referenced. | Sat/Unsat |
|--|---|-----------|

CUE: As the SSS, tell the Candidate that you have direct that sampling is to be performed later.

- | | | |
|---|--|--|
| 3. De-energize the CCP SUPPLY and RETURN isolation valves for the "A" SFP Heat Exchanger. | Direct second operator in the DIVISION I SWITCHGEAR ROOM to " OPEN " the following breakers; | |
|---|--|--|

CUE: When asked to perform the preceding steps wait one minute and then reply that "the breakers for 2EHS*MCC103-4A and 2EHS*MCC103-4B are OFF."

- | | |
|---|-----------|
| <ul style="list-style-type: none"> • 2EHS*MCC103-4A, CL LOOP CLG WTR TO SFP CLG HE A SPLY V 2CCP*MOV14A. | Sat/Unsat |
| <ul style="list-style-type: none"> • 2EHS*MCC103-4B, CL LOOP CLG WTR TO SFP CLG HE A RTN V 2CCP*MOV18A. | Sat/Unsat |

Performance Steps	Standard	Grade
4. De-energize the SWP SUPPLY and RETURN isolation valves for the "A" SFP Heat Exchanger.	Locate MCC102 in the North Auxiliary Bay 240' elevation.	Sat/Unsat
CUE: <u>As candidate repositions the two breakers, cue that the breakers switches are OFF.</u>	Simulates OPENING by rotating breaker cubicle switches clockwise to OFF position;	
	<ul style="list-style-type: none"> • 2EHS*MCC102-2A, SWP TO SPENT FUEL POOL HE – 2SWP*MOV17A. 	Pass/Fail
	<ul style="list-style-type: none"> • 2EHS*MCC102-2B, SWP FROM SPENT FUEL POOL HE - 2SWP*MOV18A. 	Pass/Fail
5. Close the CCP SUPPLY and RETURN isolation valves for the "A" SFP Heat Exchanger.	Locate the CCP SUPPLY and RETURN isolation valves for the "A" SFP Heat Exchanger in the Reactor Building 215' elevation.	Sat/Unsat
CUE: <u>As candidate rotates handwheel in clockwise (closed) direction, cue that the valve stem and collar are moving in the closed direction.</u>	Simulates CLOSING the following valves by pulling down on lever/handle for manual handwheel engaging, then rotating MOV handwheel clockwise and observes stem and collar movement in closed direction:	
	<ul style="list-style-type: none"> • 2CCP*MOV14A, SFP HEAT EXCHANGER RBCLC INLET. 	Pass/Fail
	<ul style="list-style-type: none"> • 2CCP*MOV18A, SFP HEAT EXCHANGER RBCLC OUTLET. 	Pass/Fail
6. Open the SWP SUPPLY and RETURN isolation valves for the "A" SFP Heat Exchanger.	Locate the SWP SUPPLY and RETURN isolation valves for the "A" SFP Heat Exchanger in the Reactor Building 196' elevation by the north stairwell.	Sat/Unsat
CUE: <u>As candidate rotates handwheel in counter-clockwise (open) direction, cue that the valve stem and collar are moving in the open direction.</u>	Simulates OPENING the valves by pulling down on lever/handle for manual handwheel engaging, then rotating MOV handwheel counter-clockwise and observes stem and collar movement in open direction:	
	<ul style="list-style-type: none"> • 2SWP*MOV17A, SFP HEAT EXCHANGER SERVICE WTR INLET. 	Pass/Fail
	<ul style="list-style-type: none"> • 2SWP*MOV18A, SFP HEAT EXCHANGER SEVICE WTR OUTLET. 	Pass/Fail

Performance Steps	Standard	Grade
7. Report task completion to SSS	Notifies SSS that Service Water System is supplying cooling water SFC "A" Heat Exchanger	Sat/Unsat

Terminating Cue: **The Service Water System is aligned and supplying water to the "A" Spent Fuel Pool Cooling Heat Exchanger.**

RECORD STOP TIME _____

Initial Conditions:

1. The Main Control Room has been evacuated.
2. Spent Fuel Pool Cooling Pump 2SFC*P1A is running.
3. Reactor Building Closed Loop Cooling Water System (CCP) has been lost.
4. The SSS has authorized performance of this evolution
5. A second operator is standing by in the Division I Switchgear Room to assist.

Initiating Cues:

“(Operator’s name), Line-up Service Water to supply Spent Fuel Pool Cooling Heat Exchanger “A”, in accordance with N2-SOP-38, Section 4.5.”