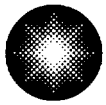
P.O. Box 63
Lycoming, New York 13093



Constellation Energy Group

Nine Mile Point
Nuclear Station

NMP-97940

August 22, 2002

rec'd 8/22

Mr. Hubert J. Miller
Regional Administrator
USNRC Region I
475 Allendale Road
King of Prussia, PA 19406

ATTENTION: Mr. John Caruso

SUBJECT: NINE MILE POINT UNIT 1 INITIAL OPERATOR CATEGORY B OPERATING EXAMINATION SUBMITTAL

Mr. Miller:

In response to the NRC Corporate Notification Letter dated June 4, 2002, arrangements were made for the administration of licensing examinations at Nine Mile Point, Unit 1 during the week of September 30, 2002. The examinations are being prepared based on the guidelines in Revision 8, Supplement 1, of NUREG 1021, "Operator Licensing Examination Standards for Power Reactors." To meet the examination schedule, Nine Mile Point Nuclear Station is required to furnish the examination materials for review and approval. Enclosed are the test items, outlines and quality checklists for the Category B Job Performance Measures Topics.

Please withhold these examination materials from public disclosure until after the examinations have been completed.

If you have any questions regarding the examination outline submittal, please contact Mr. Jerry Bobka (Facility Contact) at 315-349-2569 or Mr. Ron Thurow (General Supervisor of Operations Training) at 315-349-1182.

Sincerely,

for Louis E. Pisano
Manager Nuclear Training

LEP/crr

Facility: _Nine Mile Point # 1_ Date of Examination: 9/30/02

Exam Level (circle one): **SRO** Operating Test No.: **SRO**

B.1 Control Room Systems		
System / JPM Title	Type Code*	Safety Function
JPM 1 Torus Cooling Mode/ Transfer Torus Water to the Waste Collector Tank. (01-OPS-SJE-200-1-04) K/A 219000 A4.12 3.9/3.8;Task 2269090401/2000230501; N1-EOP-1 Attachment 15	D/S	5
JPM 2 A. C. Electrical Distribution/ Shift source of power for PB101 from R1014 to R1011. K/A 262001 A4.01 3.4/3.7; Task 2620020101; N1-OP-30 Section H.10.0	N/S	6
JPM 3 Control Rod Drive Hydraulic System/ Switching CRD Pumps (Alternate Path). K/A 201001 A4.01 3.1/3.1; Task 2010020101; N1-OP-5 Section F.3.0	N/A/S	1
JPM 4 Plant Ventilation Systems/ Shift Reactor Building Operating Exhaust and Supply fans from # 11's to # 12's. (Alternate Path) K/A 288000 A4.01 3.1/2.9; Task 2880040101; N1-OP-10 Section F.1.0 and F.2.0	N/A/S	9
JPM 5 Traversing Incore Probe/ Secure TIP on receipt of Containment Isolation. (Alternate Path) K/A 215001 A4.03 3.0/3.1; Task 2159090401; N1-OP-39 Section H.1.0	N/A/S	7
JPM 6 Reactor Feedwater System/ Change operating Motor Driven Feedwater Pumps at power. K/A 259001 A4.02 3.9/3.7; Task 2590040101; N1-OP-16 Section F.2.0	N/S	2
JPM 7 Main Turbine Generator and Auxiliary Systems/ Manual Turbine trip. (Alternate Path) K/A 245000 A2.01 3.7/3.9; Task 2450070101; N1-SOP-4	N/A/S/L	4
B.2 Facility Walk-Through		
JPM 8 Isolation (Emergency) Condenser/ Perform initiation of EC's from the Remote Shutdown Panel #11. (01-OPS-PJE-200-1-64) K/A 207000 A1.09 3.7/3.7; Task 2000140401/2079010201; N1-SOP-9.1	D/R	4
JPM 9 Low Pressure Core Spray System/ Lineup Raw Water to Core Spray Pump. **PRA: Supply containment spray raw water to Core Spray** K/A 209001 A1.08 3.3/3.2; Task 2009170504; N1-EOP-1 Attachment 5	D/R (Used on 2000 NRC Exam)	2
JPM 10 Emergency Plant Evolutions/ Diesel Fire Pump Start with No Control Power. K/A 295031 EA1.08 3.8/3.9; Task 2009050501; N1-OP-21A Sect. H.4.4	N/R	8

* 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

JPM #9 will be replaced too Complex in some general area as JPM #1

Exam Submittal Document. No changes from original outline submittal. August 22, 2002
NM Log # 1-02-009. JPMs 11-20 originally submitted with outlines will not be used.

Facility: _Nine Mile Point # 1_ Date of Examination: 9/30/02

Exam Level (circle one): **RO** Operating Test No.: **RO**

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
JPM 1 Torus Cooling Mode/ Transfer Torus Water to the Waste Collector Tank. (01-OPS-SJE-200-1-04) K/A 219000 A4.12 3.9/3.8;Task 2269090401/2000230501; N1-EOP-1 Attachment 15	D/S	5
JPM 2 A. C. Electrical Distribution/ Shift source of power for PB101 from R1014 to R1011. K/A 262001 A4.01 3.4/3.7; Task 2620020101; N1-OP-30 Section H.10.0	N/S	6
JPM 3 Control Rod Drive Hydraulic System/ Switching CRD Pumps (Alternate Path). K/A 201001 A4.01 3.1/3.1; Task 2010020101; N1-OP-5 Section F.3.0	N/A/S	1
JPM 4 Plant Ventilation Systems/ Shift Reactor Building Operating Exhaust and Supply fans from # 11's to # 12's. (Alternate Path) K/A 288000 A4.01 3.1/2.9; Task 2880040101; N1-OP-10 Section F.1.0 and F.2.0	N/A/S	9
JPM 5 Traversing Incore Probe/ Secure TIP on receipt of Containment Isolation. (Alternate Path) K/A 215001 A4.03 3.0/3.1; Task 2159090401; N1-OP-39 Section H.1.0	N/A/S	7
JPM 6 Reactor Feedwater System/ Change operating Motor Driven Feedwater Pumps at power. K/A 259001 A4.02 3.9/3.7; Task 2590040101; N1-OP-16 Section F.2.0	N/S	2
JPM 7 Main Turbine Generator and Auxiliary Systems/ Manual Turbine trip. (Alternate Path) K/A 245000 A2.01 3.7/3.9; Task 2450070101; N1-SOP-4	N/A/S/L	4
B.2 Facility Walk-Through		
JPM 8 Isolation (Emergency) Condenser/ Perform initiation of EC's from the Remote Shutdown Panel #11. (01-OPS-PJE-200-1-64) K/A 207000 A1.09 3.7/3.7; Task 2000140401/2079010201; N1-SOP-9.1	D/R	4
JPM 9 Low Pressure Core Spray System/ Lineup Raw Water to Core Spray Pump. **PRA: Supply containment spray raw water to Core Spray** K/A 209001 A1.08 3.3/3.2; Task 2009170504; N1-EOP-1 Attachment 5	D/R (Used on 2000 NRC Exam)	2
JPM 10 Emergency Plant Evolutions/ Diesel Fire Pump Start with No Control Power. K/A 295031 EA1.08 3.8/3.9; Task 2009050501; N1-OP-21A Sect. H.4.4	N/R	8

* 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

Gard Comment as SRO Set

Exam Submittal Document. No changes from original outline submittal. August 22, 2002
NM Log # 1-02-008. JPMs 11-20 originally submitted with outlines will not be used.

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Transferring Torus Water to the WCT Using CNT SP Loop 111 Revision: 1

Task Number: 2269090401

Approvals:

General Supervisor / Operations Training (Designee)	Date: 1/22/02
NA EXAM SECURITY / General Supervisor / Operations (Designee)	Date
NA EXAM SECURITY / Configuration Control	Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 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:

Evaluators Signature: _____ Date: _____

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

Unit 1 Simulator.

Simulator Set-up (if required):

1. IC-14 or equivalent.

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 **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.
   - Peer verification shall be demonstrated.

References:

1. N1-EOP-1, Attachment 15

Tools and Equipment:

1. None

Task Standard:

Torus Water Level is being lowered via the Containment Spray System.

Initial Conditions:

1. Torus Water Level is rising slowly due to a small leak inside the Drywell.
2. Level is 11.6 feet and EOP-4 has been entered.
3. Containment Spray pumps have been placed in "Pull to Lock".
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), lower Torus level by discharging water to the waste collector tank using Containment Spray Loop 111 per EOP-1, Attachment 15."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat
RECORD START TIME _____		
2. Obtain a copy of reference procedure and review/utilize the correct section of the procedure.	N1-EOP-1, Attachment 15 obtained and reviewed & section 1 and 2 referenced.	Sat/Unsat
3. Notify Radwaste of intent to pump down Torus to Waste Collector Tank.	Radwaste notified.	Sat/Unsat
Cue: Acknowledge as Radwaste operator		
4. Close valve 80-45, Cont. Spray Bypass BV 122.	80-45 control switch positioned CCW to close and/or observing green light on, red light off.	**Pass/Fail**
5. Open valve 80-118 Cont. Spray Test to Torus FCV.	80-118 control switch positioned CW to open and verifying red light on, green light off.	**Pass/Fail**
6. Verify 80-16, Cont. Spray Disch. Vlv. closed.	80-16 control switch positioned CCW to close and/or observing green light on, red light off.	Sat/Unsat
7. Verify 80-40, Cont. Spray Bypass BV111 Open.	80-40 control switch positioned CW to open and/or observing red light on, green light off.	Sat/Unsat

Performance Steps		Standard	Grade
8.	Start Containment Spray Raw Water Pump 111.	Raw Water Pump 111 control switch positioned CW to start and observing red light on, green light off	**Pass/Fail**
9.	Start Containment Spray Pump 111.	Containment Spray Pump 111 control switch CW positioned to start and observing red light on, green light off	**Pass/Fail**
10.	Open valve 80-115, Cont. Spray to Radwaste IV 12.	80-115 control switch positioned CW to open and observing red light on, green light off.	**Pass/Fail**
11.	Open valve 80-114 Cont. Spray to Radwaste IV 11.	80-114 control switch positioned CW to open and observing red light on, green light off.	**Pass/Fail**
12.	Throttle valve 80-118 Containment Spray Test to Torus FCV as required to ensure flow to Waste Collector Tank.	80-118 control switch jogged CCW to closed and observing dual indication red and green lights on.	**Pass/Fail**
Cue:	If necessary, Radwaste has indication of sufficient flow.		
13.	Monitor 58-05A and 58-06A TORUS H_2O level indicators for level response.	TORUS H_2O LEVEL indicators 58-05A and 58-06A monitored for level response.	Sat/Unsat
14.	Inform SSS that flow to the Waste Collector Tank has been established using Containment Spray Loop 111.	Proper communications used.	Sat/Unsat
Cue:	Acknowledge report.		

Terminating Cue: Torus water level being lowered via the Containment Spray system

RECORD STOP TIME _____

Initial Conditions:

1. Torus Water Level is rising slowly due to a small leak inside the Drywell.
2. Level is 11.6 feet and EOP-4 has been entered.
3. Containment Spray pumps have been placed in "Pull to Lock".
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), lower Torus level by discharging water to the waste collector tank using Containment Spray Loop 111 per EOP-1, Attachment 15."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Shift Source of Power for PB101 from R1014 to R1011. Revision: 1

Task Number: 2620020101

Approvals:

General Supervisor / Date
Operations Training (Designee)

NA EXAM SECURITY
General Supervisor / Date
Operations (Designee)

NA EXAM SECURITY
Configuration Control / Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X 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:

Evaluators Signature: _____ Date: _____

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

Unit 1 Simulator

Simulator Set-up (if required):

Power for PB101 from R1014.

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 **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.
   - Peer verification shall be demonstrated.

References:

1. N1-OP-30

Tools and Equipment:

1. None

Task Standard:

Power for PB101 shifted from R1014 to R1011.

Initial Conditions:

1. Electrical Maintenance has a work package to do surveillance work on R1014.
2. Potential Transformers J1017, J1016, and J1015 are racked in.
3. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), shift the source of power for PB101 from R1014 to R1011, IAW N1-OP-30, Section H.10.0."

Performance Steps		Standard	Grade
1.	Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-30 obtained. Precautions & limitations reviewed & section H.10.0 referenced.	Sat/Unsat
3.	Place PB101 Supply BKR INTERLOCK BY-PASS SWITCH in Bypass	Control switch rotated to the Bypass position. Annunciator A5-2-1, Power Bd. 101 Bkr. Bypass Switch is received	**Pass/Fail**
4.	Turn Sync Key on.	Sync Key inserted into Breaker R1011 and rotated clockwise to the ON position.	**Pass/Fail**
5.	Confirm incoming and running voltage normal.	Observe incoming and running voltages matched.	Sat/Unsat
6.	Close Breaker R1011.	Control switch rotated clockwise to the close position. Red light above switch illuminates, green light above switch extinguishes.	**Pass/Fail**
7.	Turn Sync Key off.	Sync Key rotated to the off position.	**Pass/Fail**

8.	Remove Sync Key.	Sync Key removed from Breaker R1011.	Sat/Unsat
9.	Open Breaker R1014.	Control switch rotated counter-clockwise to the open position. Green light above switch illuminates, red light above switch extinguishes	**Pass/Fail**
10.	Place PB101 Supply BKR INTERLOCK BY-PASS SWITCH in Normal	Control switch rotated to the Normal position. Annunciator A5-2-1, Power Bd. 101 Bkr. Bypass Switch clears	**Pass/Fail**
1.	Notify ASSS/SSS that power is shifted from R1014 to R1011. Cue: Acknowledge report.	Proper communications used.	Sat/Unsat

Terminating Cue: Power for PB101 shifted from R1014 to R1011.

RECORD STOP TIME _____

Initial Conditions:

1. Electrical Maintenance has a work package to do surveillance work on R1014.
2. Potential Transformers J1017, J1016, and J1015 are racked in.
3. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), shift the source of power for PB101 from R1014 to R1011, IAW N1-OP-30, Section H.10.0."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Switch CRD Pumps from #12 to 11 (Alternate Path) Revision: 1

Task Number: 2010020101

Approvals:

[signature] / 8/22/02		NA EXAM SECURITY /	
General Supervisor Operations Training (Designee)	Date	General Supervisor Operations (Designee)	Date
NA EXAM SECURITY /			
Configuration Control	Date		

Performer:_____(RO/SRO/AO)

Trainer/Evaluator:_____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 10 Minutes 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)

Unit 1 Simulator

Simulator Set-up (if required):

1. Place CRD Pump #12 in service.
2. I/O Override 05M181-AO-056, (F5 Panel, switch, page 19 of 21), V= 400 (high pump amps on CRD Pump 11) assigned to a Function key.
3. I/O Override 05M181-AO-056, (F5 Panel, switch, page 19 of 21) removed when CRD Pump is shutdown.
4. Crywolf annunciator F3-02 assigned to same Function key as #2 above.

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 **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.
   - Peer verification shall be demonstrated.

References:

1. N1-OP-5
2. F3-1-2 Annunciator

Tools and Equipment:

1. None

Task Standard:

Identify high operating amps on CRD Pump 11, and place CRD Pump 12 back in service.

Initial Conditions:

1. CRD Pump 11 is in standby.
2. Pre-start checks for CRD Pump 11 are SAT.
3. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Place CRD Pump 11 in service IAW N1-OP-5, Section F.3.0, Step 3.1"

Performance Steps		Standard	Grade
1.	Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-5 obtained. Precautions & limitations reviewed & section F.3.0 referenced.	Sat/Unsat
3.	Place CRD Pump 11 control switch to START.	Control switch rotated to the start position and observe red indicating light on, green indicating light off. Annunciator A3-1-2, RPS UPS 162 Trouble may alarm on voltage transient	**Pass/Fail**
4.	Verify Backfill System shifted.	Contact AO to verify Backfill shifted.	Sat/Unsat
Cue:	As AO, inform candidate backfill has been shifted.		
5.	Place CRD Pump 12 control switch to STOP. **Note: Insert I/O for high CRD pump amps and Vibration Annunciator F3-1-2**	Control switch rotated to the stop position and observe green indicating light on, red indicating light off.	**Pass/Fail**
6.	Acknowledge and report annunciator F3-1-2, "CRD Pump #11 Trip - Vibration"	Proper communications used.	Sat/Unsat

Performance Steps	Standard	Grade
7. Enter Annunciator Procedure N1-ARP-F3 and verify pump running current between 200 - 240 amps, flow between 28 - 32 X 10^3 lbm/hr, and filter DP normal..	Visually verify the following: • pump motor current 400 amps • flow between 28 - 32 X 10^3 lbm/hr • CRD FILTER DIFF PRESS not alarming	**Pass/Fail**
8. Inform ASSS of high amps on CRD Pump 11.	Proper communications used	Sat/Unsat
9. Recommend switching to CRD Pump 12 and securing CRD Pump 11 Cue: As ASSS, direct candidate to switch from CRD Pump 11 to CRD Pump 12 in accordance with Step 3.2.	ASSS acknowledges recommendation.	**Pass/Fail**
10. Place CRD Pump 12 control switch to START.	Control switch rotated to the start position and observe red indicating light on, green indicating light off. Annunciator A3-1-3, RPS UPS 172 Trouble may alarm on voltage transient	**Pass/Fail**
11. Verify Backfill System shifted. Cue: As AO, inform candidate backfill has been shifted.	Contact AO to verify Backfill shifted	Sat/Unsat
12. Place CRD Pump 11 control switch to Stop. **Remove I/O override for high CRD pump amps when pump is stopped.**	Control switch rotated to the stop position and observe green indicating light on, red indicating light off.	**Pass/Fail**
13. Confirm system flow on FIC 44-146B, CRD FLOW CONTROL.	Visually observe flow between 64 and 66 gpm (32-33 x 10^3 LB/HR)	Sat/Unsat
14. Notify ASSS/SSS that CRD Pump 12 has been returned to service and flow is normal. Cue: Acknowledge report.	Proper communications used.	Sat/Unsat

Terminating Cue:

High operating amps identified on CRD Pump 11, and CRD Pump 12 placed back in service.

RECORD STOP TIME _____

Initial Conditions:

1. CRD Pump 11 is in standby.
2. Pre-start checks for CRD Pump 11 are SAT.
3. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Place CRD Pump 11 in service IAW N1-OP-5, Section F.3.0, Step 3.1"

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Shift Reactor Building Operating Exhaust and Supply Fans From #11 to #12. (Alternate path) Revision: 1

Task Number: 2880040101

Approvals:

Ron Thurow / 8/22/02
General Supervisor Operations Training (Designee) Date

N/A Exam Security /
General Supervisor Operations (Designee) Date

N/A Exam Security /
Configuration Control Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 Minutes 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)

Unit 1 Simulator

Simulator Set-up (if required):

1. RX Building Supply and Exhaust Fans #11 in service.
2. RB VENT JPM SETUP
   - Event trigger – set ET02 to algorythm variable ZDHVF02T with equation A EQ FALSE
   - Overrides
     - 11S068-DI-049-12, RB Supply Fan 12 & Inlet Damper, POS_1 ET02
     - 11M004-AO-003, React Bldg supply Fan 12 AMP, 5 ET02
     - 11DS229-LO-B-062-04, Reactor Bldg Supply Fan 12 OFF-G OFF ET02
     - 11DS230-LO-B-062-05, Reactor Bldg Supply Fan 12 SLOW-R ON ET02
     - 11DS216-LO-B-061-07, Reactor Bldg Supply Fan 12 Inlet Damper, Closl OFF ET02 TUA=15sec
     - 11DS217-LO-B-061-08, Reactor Bldg Supply Fan 12 Inlet Damper, OPENL ON ET02

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 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.
   - Peer verification shall be demonstrated.

References:

1. N1-OP-10

Tools and Equipment:

1. None

Task Standard:

Identify low flow on Supply Fan #12, and place Supply Fan #11 back in service.

Initial Conditions:

1. Reactor Building Exhaust Fan #11, and Reactor Building Supply Fan # 11 are in service.
2. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Place Reactor Building Exhaust and Supply Fans #12 in service IAW N1-OP-10 Section F.1.0 and F.2.0.

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-10 obtained. Precautions & limitations reviewed & section F.1.0 and F.2.0 referenced.	Sat/Unsat
3. Verify operating RX Building supply and exhaust fans in SLOW.	Visually observe REACTOR BLDG SUPPLY FAN 11 and REACTOR BLDG EXHAUST FAN 11 fans in SLOW red slow light illuminated.	Sat/Unsat
4. Start REACTOR BLDG EXHAUST FAN 12 on SLOW	Rotate REACTOR BLDG EXHAUST FAN 12 control switch CW to the slow position observe red slow light illuminated, green light off.	**Pass/Fail**
5. Confirm damper 202-07, REACTOR BLDG EXHAUST FAN 12 OUTLET DAMPER open.	Observe 202-07 open red light on, green light off.	Sat/Unsat
6. Stop REACTOR BLDG EXHAUST FAN 11.	Rotate REACTOR BLDG EXHAUST FAN 11 control switch CCW to the Off position.	**Pass/Fail**
7. Confirm damper 202-08, REACTOR BLDG EXHAUST FAN 11 OUTLET DAMPER closed.	Observe REACTOR BLDG EXHAUST FAN 11 OUTLET DAMPER closed green light on, red light off.	Sat/Unsat
8. Confirm normal system flow.	Observe annunciator L1-2-5 RB VENT EXH FLOW LOW is clear.	Sat/Unsat

Performance Steps	Standard	Grade
9. Start REACTOR BLDG SUPPLY FAN 12 on SLOW.	Rotate REACTOR BLDG SUPPLY FAN 12 control switch CW to the Slow position observe red slow light illuminated, green light off.	**Pass/Fail**
10. Confirm damper FCV 202-04, REACTOR BLDG SUPPLY FAN 12 INLET DAMPER open.	Observe 202-04 open red light on, green light off	Sat/Unsat
Cue: Candidate may not notice amps low and continue in procedure to secure Fan 11 if this occurs continue at step 15. Note: There are 2 success paths. 1. Low amps identified after Supply Fan 12 start. Candidate performs steps 11,12,13 and 18, with step 13 a critical step. 2. Low amps not identified after Supply Fan 12 start. Candidate performs steps 14,15,16,17,18, with step 16 a critical step.		
•11. Identify low amps on REACTOR BLDG SUPPLY FAN 12.	Observe low amps on Fan 12 (5-10 amps) with Fan 11 amps remaining at normal (~30 amps).	Sat/Unsat/ NA
•12. Inform ASSS of low amps on REACTOR BLDG SUPPLY FAN 12.	Recommend Fan 11 remains in service.	Sat/Unsat/ NA
13. Secure REACTOR BLDG SUPPLY FAN 12.	Rotate REACTOR BLDG SUPPLY FAN 12 control switch CCW to the Off position.	**Pass/Fail/ NA**
14. Secure REACTOR BLDG SUPPLY FAN 11	Rotate REACTOR BLDG SUPPLY FAN 11 control switch CCW to the Off position and observe red slow light off, green light illuminated. Observe annunciator L1-3-4 and L1-2-4 alarm Observe RB dp indication rises indicating high negative dp	**Pass/Fail/ NA**
15. Report abnormal indication to ASSS	Recommend returning Fan 11 to service and securing Fan 12	Sat/Unsat/ NA

Performance Steps	Standard	Grade
Cue: Acknowledge report		
16. Start REACTOR BLDG SUPPLY FAN 11 on SLOW.	Rotate REACTOR BLDG SUPPLY FAN 11 control switch CW to the Slow position observe red slow light illuminated, green light off.	**Pass/Fail/ NA**
17. Secure REACTOR BLDG SUPPLY FAN 12	Rotate REACTOR BLDG SUPPLY FAN 12 control switch CCW to the Off position and observe red slow light off, green light illuminated. Observe annunciator L1-3-4 and L1-2-4 alarm clear Observe RB dp indication returns to normal	**Pass/Fail/ NA**
18. Notify ASSS/SSS that REACTOR BLDG SUPPLY FAN 11 has been returned to service with normal dp and REACTOR BLDG supply FAN 12 is secured.	Proper communications used.	Sat/Unsat
Cue: Acknowledge report.		

Terminating Cue: Low amps/flow identified on Supply Fan #12, and Supply Fan #11 placed back in service or remains in service.

RECORD STOP TIME _____

Initial Conditions:

1. Reactor Building Exhaust Fan #11, and Reactor Building Supply Fan # 11 are in service.
2. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Place Reactor Building Exhaust and Supply Fans #12 in service IAW N1-OP-10 Section F.1.0 and F.2.0.

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Secure TIP on receipt of Containment Isolation (Alternate Path) Revision: 1

Task Number: 2159090401

Approvals:

Ron Thurow / 8/22/02
General Supervisor Date
Operations Training (Designee)

NA EXAM SECURITY /
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY /
Configuration Control Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 Minutes 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)

Unit 1 Simulator

Simulator Set-up (if required):

1. Initialize the simulator to any IC
2. Select and drive TIP Machine #1 into core location 12-09 at the Core Top position
3. Place TIP control switches in the following positions:
   - Mode switch in MAN
   - Channel 12-09 selected
   - Low switch in ON
   - Manual switch in OFF
   - MAN Valve Control in CLOSED
   - Core Limit in BOTTOM

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 **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.
- Peer verification shall be demonstrated.

References:

1. N1-OP-39

Tools and Equipment:

1. None

Task Standard:

Squib fired, SQUIB MONITOR and SHEAR VALVE MONITOR lights lit.

Initial Conditions:

1. A TIP trace has been completed in core location 12-09 using TIP Machine #1.
2. The TIP trace was completed in the MANUAL mode.
3. The TIP detector is located at the core top location in channel 12-09 and needs to be withdrawn to the in-shield position in accordance with Step F.3.6 of N1-OP-39.
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), withdraw the TIP detector in the Manual Mode to its in-shield position in accordance with Step F.3.6 of N1-OP-39."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-39 obtained. Precautions & limitations reviewed & section F.3.6 is referenced.	Sat/Unsat
3. Set MODE Switch to MAN	Verify MODE switch is in the MAN position.	Sat/Unsat
4. Set MANUAL Switch to REV and verify TIP Detector is withdrawn to Chamber Shield (IN-SHIELD light is lit.)	Rotate MANUAL switch to REV, TIP detector starts moving out of the core.	**Pass/Fail**

Performance Steps	Standard	Grade
Note: When the detector has moved for 1 minute, insert malfunction NM-33	When NM-33 is inserted, the detector will be stuck where it is in the core. All actions to move the detector will be unsuccessful.	
Cue: Approximately 1 minute after the detector is stuck, inform the candidate that drywell pressure has exceeded 3.5 psig due to a coolant leak in the drywell.		
5. When the containment isolation setpoint (3.5 psig) is reached, refer to N1-OP-39, section H.1.0, "Securing TIP on receipt of Containment Isolation."	Section H.1.0 of N1-OP-39 is referenced.	Sat/Unsat
6. Confirm TIP Machine #1 Detector withdraws and Ball Valve closes.	Identify detector has not withdrawn for TIP Machine #1, and ball valve remains open.	**Pass/Fail**
7. Determine if detector is stuck.	Visually observe position of detector on position display for TIP Machine #1 and recognize it is not changing.	Sat/Unsat
8. Attempt to free the detector using FWD and REV positions on the MANUAL Selector Switch.	Position the MANUAL Selector Switch for TIP Machine #1 alternately from the FWD to REV positions.	**Pass/Fail**
9. Notify SSS of stuck detector on TIP Machine #1.	Consult with SSS and determine if squib valve should be fired.	Sat/Unsat
Cue: Role play as SSS and direct the squib circuit to be fired to isolate TIP Machine #1.		
10. Select associated keylock squib fire switch to FIRE.	Rotate the squib fire keylock switch to the FIRE position for 36-151.	**Pass/Fail**
11. Confirm SQUIB MONITOR Light for 36-151 is lit.	Visually observe SQUIB MONITOR amber Light is lit	Sat/Unsat
12. Confirm SHEAR VALVE MONITOR Light for 36-151 is lit.	Visually observe SHEAR VALVE MONITOR amber Light is lit.	Sat/Unsat
13. Notify SSS Squib valve has been fired.	Proper communications used.	Sat/Unsat
Cue: Acknowledge report.		

Terminating Cue: Squib fired, SQUIB MONITOR and SHEAR VALVE MONITOR Lights lit for 36-151.

RECORD STOP TIME _____

Initial Conditions:

1. A TIP trace has been completed in core location 12-09 using TIP Machine #1.
2. The TIP trace was completed in the MANUAL mode.
3. The TIP detector is located at the core top location in channel 12-09 and needs to be withdrawn to the in-shield position in accordance with Step F.3.6 of N1-OP-39.
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), withdraw the TIP detector in the Manual Mode to its in-shield position in accordance with Step F.3.6 of N1-OP-39."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Changing Motor-driven Feedwater Pumps at Power (From #12 to #11) Revision: 1

Task Number: 2590040101

Approvals:

Ron Thurson	8/22/02	NA EXAM SECURITY	/
General Supervisor Operations Training (Designee)	Date	General Supervisor Operations (Designee)	Date
NA EXAM SECURITY	/		
Configuration Control	Date		

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 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:

Evaluators Signature: _____ Date: _____

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

Unit 1 Simulator

Simulator Set-up (if required):

1. Initialize simulator to IC-24 or equivalent
2. RFP 13 and 12 are in service.
3. RFP 11 is in standby.

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.

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Read Before Each Training JPM Performance:

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Notes to Instructor / Evaluator:

1. Critical steps are identified in grading areas **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.
   - Peer verification shall be demonstrated.

References:

1. N1-OP-16

Tools and Equipment:

1. None

Task Standard:

RFP 11 online feeding the RPV with RFP 12 secured.

Initial Conditions:

1. Plant is at 100% power.
2. RFP 13 and 12 are in service.
3. RFP 11 is in standby
4. RFP 11 oil levels are in the normal range
5. RFP 11 Lubrication and cooling water flows are normal
6. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Shift operating feedwater pumps from RFP 12 to RFP 11 per N1-OP-16, Section F.2.0."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-16 obtained. Precautions & limitations reviewed & section F.2.0 referenced.	Sat/Unsat
3. Verify one of the following: • RFP13 VALVE CONTROL M/A station in AUTO and the combined flow for RFP 11 and 12 is less than or equal to 1.5×10^6 lbm/hr	Verifies FWP 13 Controller mode switch in AUTO or BAL position AND RFP 12 flow is less than or equal to 1.5×10^6 lbm/hr	Sat/Unsat Sat/Unsat
OR • MCPR greater than 1.59		

Cue: If asked identify MCPR is 1.57

Performance Steps	Standard	Grade
4. Verify the following for the oncoming feedwater pump (FWP 11);		
• Flow Control M/A station in MANUAL and demand output of zero	FWP 11 Flow Control M/A station in MAN and output meter indicates 0.	Sat/Unsat
• BYPASS Valve M/A station in MANUAL and demand output of zero	FWP 11 BYPASS Valve M/A station MANUAL PB "MAN" light illuminated and output meter indicates 0.	Sat/Unsat
5. Using local indication, verify FWP 11 FLOW Control Valves FCV 29-141 and 29-49 are closed Cue: As operator dispatched, report FCV 29-141 and 29-49 are closed	Dispatches operator to locally verify FWP 11 FLOW Control Valves FCV 29-141 and 29-49 are closed Acknowledges report	Sat/Unsat
6. Using local indication, verify open 6 inch recirc blocking for 11 and 12 FWP:	Dispatches operator to locally verify	
• 29-55, BV-FW PUMP 11 6" RECIRC	– 29-55, BV-FW PUMP 11 6" RECIRC valve open	Sat/Unsat
• 29-57, BV-FW PUMP 12 6" RECIRC	– 29-57, BV-FW PUMP 12 6" RECIRC valve open	Sat/Unsat
Cue: As operator dispatched, report 29-55, BV-FW PUMP 11 6" RECIRC valve, and 29-57, BV-FW PUMP 12 6" RECIRC valve are open	Acknowledges the report	
7. Verify operating motor-driven feedwater pump VALVE CONTROL M/A station in MANUAL	FWP 12 VALVE CONTROL M/A station observed in MAN position	Sat/Unsat
8. Monitor vessel level AND response of 13 FWP VALVE CONTROL controller while changing motor-driven feedwater pumps **(Continuous action while performing subsequent steps)**	Observes vessel level and 13 FWP VALVE CONTROL controller	Sat/Unsat
9. Start selected feedwater pump AND confirm the following for the pump started:	RFP 11 control switch rotated CW to Start position and observe red light energized and green light extinguished	**Pass/Fail**
• FCV 29-23 and 29-51, 11 FWP recirc valves open	Observe dual indication on FCV 29-23 and 29-51, 11 FWP recirc valves	Sat/Unsat
• Annunciator H3-1-7 and H3-1-8, clear	Annunciators H3-1-7 and H3-1-8 clear	Sat/Unsat

Performance Steps	Standard	Grade
10. Transfer load between FWP 11 and 12 by performing the following concurrently:	Concurrently:	
• Slowly open oncoming FWP VALVE CONTROL manually	Rotate manual control knob on 11 FWP VALVE CONTROL CW to open valve AND	
• Slowly close offgoing FWP VALVE CONTROL manually	Rotate manual control knob on 12 FWP VALVE CONTROL CCW to close valve	
	Such that turbine control valves do not oscillate, and RPV water level hi and low annunciators DO NOT alarm.	**Pass/Fail**
11. WHEN offgoing FWP VALVE CONTROL M/A station indicates valve is closed, stop feedwater pump:	When 12 FWP VALVE CONTROL indicates 0 position rotate 12 FWP control switch CCW to the STOP position	**Pass/Fail**
• Confirm Aux Oil Pump running by observing red light lit	Observing 12 FWP Aux Oil Pump (center) red light lit	Sat/Unsat
• Confirm pump shaft is NOT rotating backwards	Contacts AO to confirm shaft is NOT rotating backwards	Sat/Unsat
Cue: As the operator dispatched, report that the FWP 12 shaft is NOT rotating backwards	Acknowledges report	
12. Report that RFP 11 is running feeding the RPV and RFP 12 is secured	Proper communications used	Sat/Unsat

Cue: Acknowledge report

Terminating Cue: RFP 11 running and feeding the RPV with RFP 12 secured

RECORD STOP TIME _____

Initial Conditions:

1. Plant is at 100% power.
2. RFP 13 and 12 are in service.
3. RFP 11 is in standby
4. RFP 11 oil levels are in the normal range
5. RFP 11 Lubrication and cooling water flows are normal
6. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Shift operating feedwater pumps from RFP 12 to RFP 11 per N1-OP-16, Section F.2.0."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Manual Turbine Trip (Alternate Path) Revision: 1

Task Number: 2450070101

Approvals:

Ron Thurow / 8/22/02
General Supervisor Operations Training (Designee) Date

NA EXAM SECURITY /
General Supervisor Operations (Designee) Date

NA EXAM SECURITY /
Configuration Control Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: X Perform _____ Simulate

Evaluation Location: _____ Plant X Simulator

Expected Completion Time: 15 Minutes 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)

Unit 1 Simulator

Simulator Set-up (if required):

1. IC-20
2. Main Turbine startup in progress, Generator ready to be synchronized, Sync switch is in R915 and turned ON, incoming and running voltages are matched.
3. Complete N1-OP-32 through Step E.3.4. Candidate will start JPM with Step E.3.5.
4. Annunciator A7-26 crywolf for A7-4-2, "Main Generator Lockout 86G1" on a pre-determined function key.

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 **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.
   - (Independent/Peer/No other) verification shall be demonstrated.

References:

1. Alarm Response A7-4-2
2. N1-SOP-4
3. N1-OP-31
4. N1-OP-32

Tools and Equipment:

1. A copy of N1-OP-32 marked up through Step 3.4, with the synch key for R915 turned ON.

Task Standard:

Main Turbine tripped, TCV's, TSV's and Combined Reheat Valves closed.

Initial Conditions:

1. A plant startup is in progress.
2. Reactor power is approximately 20%.
3. N1-OP-43A Step E.5.7 is in progress to synchronize and load the turbine and generator.
4. The Main Generator is ready to be synchronized to the grid.
5. N1-OP-32 is completed through Step E.3.4.
6. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), complete synchronizing the Main Generator to the grid by starting at Step E.3.5 of N1-OP-32.

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-32 obtained.	Sat/Unsat
3. Adjust GOVERNOR switch UNTIL synchroscope is rotating slowly in the FAST direction.	Governor control switch adjusted CCW (RAISE) and/or CW (LOWER) to attain slow rotation of the synchroscope in the FAST direction.	Sat/Unsat
4. When INCOMING and RUNNING voltages are matched, AND synchroscope is indicating 3 to 5 degrees lead time, close R915 (R925).	Verifies INCOMING and RUNNING voltages are matched. When synchroscope indicates 3 to 5 degrees lead time, places control switch for R915 (R925) in the CLOSE position. Red light above the switch illuminates and the green light above the switch extinguishes.	**Pass/Fail**

Performance Steps	Standard	Grade
5. Immediately load generator to 40-60 MWe OR UNTIL all Turbine Bypass Valves close.	Places governor control switch in the RAISE position until generator load is at least 40 Mwe.	**Pass/Fail**
Cue: As ASSS, direct the candidate to load the generator until the Turbine Bypass Valves are closed.	Acknowledges direction from the ASSS.	Sat/Unsat
6. Continues to load generator.	Places governor control switch in the RAISE position.	Sat/Unsat
NOTE: When generator load reaches 80 MWe, insert annunciator crywolf for A7-4-2	GENERATOR LOCKOUT 86G1 annunciates.	
7. Reports and acknowledges annunciator A7-4-2, "GENERATOR LOCKOUT 86G1"	Proper communications used.	Sat/Unsat
Cue: W031, "GEN LOCKOUT TRIP RELAY 1" is in on the computer		
8. Verify TSV's, TCV's and Combined Reheat Valves closed.	Visually observe TSV's, TCV's and Combined Reheat Valves open, and turbine speed is not coasting down. Report to ASSS valves failed to close and the turbine is not tripped.	Sat/Unsat
Cue: Acknowledge report of failure of turbine to trip, and direct the Main Turbine tripped.		
9. Trip the Main Turbine.	Depress the UNIT EMERGENCY TRIP pushbutton.	**Pass/Fail**
10. Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	N1-SOP-4 obtained. SOP-4 flow chart referenced.	Sat/Unsat
11. Verify Main Turbine tripped.	Visually observe the following: • Turbine Stop Valves closed • Turbine Control Valves closed • Combined Reheat Valves closed • Turbine Bypass Valves open to control reactor pressure	Sat/Unsat

Performance Steps	Standard	Grade
12. Verify Electrical Distribution status.	Visually observe: • 345Kv Breakers R915, R925 TRIPPED • MOD 18 OPEN • PB 11, PB12 supplied from Reserve Power	Sat /Unsat
13. Restore and maintain RPV level between 53 and 95 in. using one or more of the following: • Condensate/FW • CRD • Core Spray	RPV water level is stable at the pre-trip value (reactor did not scram due to the turbine trip scram bypassed below 45%)	Sat/Unsat
14. Maintain RPV pressure below 1080 psig using one or more of the following: • Main Turbine Bypass valves • Emergency Condensers • ERVs • RWCU • Main Steam Line drains	Reactor pressure is stable and is being maintained with the bypass valves.	Sat /Unsat
15. If ATS Gross Failure lights ON: • determine cause of ATS lights • notify SSS • with SSS permission, reset ATS Gross Failure lights	ATS Gross Failure lights are NOT lit	Sat /Unsat
Cue: Inform candidate that ATS Gross Failure lights are NOT lit.		
16. Perform the following:		
• Verify ON, Aux. Oil pumps	• Rotates Aux. Oil Pump switches clockwise to start pumps. Red lights illuminate, green lights extinguish	Sat /Unsat
• Reset Generator 86 relays	• 86 relays cannot be reset due to fault	Sat/Unsat
• Restart Stator Water Cooling	• stator cooling cannot be restarted due to tripped 86 relays	Sat/Unsat
• Start bearing lift pumps	• Bearing lift pump switches rotated clockwise to start the pumps. Red lights illuminate, green lights extinguish	**Pass/Fail**
17. Shutdown turbine per N1-OP-31.		Sat /Unsat
Cue: Inform candidate that another operator will be tasked with turbine shutdown.		
18. Report Main Turbine tripped	Proper communications used	Sat/Unsat

Terminating Cue: Main Turbine tripped, TCV's, TSV's and Combined Reheat Valves closed.

RECORD STOP TIME _____

Initial Conditions:

1. A plant startup is in progress.
2. Reactor power is approximately 20%.
3. N1-OP-43A Step E.5.7 is in progress to synchronize and load the turbine and generator.
4. The Main Generator is ready to be synchronized to the grid.
5. N1-OP-32 is completed through Step E.3.4.
6. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), complete synchronizing the Main Generator to the grid by starting at Step E.3.5 of N1-OP-32.

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Perform Initiation of ECs from Remote Shutdown Panel 11 Revision: 1

Task Number: 2000140401

Approvals:

Ron Thurman / 8/22/02
General Supervisor Date
Operations Training (Designee)

NA EXAM SECURITY /
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY /
Configuration Control Date

Performer:_____(RO/SRO/AO)

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:

Evaluators Signature:_____ Date:_____

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

Turbine Building

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 **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.
   - Peer verification shall be demonstrated.

References:

1. N1-SOP-9.1, Control Room Evacuation

Tools and Equipment:

1. VA-1 Key

Task Standard:

Emergency Cooling Loop 11 in service.

Initial Conditions:

1. You are the Control Room E.
2. Control Room evacuation has occurred due to a fire.
3. The reactor has been scrammed and all control rods have been verified full in.
4. Time did not permit initiating ECs from the Control Room.
5. Reactor Pressure is 900#
6. Cooldown and depressurization of the Reactor is required using the Emergency Condensers.
7. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), "Place Emergency Cooling Loop 11 in service and establish a cooldown rate below 100 °F/hr. from Remote Shutdown Panel 11."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-SOP-9.1 obtained. Control Room E actions referenced.	Sat/Unsat
3. Go to Remote Shutdown Panel #11.	Proceed to RSP 11.TB 250'.	**Pass/Fail**
NOTE: Instructor to provide VA-1 Key. All other keys are simulated		
Cue: "CONTROL RODS IN" white light is lit.		
Cue: ASSS directs EC 11 placed in service.		
4. Place the Channel 11 CONTROL TRANSFER keylock switch in EMER.	Rotate control switch clockwise to the emergency position.	**Pass/Fail**
5. Verify Open EC Steam Supply Valves 39-07R and 39-09R.	Verify Red lights energized and Green lights extinguished.	Sat/Unsat
Cue: 39-07R and 39-09R are open.		

Performance Steps	Standard	Grade
6. Open 39-05, EMERGENCY CONDENSER COND. RTN IV 11.	Rotate control switch for valve 39-05 clockwise to the Open position and verified by Red light energized, Green light extinguished.	**Pass/Fail**
Cue: 39-05 is Open, Rx pressure is now 780# and lowering.		
7. Place EC 111-112 Level Control Transfer Switch to Local.	Rotates EC 111-112 Level Control Transfer Switch to Local.	**Pass/Fail**
Cue: EC 111/112 Level Control Transfer Switch in Local.		
8. Verify Auto Control functions.	Observe "A" is illuminated in Status Display Panel.	Sat/Unsat
Cue: "A" Status Light lit, EC Lvl = 6.5'.		
9. Inform ASSS that EC loop 11 is in service.	Proper communication used.	Sat/Unsat
Cue: Acknowledge report.		

Terminating Cue: Emergency Cooling Loop 11 in service.

RECORD STOP TIME _____

Initial Conditions:

1. You are the Control Room E.
2. Control Room evacuation has occurred due to a fire.
3. The reactor has been scrammed and all control rods have been verified full in.
4. Time did not permit initiating ECs from the Control Room.
5. Reactor Pressure is 900#
6. Cooldown and depressurization of the Reactor is required using the Emergency Condensers.
7. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), "Place Emergency Cooling Loop 11 in service and establish a cooldown rate below 100 ^{o}F/hr. from Remote Shutdown Panel 11."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Lineup Raw Water to Core Spray per N1-EOP-1, Attachment 5 Revision: 1

Task Number: 2009170504

Approvals:

Ron Thurson / 8/22/02
General Supervisor Date
Operations Training (Designee)

NA EXAM SECURITY /
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY /
Configuration Control Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: _____ Perform X Simulate

Evaluation Location: X Plant _____ Simulator

Expected Completion Time: 10 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)

At the Scram Discharge Volume, Pillar N-5, 237' level of the Reactor Building.

Simulator Set-up (if required):

N/A

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 **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.
   - Peer verification shall be demonstrated.

References:

1. N1-EOP-1, Attachment 5

Tools and Equipment:

1. None

Task Standard:

Perform the in plant actions to lineup the Containment Spray Raw Water to Core Spray and inject into the RPV per N1-EOP-1, Attachment 5.

Initial Conditions:

1. A LOCA has occurred. RPV level is +35 inches and lowering.
2. Because of the unavailability of Core Spray, the SSS has determined that Containment Spray Raw Water will be aligned to Core Spray in accordance with N1-EOP-1, Attachment 5.
3. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), perform the in plant actions to lineup Containment Spray Raw Water to Core Spray loop 11 and inject water into the RPV."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-EOP-1, Attachment 5 obtained. Section 1 and 2 referenced.	Sat/Unsat
Cue: As the control room operator, direct the operator to close 93-14, 111 Containment Spray Raw Pump Discharge Valve in the screenhouse then open the valve 4 to 6 turns.		
3. Close 93-14, 111 Cont. Spray Raw Water Pump Disch. Valve in the screenhouse.	Unlock 93-14, 111 Cont. Spray Raw Water Pump Disch. Valve using a VA1 key.	**Pass/Fail**
Cue: Handwheel is rotating clockwise and valve stem is going in. Valve stem is fully in and handwheel resistance is felt.	Rotate 93-14 handwheel clockwise observing stem goes in, until valve is closed.	**Pass/Fail**
4. Opens 93-14 four to six turns.	Rotates 93-14 valve handwheel counter-clockwise counting the turns or number of thread flats on the valve until the valve is open four to six turns.	**Pass/Fail**

Performance Steps	Standard	Grade
5. Reports to the control room operator that valve 93-14, Cont. Spray Raw Water Pump Disch. Valve, is open four to six turns.	Correct communications used.	Sat/Unsat
Cue: As the control room operator, acknowledge the report that valve 93-14, 111 Containment Spray Raw Pump Discharge Valve, is open 4 to 6 turns.		
Cue: Direct the operator to standby at valve 93-14 while several control room actions are performed.		
Cue: Inform the operator that the control room actions EOP-1, Attachment 5 (steps 2.3.4 through 2.3.11) have been performed and Containment Spray Raw Water Pump 111 is running.		
6. While maintaining CSRW Pump 111 motor amps less than 76 amps, throttle 93-14 as necessary to maximize flow rate.	Slowly rotate 93-14 handwheel counter-clockwise.	**Pass/Fail**
Cue: After 93-14 has been opened one additional turn, inform the operator CSRW Pump 111 motor amps are 75 amps.	Operator should stop opening 93-14 to maintain CSRW Pump motor amps less than 76 amps.	
Cue: Inform the operator that CSRW Pump 111 flow rate is at maximum and to return to the control room.		

Terminating Cue: In plant actions to align Containment Spray Raw water to Core Spray are performed as directed by the Control Room Operator.

RECORD STOP TIME _____

Initial Conditions:

1. A LOCA has occurred. RPV level is +35 inches and lowering.
2. Because of the unavailability of Core Spray, the SSS has determined that Containment Spray Raw Water will be aligned to Core Spray in accordance with N1-EOP-1, Attachment 5.
3. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), perform the in plant actions to lineup Containment Spray Raw Water to Core Spray loop 11 and inject water into the RPV."

NINE MILE POINT NUCLEAR STATION

OPERATOR JOB PERFORMANCE MEASURE

Title: Diesel Fire Pump Start with No Control Power Revision: 1

Task Number: 2009050501

Approvals:

General Supervisor / Date
Operations Training (Designee)

NA EXAM SECURITY /
General Supervisor Date
Operations (Designee)

NA EXAM SECURITY /
Configuration Control Date

Performer: _____ (RO/SRO/AO)

Trainer/Evaluator: _____

Evaluation Method: _____ Perform X Simulate

Evaluation Location: X Plant _____ Simulator

Expected Completion Time: 15 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:

Evaluators Signature: _____ Date: _____

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

Turbine Building

Simulator Set-up (if required):

N/A

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 **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.
   - Peer verification shall be demonstrated.

References:

1. N1-OP-21A, H.4.4

Tools and Equipment:

1. None

Task Standard:

Diesel Fire Pump running

Initial Conditions:

1. A LOCA is in progress.
2. Alternate systems are being lined up to augment RPV level control
3. DC control power is unavailable to the diesel fire pumps
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Start the Diesel Fire pump per N1-OP-21A section H.4.4."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. *Evaluator Acknowledge repeat back providing correction if necessary.*	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.	N1-OP-21A obtained. Precautions & limitations reviewed & section H.4.4 referenced.	Sat/Unsat
3. Request a qualified person be stationed at the Diesel Fire Pump to monitor engine condition	Individual requested	Sat/Unsat
Cue: Another operator is standing by at the pump		
4. Place Diesel Fire Pump control switch to Off.	Rotate switch CW to Off position.	**Pass/Fail**
Cue: control switch is in Off position		
5. Manually open 100-1211, Solenoid Operated Inlet Valve, to the Woodward Governor	100-1211 opened	**Pass/Fail**
Cue: Valve open		

Performance Steps		Standard	Grade
6.	Manually close 100-1212, Outlet Blocking Valve, from Woodward Governor	100-1212 closed	**Pass/Fail**
Cue:	Valve closed		
7.	Manually open 100-1213, Pump Lubrication Solenoid Valve.	100-1213 opened	**Pass/Fail**
Cue:	Valve open		
8.	Open 100.4-04 (IA-222) OR 100.4-03 (IA-223), Starting Air Bypass valves to provide starting air supply	Selected valve 100.4-04 (IA-222) OR 100.4-03 (IA-223) opened	**Pass/Fail**
Cue:	Valve Opened engine starts and continues to run		
9.	Close 100.4-04 (IA-222) OR 100.4-03 (IA-223), Starting Air Bypass valves to provide starting air supply	Selected valve 100.4-04 (IA-222) OR 100.4-03 (IA-223) opened	**Pass/Fail**
Cue:	Valve closed.		
10.	Report to control room that Diesel fire Pump is running	Control Room notified	Sat/Unsat
Cue:	Acknowledge report		

Terminating Cue: Diesel fire Pump Running

RECORD STOP TIME _____

Initial Conditions:

1. A LOCA is in progress.
2. Alternate systems are being lined up to augment RPV level control
3. DC control power is unavailable to the diesel fire pumps
4. Instructor to ask operator for any questions.

Initiating Cues:

"(Operator's name), Start the Diesel Fire pump per N1-OP-21A section H.4.4."