

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Conduct of Operations
TASK: Complete an On The Spot Change (OTSC)
TASK NUMBER: 2010200101
JPM NUMBER: NRC-ADM-003

ALTERNATE PATH: K/A NUMBER: 2.1.20
IMPORTANCE FACTOR: 4.3 4.2
APPLICABILITY: RO SRO
RO SRO

EVALUATION SETTING/METHOD: Classroom/Perform

REFERENCES: NC.DM-AP.ZZ-0002 Rev. 2

TOOLS AND EQUIPMENT:

VALIDATED JPM COMPLETION TIME: 12 Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

JPM SOURCE: New

APPROVAL:

Author Facility Representative Chief Examiner

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the OS or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: Minutes
ACTUAL TIME CRITICAL: N/A
JPM PERFORMED BY: _____ GRADE: SAT UNSAT
REASON, IF UNSATISFACTORY:
EVALUATOR'S SIGNATURE: _____ DATE: _____

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Conduct of Operations

TASK: Complete an On The Spot Change (OTSC)

TASK NUMBER: 2010200101

INITIAL CONDITIONS:

1. The plant is in OPCON 3 preparing to place Shutdown Cooling in service
2. It has been determined that HV-F048A(B) RHR HX SHELL SIDE BYP MOV should be opened after ~2 minutes have elapsed vs. the current 5 minutes. To prevent a thermal shock on the RHR piping.
3. You have been directed by the CRS to complete a OTSC to change step 5.2.8 of HC.OP-SO.BC-0002, Decay Heat Removal from ~5 minutes to ~2 minutes.

INITIATING CUE:

Initiate an OTSC to change the time until HV-F048A(B) is opened in step 5.2.8 from ~5 minutes to ~ 2 minutes.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations

TASK: Complete an On The Spot Change (OTSC)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure NC.DM-AP.ZZ-0002.	Examiner Cue: When the Operator has demonstrated that he can know which procedure is need, provide him a copy of NC.DM-AP.ZZ-0002. Also provide the Operator with a copy of HC.OP-SO.BC-0002.		
		Operator determines he needs to perform Section 5.1			
*	5.1.1 A.	Verify that the copy of the procedure is the latest active revision in DCRMS.	Operator verifies the copy he has been given is the latest revision of the procedure. Examiner Cue: Operator will need access to a computer terminal to verify latest active revision in DCRMS		
	B.	Obtain copies of all active OTSCs.	Operator determines there are NO active OTSCs on this procedure.		
	C.	Discuss the proposed OTSC with the Job Supervisor or Superintendent or Department Manager. If there is a change of intent involved (refer to Attachment 1 for criteria), <u>DO NOT</u> use an OTSC to resolve the condition.	Operator discusses the proposed OTSC with Evaluator. Operator determines that there is NO change in Intent per Attachment 1. Examiner Cue: Act as the Operators Supervisor and get the Operator to determine if there is a Change in Intent of the procedure.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations
TASK: Complete an On The Spot Change (OTSC)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	D.	<p>Obtain a copy of Form-1, On-The-Spot-Change Form:</p> <ul style="list-style-type: none"> • Assign an OTSC#. Use the current revision number of the procedure followed by the next available sequential letter (e.g., Rev. 6A, 6B). • Complete the Description Of Change, Reason for Change and Pages Changed sections. List all affected pages individually. [CD-607E] • Attach information that is used as the technical basis for the change. • Evaluate the impact of the proposed change on any existing OTSCs. • Ensure that the change is not a change of intent. 	<p>Operator obtains a copy of Form-1 OTSC change form</p> <ul style="list-style-type: none"> • OTSC# - Rev 16A • Page 21 is affected page. Description of change is: Change step 5.2.8 to read as follows: “WHEN ~2 minutes have elapsed THEN OPEN BC-HV-F048A(B) RHR HX SHELL SIDE BYP MOV” or words to this effect. • Reason for change – Prevent overcooling the RHR piping or words to that effect. • Pages affected – Page 21 • Attach the information provided to him from engineering. • Should not be any other OTSC’s so there should be NO effect on other OTSC’s • Operator verifies again that this NOT a change of Intent 		

INITIAL LICENSED OPERATOR EXAMINATION
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NAME: _____

DATE: _____

SYSTEM: Conduct of Operations

TASK: Complete an On The Spot Change (OTSC)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	E.	<p>Mark-up the affected procedure page(s) with the required changes as follows:</p> <ul style="list-style-type: none"> • Obtain a clean copy of all affected pages. • Address text changes only (no changes to drawings, except for text on drawing pages – there should be no <i>new</i> drawings.) • Do not change pre-existing page numbers, etc. • Identify changes by placing vertical revision bars and the OTSC change number in the right margin. • Ensure previously approved OTSCs for the current revision are not adversely affected. 	<p>Operator marks up affected procedure pages showing changes he will make.</p> <p>Operator identifies changes by placing vertical Revision bars and the OTSC Change Number in the Right margin.</p>		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations
TASK: Complete an On The Spot Change (OTSC)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	F.	Sign and date the OTSC Form-1 and attach the OTSC Form-1 (with any technical basis documentation) to the marked-up copy of the procedure, including affected OTSCs (hereafter referred to as the OTSC package).	Operator signs and dates the OTSC Form-1		

Terminating Cue: When Operator has signed and dated the OTSC Form-1, and then state "This JPM is complete".

INITIAL CONDITIONS:

1. The plant is in OPCON 3 preparing to place Shutdown Cooling in service
2. It has been determined that HV-F048A(B) RHR HX SHELL SIDE BYP MOV should be opened after ~2 minutes have elapsed vs. the current 5 minutes. To prevent a thermal shock on the RHR piping.
3. You have been directed by the CRS to complete a OTSC to change step 5.2.8 of HC.OP-SO.BC-0002, Decay Heat Removal from ~5 minutes to ~2 minutes.

INITIATING CUE:

Initiate an OTSC to change the time until HV-F048A(B) is opened in step 5.2.8 from ~5 minutes to ~ 2 minutes.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Equipment Control
TASK: Conduct Reactor Recirculation Single Loop Operation
TASK NUMBER: 2020140401
JPM NUMBER: NRC-ADM-002

ALTERNATE PATH: K/A NUMBER: 2.2.12
IMPORTANCE FACTOR: 3.0 3.4
APPLICABILITY: RO SRO
RO SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: HC.OP-ST.BB-0007, Rev. 8

TOOLS AND EQUIPMENT:

VALIDATED JPM COMPLETION TIME: 12 Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

JPM SOURCE: Bank

APPROVAL:

Author Facility Representative Chief Examiner

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the OS or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: Minutes
ACTUAL TIME CRITICAL N/A

JPM PERFORMED BY: _____ GRADE: SAT UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ DATE: _____

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Equipment Control

TASK: Conduct Reactor Recirculation Single Loop Operation

TASK NUMBER: 2020140401

INITIAL CONDITIONS:

1. Recirculation Pump A has been removed from service.
2. Preparations for Single Loop Operations are in progress in accordance with HC.OP-IO.ZZ-0006.
3. Section 5.1, Jet Pump Operability Verification, of HC.OP-ST.BB-0007, Recirculation Jet Pump Operability-Single Loop-Daily, has been completed.

INITIATING CUE:

Perform Section 5.2, APRM Flow to Total Core Flow Comparison, of HC.OP-ST.BB-0007, Recirculation Jet Pump Operability-Single Loop-Daily.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Equipment Control

TASK: Conduct Reactor Recirculation Single Loop Operation

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure HC.OP-ST.BB-0007.	Provide the operator with the partially completed HC.OP-ST.BB-0007.		
		Operator reviews Precautions and Limitations.	Operator reviews Precautions and Limitations and initials each Precaution and Limitation in the space provided in the procedure. Examiner Cue: If excessive time is taken reviewing Precautions and Limitations, inform operator that all are satisfied. Examiner Note: It is not critical to initial the procedure steps.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.2.1.		
	5.2.1	<u>IF</u> this is the first subsection of the procedure to be performed <u>THEN LOG</u> test start time in the Control Room log(s).	Operator determines that this is not the first subsection of the procedure to be performed. The operator then initials the appropriate procedure step.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Equipment Control

TASK: Conduct Reactor Recirculation Single Loop Operation

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.2.2	ENSURE that all prerequisites have been satisfied IAW Section 2.2 of this procedure.	Operator reviews Prerequisites and initials each Prerequisite in the space provided in the procedure. Examiner Cue: If excessive time is taken reviewing Prerequisites, inform operator that all are satisfied. The operator then initials the appropriate procedure step.		
	5.2.3	ENSURE Attachment 1, Section 1.0 of the OS/CRS Data and Signature Sheet has been completed <u>AND</u> Regular Surveillance <u>OR</u> Retest is indicated.	Operator ensures Attachment 1, Section 1.0 of the OS/CRS Data and Signature Sheet has been completed and Regular Surveillance or Retest is indicated. The operator then initials the appropriate procedure step.		
# *	5.2.4	START TIME: _____ At APRM panel 10C608, at each APRM channel, PLACE the Meter Function Switch to FLOW.	Operator places the Meter Function Switch to FLOW for each APRM channel to FLOW. The operator then initials the appropriate procedure step.		
# *	5.2.5	RECORD the value indicated for each APRM's flow on Attachment 2.	Operator records the value indicated for each APRM's flow on Attachment 2. The operator then initials the appropriate procedure step.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Equipment Control

TASK: Conduct Reactor Recirculation Single Loop Operation

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.2.6	RETURN the Meter Function Switch at each APRM to the AVERAGE position.	Operator returns the Meter Function Switch at each APRM to the AVERAGE position. The operator then initials the appropriate procedure step.		
*	5.2.7	Using the value of the highest APRM % Flow obtained in Step 5.2.5, DETERMINE the established Total Core Flow from Attachment 10.	Operator determines the established Total Core Flow from Attachment 10 using the highest APRM % Flow obtained in step 5.2.5. The operator then initials the appropriate procedure step.		
	5.2.8	ENTER the value obtained in Step 5.2.7 on Attachment 2.	Operator enters the value obtained in step 5.2.7 on Attachment 2. The operator then initials the appropriate procedure step.		
	5.2.9	ENTER the Total Core Flow obtained in Step 5.1.4.F on Attachment 2.	Operator enters the Total Core Flow obtained in step 5.1.4.F on Attachment 2. The operator then initials the appropriate procedure step.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Equipment Control

TASK: Conduct Reactor Recirculation Single Loop Operation

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
# *	5.2.10	COMPARE the Total Core Flow from Step 5.2.9 to the Established Total Core Flow recorded in Step 5.2.8 (the Total Core Flow must be greater than or equal to the Established Total Core Flow).	Operator compares the Total Core Flow from step 5.2.9 to the Established Total Core Flow recorded in step 5.2.8 and determines that the Total Core Flow is greater than the Established Total Core Flow. Examiner Note: Entering SAT in 5.2.11 shows satisfactory completion. The operator then initials the appropriate procedure step.		
	5.2.11	ENTER SAT OR UNSAT on Attachment 2. [T/S Table 4.3.1.1-1 Item 2.b Footnote (g)]	Operator enters a SAT on Attachment 2. The operator then initials the appropriate procedure step.		
	5.2.12	<u>IF</u> this is the final subsection of the procedure <u>THEN LOG</u> test end time in the Control Room log(s). STOP TIME: _____	Operator requests that the test end time in the Control Room Narrative Log.		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete".

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. Recirculation Pump A has been removed from service.**
- 2. Preparations for Single Loop Operations are in progress in accordance with HC.OP-IO.ZZ-0006.**
- 3. Section 5.1, Jet Pump Operability Verification, of HC.OP-ST.BB-0007, Recirculation Jet Pump Operability-Single Loop-Daily, has been completed.**

INITIATING CUE:

Perform Section 5.2, APRM Flow to Total Core Flow Comparison, of HC.OP-ST.BB-0007, Recirculation Jet Pump Operability-Single Loop-Daily.

**JOB PERFORMANCE MEASURE
SIMULATOR INSTRUCTIONS**

Reset Simulator to IC-04.

Remove the A Recirculation Pump from service.

Insert a Group of control rods.

Raise Recirculation Pump B speed to 55%

Complete Section 5.1 of HC.OP-ST.BB-0007. Ensure data/plant conditions support successful completion of Section 5.2. Need to determine the Total Core Flow in step 5.1.4.F so that Total Core Flow is greater than or equal to the Established Total Core Flow.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Conduct of Operations
TASK: Conduct Weekly Power Distribution Lineup
TASK NUMBER: 2630010201
JPM NUMBER: NRC-ADM-001

ALTERNATE PATH: K/A NUMBER: 2.1.31
IMPORTANCE FACTOR: 4.2 3.9
APPLICABILITY: RO SRO
RO SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: HC.OP-ST.ZZ-0001, Revision 23

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 15 Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

JPM SOURCE: Bank

APPROVAL:

Author

Facility Representative

Chief Examiner

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the OS or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____ Minutes
ACTUAL TIME CRITICAL COMPLETION: N/A
JPM PERFORMED BY: _____ GRADE: SAT UNSAT
REASON, IF UNSATISFACTORY:
EVALUATOR'S SIGNATURE: _____ DATE: _____

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Conduct of Operations

TASK: Conduct Weekly Power Distribution Lineup

TASK NUMBER: 2630010201

INITIAL CONDITIONS:

1. Emergency Diesel Generator AG400 has a mechanical problem and is declared inoperable.
2. HC.OP-ST.ZZ-0001, Power Distribution Lineup-Weekly, is in progress.
3. This procedure is being performed to satisfy Technical Specification Surveillance requirement 4.8.1.1.1.a.

INITIATING CUE:

Perform HC.O-ST.ZZ-0001, POWER DISTRIBUTION LINEUP – WEEKLY to satisfy Technical Specification 4.8.1.1.1.a only.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations

TASK: Conduct Weekly Power Distribution Lineup

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
			Examiner Cue: Provide the operator with a copy of the partially completed procedure HC.OP-ST.ZZ-0001(Q).		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. Examiner Cue: If excessive time is taken to review precautions and limitations, inform operator that all are satisfied. Examiner Note: Initialling the following steps is not critical.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step of procedure to be 5.1.		
	5.1	<u>Power Distribution Lineup</u>	N/A	N/A	N/A
	5.1.1	LOG test start time in the Control Room log(s).	Operator requests that the start time be logged in the Control Room log. Examiner Cue: The test start time has been logged in the Control Room log. Operator initials the step.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations
TASK: Conduct Weekly Power Distribution Lineup

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.1.2	ENSURE that all prerequisites have been satisfied IAW Section 2.1 of this procedure.	Operator ensures that the prerequisites are satisfied: <ul style="list-style-type: none"> • Observes that permission to complete the test has been given by the OS/CRS • Operator completes Att. 1, Section 3 • Ensures no other testing or maintenance is in progress that will adversely affect the performance of this test Examiner Cue: If asked, "No other testing or maintenance is in progress that will adversely affect the performance of this test." Operator initials the step.		
	5.1.3	ENSURE Attachment 1, Section 1.0 of the OS/CRS Data and Signature Sheet has been completed and Regular Surveillance or Retest is indicated.	Operator observes that Attachment 1, Section 1.0 of the OS/CRS Data and Signature Sheet has been completed and Regular Surveillance is indicated. Operator initials the step.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Conduct of Operations

TASK: Conduct Weekly Power Distribution Lineup

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.1.4	<p><u>IF</u> performing this procedure to satisfy T/S Surveillance 4.8.1.1.1.a ONLY, PERFORM the following sections: [T/S 4.8.1.1.1.a]</p> <ul style="list-style-type: none"> • 4.16KV SWITCHGEAR 10A401 • 4.16KV SWITCHGEAR 10A402 • 4.16KV SWITCHGEAR 10A403 • 4.16KV SWITCHGEAR 10A404 • OFFSITE TO ONSITE DISTRIBUTION 	Operator determines that these sections only are to be completed and initials step.		
	5.1.5	<p>RECORD M&TE identification numbers and calibration due dates for test equipment utilized for this test on Attachment 3 <u>THEN ASSIGN</u> a Production Resource Tool (PRT) to activity 0220 of Order 80014483 for the M&TE utilized <u>AND RECORD</u> in the long text of the PRT the surveillance and date performed. [80024844]</p>	Operator determines that this step is not required and marks step as N/A.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations
TASK: Conduct Weekly Power Distribution Lineup

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
# *	5.1.6	START TIME: _____ PERFORM Power Distribution Lineup by completing Attachment 2.	Operator observes the breaker positions, (and bus Voltage for the 4.16KV busses) of those breakers listed in Attachment 2 for: <ul style="list-style-type: none"> • 4.16KV SWITCHGEAR 10A401 • 4.16KV SWITCHGEAR 10A402 • 4.16KV SWITCHGEAR 10A403 • 4.16KV SWITCHGEAR 10A404 • OFFSITE TO ONSITE DISTRIBUTION The operator notes the positions/voltages on the attachment, enters SAT, and initials as the performer. Examiner Note: See attached.		

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Conduct of Operations
TASK: Conduct Weekly Power Distribution Lineup

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.1.7	<u>IF</u> any indication not specified in Attachment 2 was used to satisfy this surveillance <u>THEN DOCUMENT AND JUSTIFY</u> its use in Section 2.1.5 of Attachment 1.	Operator determines that the lineup not specified in Attachment 2 was used to satisfy this surveillance and documents the reason in Section 2.1.5 of Attachment 1. Examiner Note: See attached. The description in 2.1.5 need not exactly match that provided, but must state a correct decision making process. Operator initials the step.		
	5.1.8	LOG test end time in Control Room log(s).	Examiner Cue: Log entry completed. Operator initials the step.		
	5.1.9	SUBMIT this procedure to the OS/CRS for review <u>AND</u> completion of Attachment 1. STOP TIME: _____	Examiner Cue: Provide Terminating Cue.		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. Emergency Diesel Generator AG400 has a mechanical problem and is declared inoperable.
2. HC.OP-ST.ZZ-0001, Power Distribution Lineup-Weekly, is in progress.
3. This procedure is being performed to satisfy Technical Specification Surveillance requirement 4.8.1.1.1.a.

INITIATING CUE:

Perform HC.O-ST.ZZ-0001, POWER DISTRIBUTION LINEUP – WEEKLY to satisfy Technical Specification 4.8.1.1.1.a only.

**JOB PERFORMANCE MEASURE
SIMULATOR INSTRUCTIONS**

Reset Simulator to any IC-1

Setup Electrical Distribution System as noted on page 28 of Attachment 2.

Complete Section 1 for Regular Surveillance and 4.8.1.1.1.a ONLY.

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INPLANT DATA SHEET
POWER DISTRIBUTION LINEUP - WEEKLY

1.1 **Power Distribution Lineup (Continued)**

EQUIPMENT	NOMENCLATURE	REQUIRED	ACTUAL	SAT/ UNSAT	PERF
CHANNEL A	4.16KV SWGR 10A401				
40101	ALTERNATE FEEDER BKR TO 10A401	OPEN	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
40103	10A401 FEED TO 10B450	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
40107	EDG AG400 OUTPUT BKR TO 10A401	OPEN	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
40108	NORMAL FEEDER BKR TO BUS 10A401	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
40110	10A401 FEED TO 10B410	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
	VOLTAGE ON 10A401(A7061)	3744 - 4576V	<i>4163</i>	<i>SAT</i>	<i>Initials</i>
CHANNEL A	480 VOLT BUS 10B410				
41022	10B410 FEED TO MCC 10B212	CLOSED			
41021	10B410 FEED TO MCC 10B411	CLOSED			
	VOLTAGE ON 10B410	432 - 528V			
CHANNEL A	480 VOLT BUS 10B450				
45022	10B450 FEED TO MCC 10B553	CLOSED			
45021	10B450 FEED TO MCC 10B451	CLOSED			
	VOLTAGE ON 10B450	432 - 528V			

* Acceptance Criterion - the SAT block must be marked SAT.

INPLANT DATA SHEET
POWER DISTRIBUTION LINEUP - WEEKLY

1.1 **Power Distribution Lineup (Continued)**

EQUIPMENT	NOMENCLATURE	REQUIRED	ACTUAL	SAT/ UNSAT	PERF
CHANNEL C	4.16KV SWGR 10A403				
40301	ALTERNATE FEEDER BKR TO 10A403	OPEN	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
40303	10A403 FEED TO 10B470	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
40307	EDG CG400 OUTPUT BKR TO 10A403	OPEN	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
40308	NORMAL FEEDER BKR TO 10A403	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
40310	10A403 FEED TO 10B430	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
	VOLTAGE ON 10A403 (A7066)	3744 - 4576V	<i>4163</i>	<i>SAT</i>	<i>Initials</i>
CHANNEL C	480 VOLT BUS 10B430				
43022	10B430 FEED TO MCC 10B232	CLOSED			
43021	10B430 FEED TO MCC 10B431	CLOSED			
	VOLTAGE ON 10B430	432 - 528V			
CHANNEL C	480 VOLT MCC 10B470				
47022	10B470 FEED TO MCC 10B573	CLOSED			
47021	10B470 FEED TO MCC 10B471	CLOSED			
	VOLTAGE ON 10B470	432 - 528V			

* Acceptance Criterion - the SAT block must be marked SAT.

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INPLANT DATA SHEET
POWER DISTRIBUTION LINEUP - WEEKLY

1.1 Power Distribution Lineup (Continued)

EQUIPMENT	NOMENCLATURE	REQUIRED	ACTUAL	SAT/ UNSAT	PERF
CHANNEL B	4.16KV SWGR 10A402				
40201	NORMAL FEEDER BKR TO 10A402	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
40203	10A402 FEED TO 10B460	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
40207	EDG BG400 OUTPUT BKR TO 10A402	OPEN	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
40208	ALTERNATE FEEDER BKR TO 10A402	OPEN	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
40210	10A402 FEED TO 10B420	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
	VOLTAGE ON 10A402 (A7076)	3744 - 4576V	<i>4159</i>	<i>SAT</i>	<i>Initials</i>
CHANNEL B	480 VOLT BUS 10B420				
42022	10B420 FEED TO MCC 10B222	CLOSED			
42021	10B420 FEED TO MCC 10B421	CLOSED			
	VOLTAGE ON 10B420	432 - 528V			
CHANNEL B	480 VOLT BUS 10B460				
46022	10B460 FEED TO MCC 10B563	CLOSED			
46021	10B460 FEED TO MCC 10B461	CLOSED			
	VOLTAGE ON 10B460	432 - 528V			

* Acceptance Criterion - the SAT block must be marked SAT.

Page 12 of 30
INPLANT DATA SHEET
POWER DISTRIBUTION LINEUP - WEEKLY

1.1 Power Distribution Lineup (Continued)

EQUIPMENT	NOMENCLATURE	REQUIRED	ACTUAL	SAT/ UNSAT	PERF
CHANNEL D	4.16KV SWGR 10A404				
40401	NORMAL FEEDER BKR TO 10A404	CLOSED	CLOSED	SAT	Initials
40403	10A404 FEED TO 10B480	CLOSED	CLOSED	SAT	Initials
40407	EDG DG400 OUTPUT BKR TO 10A404	OPEN	OPEN	SAT	Initials
40408	ALTERNATE FEEDER BKR TO 10A404	OPEN	OPEN	SAT	Initials
40410	10A404 FEED TO 10B440	CLOSED	CLOSED	SAT	Initials
	VOLTAGE ON 10A404 (A7071 OR the local volt meter on the front of 10A404-02 cabinet)	3744 - 4576V	4159	SAT	Initials
CHANNEL D	480 VOLT BUS 10B440				
44022	10B440 FEED TO MCC 10B242	CLOSED			
44021	10B440 FEED TO MCC 10B441	CLOSED			
	VOLTAGE ON 10B440	432 - 528V			
CHANNEL D	480 VOLT BUS 10B480				
48022	10B480 FEED TO MCC 10B583	CLOSED			
48021	10B480 FEED TO MCC 10B481	CLOSED			
	VOLTAGE ON 10B480	432 - 528V			

* Acceptance Criterion - the SAT block must be marked SAT.

INPLANT DATA SHEET
POWER DISTRIBUTION LINEUP - WEEKLY

1.1 **Power Distribution Lineup (Continued)**

EQUIPMENT	NOMENCLATURE	REQUIRED	ACTUAL	SAT/ UNSAT	PERF
OFFSITE TO ONSITE DISTRIBUTION					
BS4-5	13KV BUS SECTION 4-5 BKR	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS6-7	13KV BUS SECTION 6-7 BKR	CLOSED	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
2T60	STA XFMR T2 CIRCUIT SWITCHER	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
4T60	STA XFMR T4 CIRCUIT SWITCHER	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS3-4	500KV BUS SECTION 3-4 BKR	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS6-5	500KV BUS SECTION 6-5 BKR	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS7-8	13KV BUS SECTION 7-8 BKR	OPEN	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS2-3	13KV BUS SECTION 2-3 BKR	OPEN	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS1-2	13KV BUS SECTION 1-2 BKR	CLOSED	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
BS9-0	13KV BUS SECTION 9-10 BKR	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
1T60	STA XFMR T1 CIRCUIT SWITCHER	CLOSED	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
3T60	STA XFMR T3 CIRCUIT SWITCHER	CLOSED	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
BS1-3	500KV BUS SECTION 1-3 BKR	CLOSED	<i>OPEN</i>	<i>SAT</i>	<i>Initials</i>
BS5-1	500KV BUS SECTION 5-1 BKR	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>
BS2-6	500KV BUS SECTION 2-6 BKR	CLOSED	<i>CLOSED</i>	<i>SAT</i>	<i>Initials</i>

+ **NOTE:** The above alignment represents the normal lineup of the 500KV/13.8KV Switchyards. Deviations may exist while still maintaining two independent offsite power source separation. **IF** actual alignment deviates from the above, **CONSULT** electrical drawing E-0001-0 to determine if proper separation exists, and IAW the following criteria: 500KV Bus Sections 1 & 2 energized by two offsite sources (Keeney 5015, New Freedom 5023, or Salem X-Tie 5037). Two feeds (10X and 20X) into a split 13.8KV Yard, with each feed supplying power to an energized separate Station Service Transformer (AX501 and BX501).
 An independent offsite feed is considered available to the safety related distribution system **IF** all four of the 1E infeed breakers are OPERABLE. **IF** less than 4 breakers are OPERABLE, **CONSIDER** the offsite feed inoperable and comply with ACTION 3.8.1.1 as appropriate.

OS/CRS DATA AND SIGNATURE SHEET
POWER DISTRIBUTION LINEUP - WEEKLY

2.0 **POST TEST INFORMATION**

2.1 The data acquired during the performance of this test has been reviewed for completeness and compliance with Technical Specification 4.8.3.1, 4.8.3.2, or 4.8.1.1.1.a and the test is considered:

2.1.1 SATISFACTORY (All acceptance criteria is marked SAT)

_____/_____
OS/CRS DATE-TIME

2.1.2 UNSATISFACTORY AND
IF necessary the T.S. ACTION statement has been implemented.

_____/_____
OS/CRS DATE-TIME

2.1.4 Order No. _____

2.1.5 Remarks Lineup determined to be satisfactory even though not in the normal
Lineup as described on page 28. Using the NOTE, determined that 500KV Bus
Sections 1 & 2 energized by two offsite sources, Section 1 by
And Section 2 by . 10X and 20X are split into the 13.8KV Yard,
with each feed supplying power to an energized separate.
Station Service Transformers AX501 and BX501.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE:

STATION: Hope Creek
SYSTEM: Emergency Plan
TASK: Utilize The ECG To Determine The Emergency Classification And/Or Reportability Of An Event And/Or Plant Condition
TASK NUMBER: 2000500302
JPM NUMBER: NRC-ADM-004

ALTERNATE PATH: **K/A NUMBER:** 2.4.38
APPLICABILITY: **IMPORTANCE FACTOR:**

<u>2.2</u>	<u>4.0</u>
RO	SRO

RO SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: Hope Creek Event Classification Guide, Rev. 45
HC.OP-AB.RPV-0009, Rev 1

TOOLS, EQUIPMENT AND PROCEDURES:

VALIDATED JPM COMPLETION TIME: _____ Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: 15 minutes

JPM SOURCE: New

APPROVAL:

Author Facility Representative Chief Examiner

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the SM or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____ Minutes
ACTUAL TIME CRITICAL COMPLETION: _____ Minutes
JPM PERFORMED BY: _____ **GRADE:** SAT UNSAT
REASON, IF UNSATISFACTORY:
EVALUATOR'S SIGNATURE: _____ **DATE:** _____

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE:

NAME: _____

DATE: _____

SYSTEM: Emergency Plan

TASK: Utilize The ECG To Determine The Emergency Classification And/Or Reportability
Of An Event And/Or Plant Condition

TASK NUMBER: 2000500302

INITIAL CONDITIONS:

1. Plant is in the condition at the end of Simulator Scenario #1. With conditions as follows:
 - a. RCIC Isolation valves are failed open.
 - b. RCIC steam piping has broken in the RCIC pump room causing both HPCI and RCIC Room Temperatures to exceed 250°F
 - c. Reactor has been Emergency Depressurized using EO-0202

INITIATING CUE:

Based on the current condition of the Plant, classify this event and complete Step I. A. of ECG Attachment 1, 2, 3, OR 4 as appropriate. This is a Time Critical Task.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
 DATE: _____

SYSTEM: **Emergency Plan**

TASK: **Utilize The ECG To Determine The Emergency Classification And/Or Reportability Of An Event And/Or Plant Condition**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains Hope Creek Event Classification Guide.	Operator obtains the correct procedure.		
		START TIME: _____	Start time should be logged after the operator has reviewed the initial conditions and repeated the task back.		
	ECG Section i.IV.C	Classification: To use this ECG volume, follow this sequence: 1. ASSESS the event and/or plant conditions and DETERMINE which ECG section(s) is most appropriate.	Operator assesses the initial conditions, and determines that Sections 3.2 RCS Barrier and 3.3 Containment Barrier are appropriate.		
	ECG Section i.IV.C	2. REFER to Section EAL/RAL Flowchart diagram(s), and identify the Initiating Conditions that are related to the event/condition that has occurred or is ongoing.	Operator reviews the EALs and determines that the Initiating Conditions for EALs 3.2.3.B and 3.3.4 are related to the event that has occurred.		
*	ECG Section i.IV.C	3. RCS Barrier (3.2.3 B) is determined to be failed – 4 points and Containment Barrier (3.3.4) is determined to be failed – 2 points	Operator adds 4 points for a failed RCS barrier and 2 points for a failed Containment barrier and determines that 6 points is enough to warrant a declaration of a SAE.		

ATTACHMENT 4
JOB PERFORMANCE MEASURE
JPM/SIMULATOR SETUP INSTRUCTIONS
(OPTIONAL)

INITIAL CONDITIONS:

1. Plant is in the condition at the end of Simulator Scenario #1. With conditions as follows:
 - a. RCIC Isolation valves are failed open.
 - b. RCIC steam piping has broken in the RCIC pump room causing both HPCI and RCIC Room Temperatures to exceed 250°F
 - c. Reactor has been Emergency Depressurized using EO-0202

INITIATING CUE:

Based on this information, classify this event and complete Step I. A. of ECG Attachment 1, 2, 3, OR 4 as appropriate. This is a Time Critical Task.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Emergency/ECG/E-Plan/Fire & Medical
TASK: Complete a Major Equipment and Electrical Status (MEES) Form
TASK NUMBER:
JPM NUMBER: NRC-ADM-005

ALTERNATE PATH: K/A NUMBER: 2.4.39
IMPORTANCE FACTOR: 3.3
APPLICABILITY: RO SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: Hope Creek Event Classification Guide, Attachment 8, Revision 07

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: (10) Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

JPM SOURCE: Bank

APPROVAL:

Author

Facility Representative

Chief Examiner

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the OS or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: Minutes
ACTUAL TIME CRITICAL COMPLETION: N/A

JPM PERFORMED BY: _____ GRADE: SAT UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ DATE: _____

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Emergency/ECG/E-Plan/Fire & Medical

TASK: Complete a Major Equipment and Electrical Status (MEES) Form

TASK NUMBER:

INITIAL CONDITIONS:

1. You are the On-Shift Plant Operator designated as Communicator 2.
2. The plant has experienced a LOCA followed by a LOP when the Main Generator locked out.

INITIATING CUE:

Complete a Major Equipment and Electrical Status (MEES) Form in accordance with ECG Attachment 8.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: Emergency/ECG/E-Plan/Fire & Medical
TASK: Complete a Major Equipment and Electrical Status (MEES) Form

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains and locates Attachment 8 of the Hope Creek ECG.	Operator obtains the correct procedure. Examiner Note: It is acceptable to provide the operator the Attachment.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step of procedure to be B.1.		
	B.1.	START TIME: _____ <u>WHEN</u> in an <u>ALERT</u> or higher <u>emergency</u> <u>OR</u> <u>AFTER</u> significant changes in plant status; <u>THEN</u> <u>COMPLETE</u> the Major Equipment and Electrical Status (MEES) Form.	Operator enters the date, time, and completes the Major Equipment and Electrical Status (MEES) Form, while walking-down the control room boards.		
			Examiner Cue: WHEN the operator asks for the status of 1BC663, B Hydrogen Recombiner, STATE that it is not in service but is available.		

INITIAL LICENSED OPERATOR EXAMINATION
 JOB PERFORMANCE MEASURE

NAME: _____
 DATE: _____

SYSTEM: Emergency/ECG/E-Plan/Fire & Medical
 TASK: Complete a Major Equipment and Electrical Status (MEES) Form

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*		STOP TIME: _____	Operator initials the Major Equipment and Electrical Status (MEES) Form. (NOT Critical) Examiner Note: See attached for the completed Form. Examiner Note: PCIG compressors may be marked as OUT OF SERVICE(N) or as IN SERVICE(Y). <u>CRITICAL NOTATIONS ARE:</u> <ul style="list-style-type: none"> • Correct status of: <ul style="list-style-type: none"> ○ C RHR Pump ○ All SSW Pumps ○ All SACS Pumps ○ All Core Spray Pumps ○ All EDG, Running and Loaded ○ A, B, and D RHR Pumps 		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. You are the On-Shift Plant Operator designated as Communicator 2.
2. The plant has experienced a LOCA followed by a LOP when the Main Generator locked out.

INITIATING CUE:

Complete a Major Equipment and Electrical Status (MEES) Form in accordance with ECG Attachment 8.

JOB PERFORMANCE MEASURE
SIMULATOR INSTRUCTIONS

Reset Simulator to an 100% IC. (Keep simulator in freeze.)

Tag out the B CRD Pump. (3A83 F LO to OFF, place bezel cover over controls)

Insert RR31A2 at 100%.

Insert RH04C.

Insert EG12 with a 120 second time delay.

Place the simulator in RUN.

Take all scram actions.

Restore 1E Breakers.

Restore PCIG.

Allow plant conditions to stabilize.

Acknowledge all alarms and flashing indications.

Place the simulator in freeze.

**EXAMINER'S COPY
FOR TRAINING ONLY**

HOPE CREEK						DATE: <u>TODAY</u>													
MAJOR EQUIPMENT AND ELECTRICAL STATUS						UPDATE TIME: <u>NOW</u>													
NOTE: Y = IN SERVICE N = OUT OF SERVICE (CIRCLE ANY UNAVAILABLE EQUIPMENT)			REACTIVITY CONTROL		ELECT. FEED	Y/N	CONTAINMENT CONTROL		ELECT. FEED	Y/N									
			SLC PUMPS		A	B212	N	FRVS RECIRC FANS		A	B410	Y							
					B	B222	N			E	B450	Y							
			RWCU PUMPS		A	B254	(N)			B	B420	Y							
					B	B264	(N)			F	B460	Y							
REACTOR RECIRC PUMPS		A	A110	(N)			C	B430	Y										
		B	A120	(N)			D	B440	Y										
WATER COOLING SYSTEMS			ELECT. FEED	Y/N	CRD PUMPS		A	B430	N	FRVS VENT FANS		A	B212	Y					
SW PUMPS		A	A401	Y			B	B440	(N)			B	B222	Y					
		C	A403	Y	ELECTRICAL STATUS			Y/N		H2 RECOMBINERS		A	B410	N					
		B	A402	Y	OFFSITE AC POWER AVAILABLE			(N)		PCIG COMPRESSORS		A	B232	Y					
		D	A404	Y	EMERGENCY DIESELS		RUN	LOADED			B	B242	Y						
SACS PUMPS			A	A401	Y	EDG		A	Y	Y	SERVICE AIR COMPRESSORS		ELECT. FEED		Y/N				
		C	A403	Y			B	Y	Y			00K107		A120	(N)				
		B	A402	Y			C	Y	Y			10K107		A110	(N)				
		D	A404	Y			D	Y	Y										
RACS PUMPS			A	B415	N	HVAC		ELECT. FEED		Y/N	EMER. INST. AIR COMPRESSOR		ELECT. FEED		Y/N				
		B	B426	N							10K100		B450	(N)					
		C	B250	(N)	TURBINE BLDG		A	A110	(N)	ECCS		ELECT. FEED		Y/N					
CIRC WATER PUMPS			A	A501	(N)	CHILLED WATER CHILLERS		B	A120	(N)									
		B	A502	(N)			C	A101	(N)			RHR PUMPS		A	A401	Y			
		C	A501	(N)			D	A110	(N)					C	A403	(N)			
		D	A502	(N)	TURBINE BLDG		A	B130	(N)					B	A402	Y			
CONDENSATE/ FEEDWATER			ELECT. FEED	Y/N	CHILLED WATER		B	B120	(N)					D	A404	Y			
PRIMARY CONDENSATE PUMPS		A	A110	(N)	CIRC PUMPS		C	B110	(N)	CONTROL AREA		A	B431	Y	RCIC PUMPS		STEAM	(N)	
		B	A120	(N)											HPCI PUMPS		STEAM	(N)	
		C	A102	(N)	CONTROL AREA CHILLED WATER CHILLERS		B	B441	Y					CORE		A	A401	Y	
SECONDARY CONDENSATE PUMPS			A	A110	(N)	CONTROL AREA CHILLED WATER CHILLERS		A	A403	Y					SPRAY PUMPS		C	A403	Y
		B	A120	(N)											B		A402	Y	
		C	A104	(N)	TSC		A	B451	Y							D		A404	Y
FEED WATER PUMPS			A	STEAM	(N)	CHILLED WATER													
		B	STEAM	(N)	CIRC PUMPS		B	B461	Y										
		C	STEAM	(N)															
					TSC		A	A401	Y										
					CHILLED WATER CHILLERS		B	A402	Y										

LICENSED OPERATOR REVIEW: INITIALS

INITIALS

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Radiation Control
TASK: Review a Containment Purge form
TASK NUMBER: 2290050101
JPM NUMBER: NRC-ADM-006

ALTERNATE PATH: K/A NUMBER: 223001A4.03
IMPORTANCE FACTOR: 3.4
APPLICABILITY: RO SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: HC.OP-AP.ZZ-0104, Revision 5

TOOLS AND EQUIPMENT: Calculator

VALIDATED JPM COMPLETION TIME: (3) Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

JPM SOURCE: Bank

APPROVAL:

Author Facility Representative Chief Examiner

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the OS or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____ Minutes
ACTUAL TIME CRITICAL COMPLETION: N/A
JPM PERFORMED BY: _____ GRADE: SAT UNSAT
REASON, IF UNSATISFACTORY:
EVALUATOR'S SIGNATURE: _____ DATE: _____

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: Radiation Control

TASK: Review a Containment Purge form

TASK NUMBER: 2290050101

INITIAL CONDITIONS:

1. A plant shutdown is in progress for a Refueling outage.
2. The Reactor is shutdown.
3. At 0200 today Purging of the Primary Containment commenced..
4. At 0846 today Operational Condition 4 was entered.
5. At 1142 today the purge lineup was secured in accordance with HC.OP-SO.GS-0001, Containment Atmosphere Control System Operation.

INITIATING CUE:

Review today's Containment Prepurge Cleanup, Inerting, Or Pressure Control Valve Permit and Log in accordance with HC.OP-AP.ZZ-0104.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made.

INITIAL LICENSED OPERATOR EXAMINATION
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: **Radiation Control**

TASK: **Review a Containment Purge form**

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
			Examiner Cue: Provide the operator with HC.OP-AP.ZZ-0104 and the supporting paperwork (Attached).		
		Operator reviews requirements.	Operator reviews requirements.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.2.6.		
*	5.2.6	<p>START TIME: _____</p> <p>The CRS/SM should verify the calculations, sign in the appropriate space for verification and close out and enter the time and date.</p> <p>STOP TIME: _____</p>	<p>Operator verifies the calculations.</p> <p>Operator notices that the incorrect STOP TIME was used in Section C.</p> <p>Examiner Note: The operator may request that the NCO make the corrections. If so, provide Cue.</p> <p>Examiner Cue: Make the corrections that you have noted.</p> <p>(Time should be 0846, and Total Hours should be 6.77.)</p> <p>Operator makes correction to the STOP TIME, TOTAL TIME, and the "Total number of hours valves/line open this permit". Then presents it back to the NCO for completion of the procedure.</p>		

Terminating Cue: Repeat back message from the operator on the status of the JPM, and then state "This JPM is complete"

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. A plant shutdown is in progress for a Refueling outage.**
- 2. The Reactor is shutdown.**
- 3. At 0200 today Purging of the Primary Containment commenced.**
- 4. At 0848 today Operational Condition 4 was entered.**
- 5. At 1142 today the purge lineup was secured in accordance with HC.OP-SO.GS-0001, Containment Atmosphere Control System Operation.**

INITIATING CUE:

Complete today's Containment Prepurge Cleanup, Inerting, Or Pressure Control Valve Permit and Log in accordance with HC.OP-AP.ZZ-0104.

Examiner's Copy

FORM 2

(This Form page 1 of 1)

CONTAINMENT PREPURGE CLEANUP, INERTING, OR PRESSURE CONTROL VALVE PERMIT

SECTION A																								
Date: <u>Today</u>		NOTE: This permit is valid only until 2400 of this date																						
Gaseous Effluent Permit #: <u>020020001</u>																								
SECTION B																								
HOURS VALVES/LINES OPEN PREVIOUS YEAR (Note 1)																								
Calculate Total Hours Open During Previous Year (Note 1)	(1) Max. allowed for 365 days (admin limit) 452 hrs (2) Total previous year (Note 1) (-) <u>34.98</u> Hours available this date (line 1 minus line 2 OR 24, whichever is less) (=) <u>24</u> Hours authorized this date (max 24 hours) 24																							
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SNSS/NSS Closing permit	Examinee's Signature	Date/Time <u>Today/Time</u>																						

Note 1: The previous year includes the period from 2400 on today's date back to 0001 on the same date one year earlier.

Note 2: Completed Form 2 should be filed in the AP-104 binder in the control room.

Examinee's Copy

FORM 2

(This Form page 1 of 1)

CONTAINMENT PREPURGE CLEANUP, INERTING, OR PRESSURE CONTROL VALVE PERMIT

SECTION A																																									
Date: <u>Today</u> NOTE: This permit is valid only until 2400 of this date																																									
Gaseous Effluent Permit #: <u>020020001</u>																																									
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