

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: PERFORM ROD EXERCISE TEST

JPM NUMBER: CR JPM a REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): PBN P001.020.COT/PERFORM CONTROL ROD EXERCISES

K/A NUMBERS: 001.K4.02 (3.8/3.8), 001.A3.05 (3.5/3.5), 001.A4.03 (4.0/3.7)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 20 Minutes Time Critical: No

Alternate Path: Yes

Point Beach Nuclear Plant  
**Control Room JPM a**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

**INITIAL CONDITIONS:**

- You are the Unit 1 CO.
- Unit 1 is at 100% power, steady state Xenon.

**INITIATING CUES:**

- The SRO has directed you to perform TS-5, "Rod Exercise Test Unit 1." The Pre-job brief has been completed.
- An AO is standing by in the Unit 1 Rod Drive MG Set Room to assist in the performance of the test.

### Control Room JPM a

#### JPM PERFORMANCE INFORMATION

Required Materials: TS-5, Rod Exercise Test Unit 1  
REI 7.0, Control Rod Position Determination

General References: TS-5, Rod Exercise Test Unit 1  
REI 7.0, Control Rod Position Determination

Task Standards: Bank D rods have been exercised, bank overlap counter discrepancy corrected and bank D rods returned to their original position.

Start Time: \_\_\_\_\_

**NOTE:** When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

**IMPORTANT:** Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: 1 Critical <u>N</u>	Review Precautions/Limitations and Initial Conditions
Standard:	The examinee reviews TS-5, Rod Exercise Test Precautions and Limitations and Initial Conditions.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM a**

Performance Step: 2 Critical <u>Y</u>	Record the following indications:  RDC-LOGIC Cabinet (Key #21): -Bank Overlap Counter reading
Standard:	Examinee contacts Unit 1 Turbine Hall Operator and obtains the Bank Overlap Counter Reading.
Evaluator Note:	<b>Counter Reading is in the rod control cabinet in the Rod Drive MG set Room. It is critical to record the correct reading.</b>
Evaluator Cue:	<b>AO reports that the Bank Overlap Counter is reading 594.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 3 Critical <u>N</u>	Status of the Group Select Lights for the following power cabinets: -1AC – Group Select Light “C” -2AC – Group Select Light “C” -1BD – Group Select Light “B”
Standard:	Examinee contacts the U1 TH Operator and obtains the status of the lights.
Evaluator Note:	<b>Light status is found on the power cabinets in the RD MG Set Room</b>
Evaluator Cue:	<b>AO Reports “C” lights lit for 1AC and 2AC and “B” light lit for 1BD.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM a**

Performance Step: 4 Critical <u>Y</u>	1C04, Rod Bank Group (Demand) counters: -Control Bank A Group 1 -Etc.
Standard:	The examinee correctly records Control and Shutdown Bank Group Demand counter readings.
Evaluator Note:	<b>*All Bank Demand counters should indicate 228 (225) steps except Bank D which should indicate 220 steps. Since only Bank D rods are being exercised for this JPM, only the Bank D readings are critical.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 5 Critical <u>N</u>	1C-120A, RPI #1, Bank Position Display -Bank A -Bank B -Bank C -Bank D
Standard:	The examinee correctly records bank positions on 1C-120A.
Evaluator Note:	<b>Bank Positions are indicated behind the Main Control Boards on 1C-120A. Examinee may ask permission to go behind the boards. Indicate that the 3<sup>rd</sup> license will have responsibility for the Unit while the examinee retrieves the readings.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM a**

Performance Step: 6 Critical <u>N</u>	Compare the Bank Overlap Counter reading to Control Bank position (Step Counters) in REI 7.0, Control Rod Position Determination.
Standard:	The examinee obtains a copy of REI 7.0 and compares the Control Bank position with the Bank Overlap Counter and determines whether the readings agree.
Evaluator Note:	<b>The examinee should determine that the Control Bank position and Bank Overlap Counter do NOT agree. With Control Bank D at 220 steps, the Bank Overlap Counter should read 595.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 7 Critical <u>Y</u>	If the Control Bank Position AND Bank Overlap Counter reading do not agree, then perform Attachment A.
Standard:	The examinee determines the readings do not agree and goes to attachment A.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 8 Critical <u>Y</u>	Place Rod control selector to Manual
Standard:	The examinee places Rod control selector switch to the Manual position.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM a**

Performance Step: 9 Critical <u>Y</u>	Step Control Bank D out 1 step from its current position.
Standard:	The examinee steps Control Bank D out 1 step.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 10 Critical <u>Y</u>	Bump step Control Bank D in one step.
Standard:	The examinee bumps Control Bank D in one step.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 11 Critical <u>N</u>	Check card A105 has the BOTTOM LIGHT ILLUMINATED (top row, 3 <sup>rd</sup> card from the left in the Rod Control Logic Cabined directly above the Bank Overlap Counter).
Standard:	The examinee contacts the Auxiliary Operator in the Rod Drive Room and obtains status of card A105 bottom light.
Evaluator Note:	<b>Based on the report from the AO, steps 5.0 and 6.0 of Attachment A will be N/A</b>
Evaluator Cue:	<b>The AO reports card A105 has the bottom light illuminated.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM a**

Performance Step: 12 Critical <u>N</u>	Compare the Bank D Demand Position (Step Counters) to the Bank Overlap Counter.
Standard:	The examinee contacts the AO for the Bank Overlap Counter reading and compares the Step Counter for Bank D to the obtained Bank Overlap Counter reading.
Evaluator Cue:	<b>AO reports the Bank Overlap Counter reads 595.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 13 Critical <u>N</u>	IF the Control Bank D Position (Step Counters) and the Bank Overlap Counter do not agree, THEN adjust the Bank Overlap Counter at RDC Logic Cabinet by depressing the +1 or -1 button as necessary until the proper value correlating to the Control Rod Bank D Position (Step Counters).
Standard:	Determine step is not required to be performed and N/A.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 14 Critical <u>N</u>	Return the Control Rod selector switch to AUTO.
Standard:	The examinee places Control Rod selector to auto.
Evaluator Note:	<b>When examinee asks for an Independent Verification of this step, initial the step for IV.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

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**Control Room JPM a**

Performance Step: 15 Critical <u>N</u>	If printed PPCS data is required, then obtain a screen print of PPCS display page 2121 prior to and following movement of each rod group.
Standard:	The examinee requests whether PPCS printed data is required.
Evaluator Note:	<b>Examinee may wish to print the data, inform them that it is not required.</b>
Evaluator Cue:	<b>Printed PPCS data is not required.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 16 Critical <u>Y</u>	IF Control Bank D is not fully inserted, THEN perform the following exercise test: Place the Control Rod Bank Selector switch to the CBD position.
Standard:	The examinee places the Control Rod Bank Selector switch to the CBD position.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 17 Critical <u>N</u>	Perform the following rod step sequence twice:  Step Control Bank D out 1 step from its current position.
Standard:	The examinee steps Control Bank D out 1 step.
Evaluator Note:	<b>This step and the next will be repeated.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM a**

Performance Step: 18 Critical <u>N</u>	Bump step Control Bank D in one step.
Standard:	The examinee bumps Control Bank D in one step.
Evaluator Note:	<b>This step and the previous will be repeated.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 19 Critical <u>Y</u>	Insert OR Withdraw Control Bank D at least 10 steps but no more than 20 steps while observing movement on individual Control Bank D rods.
Standard:	The examinee inserts Control Bank D at least 10 but not more than 20 steps.
Evaluator Note:	<b>The examinee must recognize that there is not enough "room" to withdraw the rods 10 steps and must therefore insert the rods the required distance</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 20 Critical <u>Y</u>	Withdraw OR insert Control Bank D to the position recorded in Step 5.1.3
Standard:	The examinee withdraws Control Bank D to its original position recorded in Step 5.1.3.
Evaluator Note:	<b>If the examinee overshoots rod steps they can correct.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

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Performance Step: 21	Withdraw Control Bank D one step.
Critical <u>Y</u>	
Standard:	The examinee withdraws Control Bank D one step.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 22	Insert Control Bank D one step.
Critical <u>Y</u>	
Standard:	The examinee inserts Control Bank D one step.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 23	Ensure Control Bank D is in the position recorded in Step 5.1.3.
Critical <u>N</u>	
Standard:	The examinee ensures the Control Bank D Group Demand Counter reading matches the number obtained in step 5.1.3.
Evaluator Note:	<b>CB D Demand Counter should read 220. When examinee asks for an Independent Verification of this step, initial the step for IV.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Terminating Cues: **The JPM is complete.**

Stop Time: \_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM a**  
TURNOVER SHEET

**INITIAL CONDITIONS:**

- You are the Unit 1 CO.
- Unit 1 is at 100% power, steady state Xenon.

**INITIATING CUES:**

- The SRO has directed you to perform TS-5, "Rod Exercise Test Unit 1." The Pre-job brief has been completed.
- An AO is standing by in the Unit 1 Rod Drive MG Set Room to assist in the performance of the test.

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: Raise Reactor Vessel Level

JPM NUMBER: Control Room JPM b REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): PBN P002.002.COT Drain the RCS and SG tubes

K/A NUMBERS: 002.A1.11 (2.7/3.2)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 10 Minutes Time Critical: NO

Alternate Path: NO

Point Beach Nuclear Plant  
**CONTROL ROOM JPM b**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

**INITIAL CONDITIONS:**

- OP 4D Part 1, 'Draining the Reactor Coolant System' is in progress.
- The RCS and SG tubes have been drained.
- The RCS is at atmospheric pressure
- Reactor Vessel Level is at 26%
- Desired Reactor Vessel Level per OP 4D Part 1 is 27%

**INITIATING CUES:**

- OS1 has directed you, the Third License, to raise reactor vessel level to 27% per OP 4D Part 1 'Attachment D, RCS Level Stabilization'.

### CONTROL ROOM JPM b

#### JPM PERFORMANCE INFORMATION

Required Materials: OP 4D Part 1, 'Draining the Reactor Coolant System Attachment D'

General References: OP 4D Part 1, 'Draining the Reactor Coolant System

Task Standards: Raise reactor vessel level per OP 4D Part 1 Attachment D

Start Time: \_\_\_\_\_

**NOTE:** When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

**IMPORTANT:** Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: 1	SHUT CV-135, LP Letdown Line Backpressure Control
Critical <u>Y</u>	
Standard:	Examinee will shut CV-135.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Record as-found position of CV-1296, Auxiliary Charging Line Isolation
Critical <u>N</u>	
Standard:	Examinee records CV-1296 as OPEN.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

**CONTROL ROOM JPM b**

Performance Step: 3 Critical <u>N</u>	Ensure OPEN CV-1296, Auxiliary Charging Line Isolation
Standard:	Examinee verifies CV-1296, Auxiliary Charging Line Isolation open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical <u>Y</u>	OPEN CV-112B, P-2A-C Charging Pump Refueling Water Suction
Standard:	Examinee opens CV-112B
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical <u>Y</u>	SHUT CV-112C, T-4 VCT Outlet
Standard:	Examinee shuts CV-112C.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### CONTROL ROOM JPM b

Performance Step: 6 Critical <u>Y</u>	Raise Charging Pump speed to maintain a stable level <b>AND</b> return level to the desired level.
Standard:	Examinee raises Charging Pump speed to raise Reactor Vessel Level to 27%.
<b>Evaluator Note:</b>	<b>Critical part of this step is to see an indicated level rise.</b>
<b>Evaluator Cue:</b>	<b>After examinee sees a rising reactor vessel level inform examinee time compression is taking place and they see 27% reactor vessel level on LT-447/LT-447A.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7 Critical <u>N</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: a. Adjust Charging Pump Speed to <b>one</b> pump at minimum speed
Standard:	Examinee goes to one charging pump in minimum.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8 Critical <u>Y</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: b. OPEN CV-112C, T-4 VCT Outlet
Standard:	Examinee opens CV-112C.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

**CONTROL ROOM JPM b**

Performance Step: 9 Critical <u>Y</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: c. SHUTS CV-112B, P-2A-C Charging Pump Refueling Water Suction
Standard:	Examinee shuts CV-112B.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10 Critical <u>Y</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: d. Adjust CV-135, LP Letdown Line Backpressure Control to have letdown matching charging. (approximately 20 gpm)
Standard:	Examinee adjusts CV-135 to match charging.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 11 Critical <u>N</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: e. Return CV-1296, Auxiliary Charging Line Isolation, to as-found position of step 1.2 of this attachment.
Standard:	Examinee verified CV-1296 still open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### CONTROL ROOM JPM b

Performance Step: 12 Critical <u>N</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: f. Ensure level has stabilized at the desired level.
Standard:	Examinee stabilizes reactor vessel level by matching letdown and charging.
<b>Evaluator Cue:</b>	<b>If time compression was used in an earlier step, the examinee should be reminded reactor vessel level is at 27%. Examinee should use existing trends to determine level stabilization.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 13 Critical <u>N</u>	<b>WHEN</b> level has been returned to the required level, <b>THEN</b> perform the following: g. Return to the main body of the procedure step in effect.
Standard:	Examinee determines task is completed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: This completes this JPM

Stop Time: \_\_\_\_\_

Point Beach Nuclear Plant  
**CONTROL ROOM JPM b**

**TURNOVER SHEET**

**INITIAL CONDITIONS:**

- OP 4D Part 1, 'Draining the Reactor Coolant System' is in progress.
- The RCS and SG tubes have been drained.
- The RCS is at atmospheric pressure
- Reactor Vessel Level is at 26%
- Desired Reactor Vessel Level per OP 4D Part 1 is 27%

**INITIATING CUES:**

- OS1 has directed you, the Third License, to raise reactor vessel level to 27% per OP 4D Part 1 'Attachment D, RCS Level Stabilization'.

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: Fill the Accumulators

JPM NUMBER: Control Room JPM c REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): PBN P006.002.COT / Fill the Accumulators

K/A NUMBERS: 006.A1.13 (3.5/3.7)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:   
Simulator:  Other:   
Lab:

Time for Completion: 30 Minutes Time Critical: No

Alternate Path: No

Point Beach Nuclear Plant  
**Control Room JPM c**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

**INITIAL CONDITIONS:**

- Unit 1 and Unit 2 are operating at 100% steady-state conditions.
- Annunciator C01B 3-8, 1T-34B ACCUMULATOR LEVEL HIGH OR LOW is lit.
- Emergency Diesel Generators G-01, G-02, G-03 and G-04 are in a normal at-power alignment.
- 1-TS-ECCS-002 Train A and 1-TS-ECCS-002 Train B, Safeguards System Venting (Monthly) Unit 1 were performed last shift for 1P-15A and 1P-15B, Unit 1 safety injection pumps.
- Combined Control Room Log accumulator level drop rate (daily accumulator leakage) is currently 0.3 % per day over the past 30 days.
- Last 1T-34B SI Accumulator fill was 11/20/10 @ 1708.
- Unit 1 RWST Boron concentration is 2950 ppm.

**INITIATING CUES:**

- You are the 3<sup>rd</sup> Control Operator.
- The SRO directs you to raise 1T-34B, Unit 1 "B" SI accumulator level 5% in accordance with OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1, Section 5.2.
- Unit 1 Control Operator has been assigned the duties of monitoring accumulator parameters per your request.

Point Beach Nuclear Plant  
**Control Room JPM c**  
JPM PERFORMANCE INFORMATION

Required Materials: 1. OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1

General References: OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1

Task Standards: The Examinee raises the 1T-34B, Unit 1 "B" SI accumulator level 5% ( $\pm$  3%) in accordance with OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1, Section 5.2.

Start Time: \_\_\_\_\_

**NOTE:** When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

**IMPORTANT:** Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: 1 Critical N	5.2.1 Perform the following as applicable: a. <b>IF</b> filling 1T-34A, <b>THEN</b> perform Attachment A, Steps 1.0 and 2.0.
Standard:	The Examinee notes this step is N/A.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 2 Critical N	5.2.1 Perform the following as applicable: b. <b><u>IF</u></b> filling 1T-34B, <b><u>THEN</u></b> perform Attachment B, Steps 1.0 and 2.0.
Standard:	The Examinee performs Attachment B, "1T-34B Accumulator Level/Pressure Change Data Sheet," Sections 1.0 and 2.0.
<b>Evaluator Cue:</b>	<b>1-TS-ECCS-002 was performed last shift and combined leak rate is &lt; 0.7% per day so it is not necessary to perform PBF-2139.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 3 Critical N	5.2.1 Perform the following as applicable: c. <b>Use Control Room Log data to determine accumulator leak rate over past 30 days, <u>OR</u> since accumulator was last filled (whichever time period is shorter):</b>  <b>Accumulator leak rate (% per day): _____</b>
Standard:	The Examinee fills in the given leak rate.
<b>Evaluator Cue:</b>	<b>1T-34B SI accumulator leak rate is 0.3 % per day over last 30 days.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 4 Critical N	5.2.1 <b><u>Engineering Verification</u></b> d. <b><u>IF</u></b> accumulator leakage is greater than 0.7% / day, <b><u>THEN</u></b> notify Engineering to perform additional evaluation.
Standard:	The Examinee N/As Step 5.2.1.d and proceeds to Step 5.2.2.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 5 Critical N	5.2.2 Align 1P-15A, Safety Injection Pump, recirc flow path as follows: <b>a. Ensure LOCKED OPEN 1SI-876A, 1P-15A SI Pump Discharge Recirc to SI Test Line.</b>
Standard:	The Examinee ensures that the 1SI-876A, 1P-15A SI pump discharge recirc to SI test line valve is locked open by dispatching the Primary Auxiliary Building Auxiliary Operator to verify 1SI-876A's status.
Evaluator Cue:	<ul style="list-style-type: none"><li>• <b>The Primary Auxiliary Building Auxiliary Operator reports that the 1SI-876A, 1P-15A SI pump discharge recirc to SI test line valve is locked open.</b></li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 6 Critical N	5.2.2 Align 1P-15A, Safety Injection Pump, recirc flow path as follows: <b>b. At C01R, ensure OPEN 1SI-897A, SI Test Line Return.</b>
Standard:	The Examinee ensures that the 1SI-897A, SI test line return isolation AOV is open. (The green light is off, the red light is on and the control switch for 1SI-897A is in the open position.)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 7 Critical N	5.2.2 Align 1P-15A, Safety Injection Pump, recirc flow path as follows: <b>c. At C01R, ensure OPEN 1SI-897B, SI Test Line Return Second Off Isolation.</b>
Standard:	The Examinee ensures that the 1SI-897B, SI test line return isolation AOV is open. (The green light is off, the red light is on and the control switch for 1SI-897B is on the open position.)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

### Control Room JPM c

Performance Step: 8  
Critical N

5.2.3 Align the RWST flow path as follows:

- **Ensure OPEN 1SI-825A, 1T-13 RWST Outlet to P-15A/B SI Pump**
- **Ensure OPEN 1SI-825B, 1T-13 RWST Outlet to P-15A/B SI Pump**
- **Ensure OPEN 1SI-896A, 1P-15A SI Pump Suction**
- **Ensure OPEN 1SI-866A, Cold Leg Injection Line Isolation**

Standard:

The Examinee ensures all of the following valves are open:

- 1SI-825A, P-15A/B SI pumps suction from RWST MOV. (The green light is off, the red light is on and the control switch is in the auto position.)
- 1SI-825B, P-15A&B SI pumps suction from RWST MOV. (The green light is off, the red light is on and the control switch is in the auto position.)
- 1SI-896A, 1P-15A pump suction isolation valve is open. (The green light is off, the red light is on and the control switch is in the spring return to center position.)
- 1SI-866A, 1P-15A pump discharge header MOV is open. (The green light is off, the red light is on and the control switch is in the spring return to center position.)

Performance:

SATISFACTORY \_\_\_\_\_ UNSATISFACTORY \_\_\_\_\_

Comments:

\_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 9 Critical N	5.2.4 Declare 1P-15A, Safety Injection Pump INOPERABLE, <u>AND</u> enter Action Condition A of TS 3.5.2.
Standard:	The Examinee notifies the SRO to declare 1P-15A, Safety Injection Pump INOPERABLE, <u>AND</u> enter TS 3.5.2 Action Condition A.
<b>Evaluator Cue:</b>	<ul style="list-style-type: none"><li>• <b>The SRO informs you that 1P-15A, Safety Injection Pump is INOPERABLE, TS 3.5.2 Action Condition A has been entered and that the Station and Unit Logs have been updated.</b></li><li>• <b>If asked, opposite train standby emergency power supply has been verified operable (per initial conditions).</b></li><li>• <b>If asked, the Unit 1 'B' Train of ECCS has been walked down and verified to be Operable.</b></li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 10 Critical N	5.2.5 Vent 1P-15A SI pump in accordance with Attachment C.
Standard:	Step 5.2.5 is marked N/A. The Examinee proceeds to Step 5.2.6.
<b>Evaluator Note:</b>	<b>Step 5.2.5 is marked N/A because 1-TS-ECCS-002 Train A, Safeguards System Venting (Monthly) Unit 1 has been completed within the last 24 hours. This is one of the Initial Conditions.</b>
<b>Evaluator Cue:</b>	<b>If examinee begins to implement action to vent 1P-15A, the SRO informs him that venting is not required.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

### Control Room JPM c

Performance Step: 11  
Critical N

- 5.2.6 Ensure proper oil level in 1P-15A as follows:
- a. Check for visible level in 1P-15A oil sightglass located next to the oiler bulb.
  - b. **IF** oil is **NOT** visible in sight glass, **THEN** go to Attachment E.
  - c. Check 1P-15A oiler bulb at or above one-half full.
  - d. **IF** oiler bulb less than one-half full, **THEN** go to Attachment E

Standard:

The Examinee directs the Primary Auxiliary Building Auxiliary Operator to check for visible level in the 1P-15A, safety injection pump oil sight glass located next to the oiler bulb. When told there is oil visible in the sight glass he N/As step b.

The Examinee directs the Primary Auxiliary Building Auxiliary Operator to ensure that the 1P-15A, safety injection pump oil bulb is at or above one-half full. When told the oiler bulb is two-thirds full, he N/As step d

Evaluator Cue:

- **The Primary Auxiliary Building Auxiliary Operator reports that there is oil visible in the 1P-15A, safety injection pump oil sight glass located next to the oiler bulb.**
- **The Primary Auxiliary Building Auxiliary Operator reports that the 1P-15A, safety injection pump oil bulb is two-thirds full.**

Performance: SATISFACTORY \_\_\_\_\_ UNSATISFACTORY \_\_\_\_\_

Comments: \_\_\_\_\_

Performance Step: 12  
Critical N

- 5.2.7 **IF** one EDG is aligned to supply both Units A05 standby emergency power, **THEN** perform the following:

Standard:

Step 5.2.7 is marked N/A. The examinee proceeds to Step 5.2.8.

Evaluator Note:

**Step 5.2.7 is marked N/A because G-01, G-02, G-03 and G-04 are in a normal at-power alignment. This is one of the Initial Conditions.**

Performance: SATISFACTORY \_\_\_\_\_ UNSATISFACTORY \_\_\_\_\_

Comments: \_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 13 Critical Y	5.2.8 Start 1P-15A, Safety Injection Pump.
Standard:	The Examinee places the control switch for 1P-15A, safety injection pump to the Start position. (The green light is off, the red light is on, 1FI-925, 1P-15A High Head SI Flow, 1P-923, 1P-15A SI Pump Disch Pressure and AC AMPS, 1P-15A SI Pump Current are as read.)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 14 Critical N	5.2.9 Monitor all available channels for accumulator pressure and level during accumulator fill.
Standard:	Examinee notes which indicators he will be monitoring during accumulator fill.
<b>Evaluator Note:</b>	<b>Initial conditions stated that the Unit 1 Control Operator is available to monitor accumulator parameters per direction of the Examinee. The Booth operator may be used for this function.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 15 Critical N	5.2.10 <b>IF</b> filling 1T-34A, <b>THEN</b> perform the following:
Standard:	Step 5.2.10 is marked N/A. The examinee proceeds to Step 5.2.11.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 16 Critical Y	5.2.11 <b>IF</b> filling 1T-34B, <b>THEN</b> perform the following: a. Open 1SI-835B, T34B Accumulator Fill AOV, <b>AND</b> record fill start time (T1).
Standard:	<ul style="list-style-type: none"><li>• The Examinee places the control switch for the 1SI-835B, 1T-34B accumulator fill AOV to the Open position (The green light is off and the red light is on.)</li><li>• <b>AND</b> records the fill start time in HH:MM:SS format.</li></ul>
Evaluator Note:	<ul style="list-style-type: none"><li>• <b>The critical portion of this step is opening 1SI-835B.</b></li><li>• <b>The fill start time is used to calculate accumulator fill time in Attachment B, "1T-34B Accumulator Level/Pressure Change Data Sheet," Section 3.1.</b></li><li>• <b>If examinee directs another operator to note fill start or stop times, the Evaluator will assign the booth operator to record clock times.</b></li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 17 Critical Y	5.2.11 <b>IF</b> filling 1T-34B, <b>THEN</b> perform the following: b. Fill SI accumulator to desired level as indicated on the following level indicators: <ul style="list-style-type: none"><li>• <b>1LI-934, 1T-34B Accumulator Level Indicator</b></li><li>• <b>1LI-935, 1T-34B Accumulator Level Indicator</b></li></ul>
Standard:	Examinee monitors level indication for 1T-34B and raises the level by 5% ( $\pm 3\%$ ).
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

### Control Room JPM c

Performance Step: 18  
Critical Y

5.2.11 **IF** filling 1T-34B, **THEN** perform the following:  
c. **WHEN** desired accumulator level is achieved,  
**THEN** stop 1P-15A, Safety Injection Pump  
**AND** record fill stop time (T2)

Standard:

- The Examinee places the control switch for 1P-15A, safety injection pump to the Stop position. (The green light is on, the red light is off, 1FI-925, 1P-15A High Head SI Flow, 1PI-923, 1P-15A SI Pump Disch Pressure and AC AMPS, 1P-15A SI Pump Current are as read.)
- **AND** records the fill stop time in HH:MM:SS format.

Evaluator Note:

- **The critical portion of this step is stopping 1P-15A.**
- **The fill stop time is used to calculate accumulator fill time in Attachment B, "1T-34B Accumulator Level/Pressure Change Data Sheet," Section 3.1.**
- **If examinee directs another operator to note fill start or stop times, the Evaluator will assign the booth operator to record clock times.**

Performance: SATISFACTORY \_\_\_\_\_ UNSATISFACTORY \_\_\_\_\_

Comments: \_\_\_\_\_

Performance Step: 19  
Critical N

5.2.11 **IF** filling 1T-34B, **THEN** perform the following:  
d. SHUT 1SI-835B

Standard:

The Examinee places the control switch for the 1SI-835B, 1T-34B accumulator fill AOV to the Close position (The green light is on and the red light is off)

Performance: SATISFACTORY \_\_\_\_\_ UNSATISFACTORY \_\_\_\_\_

Comments: \_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 20 Critical N	5.2.11 <b>IF</b> filling 1T-34B, <b>THEN</b> perform the following: e. Ensure control switch for 1P-15A is positioned to AUTO
Standard:	The Examinee ensures that the control switch for 1P-15A, safety injection pump is in the Auto (after trip) position.
<b>Evaluator Cue:</b>	<b>Another licensee has performed an independent verification of 1P-15A, safety injection pump control switch position.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 21 Critical N	5.2.11 <b>IF</b> filling 1T-34B, <b>THEN</b> perform the following: f. Declare 1P-15A OPERABLE
Standard:	The Examinee informs the SRO to declare 1P-15A, safety injection pump OPERABLE.
<b>Evaluator Cue:</b>	<ul style="list-style-type: none"><li>• <b>The SRO acknowledges your report.</b></li><li>• <b>The SRO reports that 1P-15A, safety injection pump is OPERABLE and the Station and Unit Logs have been updated.</b></li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 22 Critical N	5.2.11 <b>IF</b> filling 1T-34B, <b>THEN</b> perform the following: g. Exit Action Condition for TS 3.5.2 for Unit 1.
Standard:	The Examinee informs the SRO to exit TS 3.5.2 Action Condition for 1P-15A, Safety Injection pump.
<b>Evaluator Cue:</b>	<ul style="list-style-type: none"><li>• <b>The SRO informs you that the Technical Specification Action Condition associated with 1P-15A, safety injection pump has been exited and the Station and Unit Logs have been updated.</b></li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 23 Critical N	5.2.11 <b>IF</b> filling 1T-34B, <b>THEN</b> perform the following: h. Using data from Steps 5.2.11.c and 5.2.11.a, calculate Accumulator Fill Time (AFT) in seconds: $T2-T1=AFT$ i. Record AFT in Step 3.1 of Attachment B
Standard:	<ul style="list-style-type: none"><li>• The Examinee calculates the fill time and records the AFT in Step 3.1 of Attachment B</li><li>• The Examinee obtains an independent verification of the calculated fill time</li></ul>
<b>Evaluator Cue:</b>	<ul style="list-style-type: none"><li>• <b>Another license has performed an independent verification of the calculated accumulator fill time.</b></li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 24 Critical N	5.2.12 <b>IF</b> 2P-15A, Safety Injection Pump, for the opposite Unit was declared INOPERABLE, <b>THEN</b> perform the following:
Standard:	Step 5.2.12 is marked N/A. The examinee proceeds to Step 5.2.13.
<b>Evaluator Note:</b>	<b>As noted in step 5.2.7, the initial conditions did not require declaring 2P-15A inoperable.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 25 Critical N	5.2.13 <b>IF</b> 1T-34A was filled, <b>THEN</b> perform the following:
Standard:	Step 5.2.13 is marked N/A. The examinee proceeds to Step 5.2.14.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 26 Critical N	5.2.14 <b>IF</b> 1T-34B was filled, <b>THEN</b> perform the following: a. Complete Attachment B Steps 3.2 and 5.0 – 7.0.
Standard:	The Examinee performs Attachment B, "1T-34B Accumulator Level/Pressure Change Data Sheet", Sections 3.2 and 5.0 - 7.0.
<b>Evaluator Cue:</b>	<b>Log entries have been made for Attachment B section 7.0</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Performance Step: 27 Critical N	5.2.14 <b>IF</b> 1T-34B was filled, <b>THEN</b> perform the following: b. Ensure pressure is between 730 and 760 psig as indicated on the following indicators. <ul style="list-style-type: none"><li>• <b>1PI-936, 1T34B Accumulator Pressure Indicator</b></li><li>• <b>1PI-937, 1T34B Accumulator Pressure Indicator</b></li></ul>
Standard:	The Examinee ensures that accumulator pressure is between 730 and 760 psig as indicated on the following indicators: <ul style="list-style-type: none"><li>• 1T-34B accumulator pressure, 1PI-936 (C01)</li><li>• 1T-34B accumulator pressure, 1PI-937 (C01R)</li></ul>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM c**

Performance Step: 28 Critical N	Inform the SRO that 1T-34B, Unit 1 "B" SI accumulator level has been raised 5% in accordance with OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1, Section 5.2.
Standard:	The Examinee informs the SRO that 1T-34B, Unit 1 "B" SI accumulator level has been raised 5% in accordance with OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1, Section 5.2.
<b>Evaluator Cue:</b>	<b>The SRO acknowledges your report.</b>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Terminating Cues: The evolution is complete.

Stop Time: \_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM c**  
**TURNOVER SHEET**

**INITIAL CONDITIONS:**

- Unit 1 and Unit 2 are operating at 100% steady-state conditions.
- Annunciator C01B 3-8, 1T-34B ACCUMULATOR LEVEL HIGH OR LOW is lit.
- Emergency Diesel Generators G-01, G-02, G-03 and G-04 are in a normal at-power alignment.
- 1-TS-ECCS-002 Train A and 1-TS-ECCS-002 Train B, Safeguards System Venting (Monthly) Unit 1 were performed last shift for 1P-15A and 1P-15B, Unit 1 safety injection pumps.
- Combined Control Room Log accumulator level drop rate (daily accumulator leakage) is currently 0.3 % per day over the past 30 days.
- Last 1T-34B SI Accumulator fill was 11/20/10 @ 1708.
- Unit 1 RWST Boron concentration is 2950 ppm.

**INITIATING CUES:**

- You are the 3<sup>rd</sup> Control Operator.
- The SRO directs you to raise 1T-34B, Unit 1 “B” SI accumulator level 5% in accordance with OI 100 Unit 1, Adjusting SI Accumulator Level and Pressure Unit 1, Section 5.2.
- Unit 1 Control Operator has been assigned the duties of monitoring accumulator parameters per your request.

### Job Performance Measure (JPM)

SITE: Point Beach  
JPM TITLE: Synchronize Turbine Generator Output With Grid At Minimum Load  
JPM NUMBER: CR JPM d REV. 0  
RELATED PRA INFORMATION: None  
TASK NUMBERS / TASK TITLE(S): PBN P045.005.COT / Synchronize Turbine Generator To The Grid With Output At Minimum Load  
K/A NUMBERS: 062 A4.01 (3.3/3.1) 062 A4.03(2.8/2.9) 062 A4.07 (3.1/3.1)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:   
Simulator:  Other:   
Lab:

Time for Completion: 20 Minutes Time Critical: NO

Alternate Path: NO

**Control Room JPM d**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

**INITIAL CONDITIONS:**

- Unit 1 is at low power with OP-1C, "Startup to Power Operation Unit 1" complete through Step 5.85. The secondary is started up and the turbine generator is ready to be placed on the grid.
- Unit 1 TH Auxiliary Operator is standing by at 1E02 Voltage Regulator Cabinet.
- You are the 3<sup>rd</sup> license.

**INITIATING CUES:**

- OS1 directs you to place the turbine generator on the grid per OP-1C, "Startup to Power Operation Unit 1", starting at Step 5.86.

Point Beach Nuclear Plant  
**Control Room JPM d**  
JPM PERFORMANCE INFORMATION

Required Materials: OP-1C, "Startup to Power Operation Unit 1"  
Synchroscope Switch  
Filled out OP-1C up to step for synchronizing to grid  
General References: OP-1C, "Startup to Power Operation Unit 1"  
Task Standards: Main Generator in parallel with the grid at minimum load.

Start Time: \_\_\_\_\_

**NOTE:** When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

**IMPORTANT:** Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

<b>Performance Step: 1</b> <b>Critical <u>N</u></b>	Ensure Generator Voltage Regulator Control Switch is in the MANUAL position.
<b>Standard:</b>	Generator Voltage Regulator Control Switch is in the MANUAL position.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	_____

<b>Performance Step: 2</b> <b>Critical <u>N</u></b>	Ensure turbine speed between 1750 and 1800 rpm.
<b>Standard:</b>	Turbine speed checked.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

**Control Room JPM d**

<b>Performance Step:3</b> <b>Critical <u>Y</u></b>	CLOSE Unit 1 Generator Exciter Field Breaker.
<b>Standard:</b>	Unit 1 generator Exciter Field Breaker closed.
<b>Evaluator Note:</b>	The following alarms may occur when closing the field breaker: <ul style="list-style-type: none"><li>• C01 A 3-2 Unit 1 Generator Reg/Metering Voltage Failure.</li><li>• C01 A 4-4 Unit 1 Voltage Regulator Trouble.</li></ul>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

<b>Performance Step: 4</b> <b>Critical <u>N</u></b>	Reset Unit 1 voltage regulator panel alarms at 1E02.
<b>Standard:</b>	Voltage regulator alarms reset.
<b>Evaluator Note:</b>	<b>Insert trigger 1 to clear alarms at the Voltage Regulator Panel.</b>
<b>Evaluator Cue:</b>	<b>Unit 1 Turbine Hall AO reports that he has reset panel 1E02 and all alarms are clear.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

<b>Performance Step: 5</b> <b>Critical <u>Y</u></b>	Slowly adjust the Generator Voltage Regulator DC Adjuster to obtain a Generator Voltmeter indication of approximately 19kV at 1800 rpm.
<b>Standard:</b>	Generator voltage raised to approximately 19 kV.
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

**Control Room JPM d**

<b>Performance Step: 6</b> <b>Critical <u>N</u></b>	Check all three phases approximately 19 kV, using Unit 1 Generator Voltmeter switch.
<b>Standard:</b>	Phase voltages verified at approximately 19 kV.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 7</b> <b>Critical <u>Y</u></b>	For Automatic Voltage Regulation: <ul style="list-style-type: none"><li>• Place Unit 1 Generator Voltage Regulator to TEST,<ul style="list-style-type: none"><li>○ CHECK yellow light is LIT.</li></ul></li><li>• Ensure Generator Voltage Regulator Balance Meter is at approximately zero using Generator Voltage Regulator AC Adjuster.</li><li>• Place Generator Voltage Regulator to AUTO.<ul style="list-style-type: none"><li>○ CHECK red light is LIT.</li></ul></li></ul>
<b>Standard:</b>	Automatic Voltage Regulation is set up.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 8</b> <b>Critical <u>Y</u></b>	Place the Unit 1 Generator Breaker 122 Synchroscope switch to ON.
<b>Standard:</b>	Unit 1 Generator Breaker Synchroscope to on.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

**Control Room JPM d**

<b>Performance Step: 9</b> <b>Critical <u>N</u></b>	Adjust Incoming Voltmeter reading to match Running Voltmeter reading, using Generator Voltage Regulator AC Adjuster.
<b>Standard:</b>	Incoming and running voltages matched.
<b>Evaluator Note:</b>	<b>Incoming voltmeter reading is generator voltage. Running voltmeter reading represents line voltage.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

<b>Performance Step: 10</b> <b>Critical <u>N</u></b>	Check Unit 1 Generator Exciter Field Ammeter at less than 23 amps.
<b>Standard:</b>	Exciter Field current verified.
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

<b>Performance Step: 11</b> <b>Critical <u>Y</u></b>	Adjust turbine speed (using Reference Control raise and lower pushbuttons) as necessary to rotate the synchroscope 2 to 5 rpm in the "FAST" direction.
<b>Standard:</b>	Synchroscope rotating in the "FAST" direction.
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

**Control Room JPM d**

<b>Performance Step: 12</b> <b>Critical <u>N</u></b>	Ensure 1F52-122 Generator Main Breaker Control Switch is removed from PULLOUT.
<b>Standard:</b>	1F52-122 out of PULLOUT.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 13</b> <b>Critical <u>Y</u></b>	<b>WHEN</b> the synchroscope is just before 12:00 <b>AND</b> within the Green Band, <b>THEN</b> Close 1F52-122, Unit 1 Generator Main Breaker.
<b>Standard:</b>	Unit 1 Generator Main Breaker closed.
<b>Evaluator Note:</b>	<b>If Generator is allowed to motor, a Generator Trip and Lockout will occur in 45 seconds after receipt of “reverse power” alarm.</b>
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 14</b> <b>Critical <u>N</u></b>	Record the time.
<b>Standard:</b>	Time the generator main breaker is closed is recorded.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

**Control Room JPM d**

<b>Performance Step: 15</b> <b>Critical <u>N</u></b>	Check the following: <ul style="list-style-type: none"><li>• 20-30 MWe Unit 1 Generator Wattmeter.</li><li>• Unit 1 Generator Varmeter indicates a positive number (MVARs in out direction).</li><li>• "LOAD CONTROL" status light is LIT.</li></ul>
<b>Standard:</b>	Status of generator load verified.
<b>Evaluator Note:</b>	<b>Operation of generator in VARS IN is prohibited due to risk of overheating generator bore ring.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

<b>Performance Step: 16</b> <b>Critical <u>N</u></b>	Place the Unit 1 Generator Breaker 122 Synchroscope switch to OFF.
<b>Standard:</b>	Synchroscope OFF.
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

<b>Performance Step: 17</b> <b>Critical <u>N</u></b>	Make notification that the unit is online and intent to raise power per NP 2.1.5.
<b>Standard:</b>	Notification made to Supervision.
<b>Evaluator Cue:</b>	<b>SM will make notifications.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	

Terminating Cues: This completes the JPM.

Stop Time: \_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM d**

Turnover Sheet

**INITIAL CONDITIONS:**

- Unit 1 is at low power with OP-1C, "Startup to Power Operation Unit 1" complete through Step 5.85. The secondary is started up and the turbine generator is ready to be placed on the grid.
- Unit 1 TH Auxiliary Operator is standing by at 1E02 Voltage Regulator Cabinet.
- You are the 3<sup>rd</sup> license.

**INITIATING CUES:**

- OS1 directs you to place the turbine generator on the grid per OP-1C, "Startup to Power Operation Unit 1", starting at Step 5.86.

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: Perform Accident Fan Surveillance Testing

JPM NUMBER: CR JPM e REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): PBN P022.003.COT / Monitor the Containment Recirculation fan units for proper operation

K/A NUMBERS: 022.A4.01 (3.6/3.6)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 25 Minutes Time Critical: NO

Alternate Path: NO

Point Beach Nuclear Plant  
**Control Room JPM e**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

**INITIAL CONDITIONS:**

- Engineering has requested partial performance of TS 33 Containment Accident Recirculation Fan-Cooler Units (Monthly) Unit 1 for data collection purposes. Stroke timing and flow verifications are to be performed for 1SW-2907 Containment Ventilation Coolers Outlet Emergency Flow Control Valve.
- Service Water chlorination is in progress.
- Service Water overboard is aligned to both Unit's.
- An AO is standing by for surveillance support.
- Unit 2 is in Mode 1.

**INITIATING CUES:**

- OS1 has directed you to perform TS-33 Containment Accident Fan Recirculation Fan-Cooler Units (Monthly) Unit 1 for 1SW-2907 starting with Step 5.7.

### Control Room JPM e

#### JPM PERFORMANCE INFORMATION

Required Materials: TS-33 Containment Accident Fan Recirculation Fan-Cooler Units (Monthly) Unit 1 marked up for 1SW-2907 testing.  
Stop Watch (record serial number and calibration due date on marked-up TS-33)

General References: TS-33 Containment Accident Fan Recirculation Fan-Cooler Units (Monthly) Unit 1  
OI 70, Service Water System Operation

Task Standards: Perform TS-33 Accident Fan testing on 1SW-2907 Containment Ventilation Coolers Outlet Emergency Flow Control Valve.

Start Time: \_\_\_\_\_

**NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).**

**IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.**

Performance Step: 1 Critical <u>N</u>	Circle Service Water overboard alignment on Attachment B, Data Sheet, Step 2.0.
Standard:	Examinee circles ‘Both’ on Data Sheet per turnover.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2 Critical <u>N</u>	Circle As-Found condition of the Service Water pumps in the following table:
Standard:	Examinee lists the condition of the Service Water Pumps, ON/OFF.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Control Room JPM e

Performance Step: 3 Critical <u>N</u>	Operate additional Service Water Pumps as necessary per OI 70, Service Water System Operation.
Standard:	Examinee acknowledges guidance of OI 70 and Service Water Pump operation.
Evaluator Cue:	<b>If examinee references OI 70, state that the OS2 will ensure OI 70 requirements are addressed.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical <u>N</u>	UNLOCK <b>AND</b> OPEN 1SW-167, 1HX-015A-D Cont Recirc HX Return 1PI-2907 Isolation.
Standard:	Have field AO Unlock and Open 1SW-167.
Evaluator Cue:	<b>AO reports back that 1SW-167 is UNLOCKED and OPEN.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical <u>N</u>	<b>IF</b> Unit 2 is in MODE 1, 2, 3, or 4, <b>THEN</b> , for Unit 2, enter the applicable LCO 3.7.8 Action Condition <b>AND</b> record Date and time.
Standard:	Examinee records the time and date for SW TSAC 3.7.8.F entry.
Evaluator Cue:	<b>Inform examinee OS2 will have the 4<sup>th</sup> license make the required log entries for Unit 2 TSAC 3.7.8.F entry.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Control Room JPM e

Performance Step: 6 Critical <u>Y</u>	Perform full stroke OPEN timing and position indication verification (PIV) Test of 1SW-2907, Cont Vent Coolers Outlet Emer FCV, as follows: <ul style="list-style-type: none"><li>• OPEN <b>AND</b> time 1SW-2907, Cont Vent Coolers Outlet Emer FCV.</li><li>• Record time to OPEN on Attachment C, Service Water System Valve Stroke Testing.</li><li>• Check rising stem position indicator for OPEN indication <b>AND</b> record local valve position indication on Attachment C, Service Water System Valve Stroke Testing.</li></ul>
Standard:	Examinee opens and records correct stroke time for 1SW-2907 FCV.
Evaluator Cue:	<b>AO reports back that local position indication is OPEN for 1SW-2907.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7 Critical <u>Y</u>	<b>WHEN</b> Service Water flow has stabilized, <b>THEN</b> perform Attachment B, Data Sheet, Steps 3.0 through 6.0 to obtain As-Found conditions of 1SW-2907 Cont Vent Coolers Outlet Emer FCV.
Standard:	Record and calculate data correctly per Attachment B steps 3.0 through 6.0.
Evaluator Cue:	<b>PAB AO reports PI-2907 reads 19" Hg for Attachment B Table 3.0.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Control Room JPM e

Performance Step: 8 Critical <u>N</u>	<b>IF</b> flow to any Containment Accident Recirculation Hx is outside acceptable flow limits as recorded on Attachment B, Data Sheet, Table 6.0, <b>OR</b> following fan cooler maintenance/refueling, <b>OR</b> it is desired to adjust flow per Engineering, <b>THEN</b> perform the following:
Standard:	Examinee N/A's steps associated with adjusting flow for 1SW-2907 Cont Vent Coolers Outlet Emer FCV.
Evaluator Cue:	<b>If asked, no flow adjustments are required by Engineering.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9 Critical <u>N</u>	Perform full stroke SHUT timing and position indication verification (PIV) Test of 1SW-2907, Cont Vent Coolers Outlet Emer FCV, as follows: <ul style="list-style-type: none"><li>• SHUT <b>AND</b> time 1SW-2907, Cont Vent Coolers Outlet Emer FCV.</li><li>• Record time to SHUT on Attachment C, Service Water System Valve Stroke Testing. (For Information Only)</li><li>• Check rising stem position indicator for SHUT indication <b>AND</b> record local valve position indication on Attachment C, Service Water System Valve Stroke Testing.</li></ul>
Standard:	Examinee shuts and records stroke time for 1SW-2907 FCV.
Evaluator Cue:	<b>AO reports back that local position indication is SHUT for 1SW-2907.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10 Critical <u>N</u>	SHUT <b>AND</b> LOCK 1SW-167, 1HX-015A-D Cont Recirc HX Return 1PI-2907 Isolation.
Standard:	Have field AO Shut and Lock 1SW-167.
Evaluator Cue:	<b>AO reports back that 1SW-167 is SHUT and LOCKED along with being IV'd.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**Control Room JPM e**

Performance Step: 11 Critical <u>N</u>	<b>IF</b> necessary, <b>THEN</b> place Service Water Pumps to the As-Found alignment.
Standard:	Examinee N/As this step since Service Water Pump alignment has not changed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12 Critical <u>N</u>	Record the following Containment Accident Recirculation Hx Service Water flows:
Standard:	Examinee correctly records SW flows for all 4 Containment Accident Fans.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 13 Critical <u>N</u>	<b>IF</b> entered in Step 5.11, <b>THEN</b> exit the applicable LCO 3.7.8 Action Condition AND record date and time.
Standard:	Examinee records the time and date that TSAC 3.7.8.F is exited.
Evaluator Cue:	<b>Inform examinee OS2 will have the 4<sup>th</sup> license make the required log entry that Unit 2 TSAC 3.7.8.F is exited.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 14 Critical <u>N</u>	Check valve operability by comparing the recorded valve data with the Acceptance Criteria on Attachment C, Service Water System Valve Stroke Testing, <b>AND</b> circle the appropriate SAT / UNSAT condition.
Standard:	Examinee circles SAT for acceptance criteria.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Control Room JPM e

Performance Step: 15 Critical <u>N</u>	IF service water chlorination was required per step 4.3, THEN notify Chemistry to secure service water chlorination.
Standard:	Examinee notifies Chemistry to secure chlorination.
Evaluator Cue:	<b>Chemistry has been notified to secure service water chlorination.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: This completes the JPM.

Stop Time: \_\_\_\_\_

Point Beach Nuclear Plant  
**Control Room JPM e**  
TURNOVER SHEET

INITIAL CONDITIONS:

- Engineering has requested partial performance of TS 33 Containment Accident Recirculation Fan-Cooler Units (Monthly) Unit 1 for data collection purposes. Stroke timing and flow verifications are to be performed for 1SW-2907 Containment Ventilation Coolers Outlet Emergency Flow Control Valve.
- Service Water chlorination is in progress.
- Service Water overboard is aligned to both units.
- An AO is standing by for surveillance support.
- Unit 2 is in Mode 1

INITIATING CUES:

- OS1 has directed you to perform TS-33 Containment Accident Fan Recirculation Fan-Cooler Units (Monthly) Unit 1 for 1SW-2907 starting with Step 5.7.

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: Respond to a Loss of Reactor Coolant to a Shutdown Unit

JPM NUMBER: CR JPM f REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): P000.046.COT / Respond to a Loss of Reactor Coolant to a Shutdown Unit

K/A NUMBERS: 009 EA1.01 (4.4/4.3)009 EA1.04 (3.7/3.5)009 EA1.08 (4.0/4.1)  
009 EA1.16 (4.2/4.2)009 EA2.01 (4.2/4.8)009 EA2.39 (4.3/4.7)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:   
Simulator:  Other:   
Lab:

Time for Completion: 20 Minutes Time Critical: NO

Alternate Path: NO

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

**INITIAL CONDITIONS:**

- Unit 1 is in the process of cooling down from hot shutdown to cold shutdown.
- OP-3C in progress; completed through Step 5.21 ready for RHR.
- RCS temperature is approximately 333°F.
- RCS pressure is approximately 340 psig.
- Pressurizer level suddenly begins to lower.

**INITIATING CUES:**

- The OS1 directs you to respond to the loss of pressurizer level in accordance with SEP-2 Unit 1, Shutdown LOCA Analysis.

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**  
JPM PERFORMANCE INFORMATION

- Required Materials:    1. SEP-2 Unit 1, Shutdown LOCA Analysis  
                                 2. SEP-2.1 Unit 1, Shutdown LOCA With RHR Aligned For Low Head Injection
- General References:    1. SEP-2 Unit 1, Shutdown LOCA Analysis  
                                 2. SEP-2.1 Unit 1, Shutdown LOCA With RHR Aligned For Low Head Injection
- Task Standards:        The Examinee mitigates the leak such that RCS inventory is stable or rising in accordance with SEP-2 Unit 1, Shutdown LOCA Analysis, and SEP-2.1 Unit 1, Shutdown LOCA With RHR Aligned For Low Head Injection

Start Time: \_\_\_\_\_

**NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).**

**IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.**

Performance Step: 1 Critical <u>N</u>	SEP-2 step 1: <b>Check both SI Accumulators isolated.</b>
Standard:	The Examinee checks both SI accumulators isolated by checking the accumulator MOVs, 1SI-841A and 1SI-841B deenergized and the SI Spray Ready Status Lights for 1SI-841A and 1SI-841B lit.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 2 Critical <u>Y</u>	<b>2: Check one train of RHR aligned for decay heat removal.</b>
Standard:	<ul style="list-style-type: none"><li>□ The Examinee checks that RHR is not aligned for decay heat removal by checking the status of 1P-10A&amp;B RHR pumps suction header MOVs, 1RH-700 and 1RH-701 and the RHR return to RC MOV, 1RH-720 and</li><li>□ Goes to <u>SEP-2.1 Unit 1, Shutdown LOCA With RHR Aligned For Low Head Injection.</u></li></ul>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3 Critical <u>Y</u>	SEP-2.1 step 1: <b>Isolate RCS Letdown:</b> <b>a. Shut letdown orifice outlet valves</b> <ul style="list-style-type: none"><li>• 1CV-200A</li><li>• 1CV-200B</li><li>• 1CV-200C</li></ul>
Standard:	The Examinee places the control switches for the letdown orifice outlet valves, 1CV-200A, 1CV-200B and 1CV-220C to the close position and verifies they go shut.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical <u>N</u>	1: Isolate RCS Letdown <b>b. Shut RCS loop B cold leg to CVCS letdown isolation 1RC-427</b>
Standard:	The Examinee places the control switch for the RCS loop B cold leg to CVCS letdown isolation, 1RC-427 to the close position and verifies it goes shut.
<b>Evaluator Note:</b>	<b>1RC-427 may already be shut due to low pressurizer level.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 5 Critical <u>Y</u>	2: Establish Design Charging Flow Rate Using RWST Suction: <b>a. Open RWST charging pump suction 1CV-112B</b>
Standard:	The Examinee places the control switch for the RWST charging pump suction, 1CV-112B to the open position and verifies it goes open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6 Critical <u>Y</u>	2: Establish Design Charging Flow Rate Using RWST Suction: <b>b. Shut VCT outlet valve 1CV-112C</b>
Standard:	The Examinee places the control switch for the VCT outlet valve, 1CV-112C to the close position and verifies it shut.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7 Critical <u>Y</u>	2: Establish Design Charging Flow Rate Using RWST Suction: <b>c. Establish 76 gpm charging flow</b>
Standard:	The Examinee adjusts running charging pump(s) speed and 1HC-142 valve position to establish 76 gpm charging flow.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 8 Critical <u>Y</u>	<b>3: Check Leak Rate – GREATER THAN CHARGING FLOW:</b> <ul style="list-style-type: none"><li>○ <b>PZR LEVEL TRENDING LOWER</b> <b>OR</b></li><li>○ <b>PZR level less than [34%] 10%</b><ul style="list-style-type: none"><li>• <b>1LI-433</b></li></ul></li><li><b>OR</b></li><li>○ <b>RCS subcooling based on core exit thermocouples less than [80°F] 35°F</b></li></ul>
Standard:	The Examinee checks pressurizer level trending lower or less than [34%] 10% on 1LI-433 or RCS subcooling less than [80°F] 35°F.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9 Critical <u>Y</u>	<b>4: Establish Maximum Charging Flow:</b> <ul style="list-style-type: none"><li><b>a. Fully open charging flow control valve 1HC-142</b></li></ul>
Standard:	The Examinee fully opens charging flow control valve, 1HC-142.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10 Critical <u>Y</u>	<b>4: Establish Maximum Charging Flow:</b> <ul style="list-style-type: none"><li><b>b. Start additional charging pumps</b><ul style="list-style-type: none"><li>• <b>1P-2A</b></li><li>• <b>1P-2B</b></li><li>• <b>1P-2C</b></li></ul></li></ul>
Standard:	The Examinee starts additional available charging pumps, 1P-2A, 1P-2B and 1P-2C by placing the control switch(es) to the Start position.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 11 Critical <u>Y</u>	<b>4: Establish Maximum Charging Flow:</b> <b>c. Limit charging flow to less than 140 gpm by adjusting charging pump speed as necessary</b>
Standard:	The Examinee adjusts running charging pump(s) speed to limit charging flow to less than 140 gpm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12 Critical <u>N</u>	<b>5: Initiate Containment Isolation</b>
Standard:	The Examinee depresses both containment isolation pushbuttons and acknowledges the annunciator Unit 1 Containment Isolation (C01B 2-5).
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 13 Critical <u>Y</u>	<b>6: Stop RCPs</b> <ul style="list-style-type: none"><li>• 1P-1A</li><li>• 1P-1B</li></ul>
Standard:	The Examinee places the control switches for reactor coolant pumps, 1P-1A and 1P-1B to the stop position and verifies they are secured.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 14 Critical <u>N</u>	<b>7: Initiate the following actions</b> <b>a. Evacuate Containment</b>
Standard:	The Examinee performs containment evacuation.
<b>Evaluator Note:</b>	<b>Examinee to sound plant evacuation alarm and announce that personnel to leave unit 1 containment.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 15 Critical <u>N</u>	<b>7: Initiate the following actions</b> <b>b. Notify DCS and implement emergency plan</b>
Standard:	The Examinee directs the OS1/SM to notify the DCS and implement the Emergency Plan.
<b>Evaluator Cue:</b>	<b>I will notify the DCS and implement emergency plan.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 16 Critical <u>N</u>	<b>8: Check Low Temperature Overpressure Protection In Service</b>
Standard:	The Examinee checks Low Temperature Overpressure Protection In Service by: <ul style="list-style-type: none"><li>• Checking Key #3(s) installed and in the on position,</li><li>• The 1RC-431C Low Temp Overpress Enabled (1PT-493) light lit and</li><li>• The 1RC-430 Low Temp Overpress Enabled (1PT-420) light lit.</li></ul>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 17 Critical <u>N</u>	<b>9: Establish Flow From One SI Pump:</b> a. <b>Open both RWST outlet to SI pump valves</b> <ul style="list-style-type: none"><li>• 1SI-825A</li><li>• 1SI-825B</li></ul>
Standard:	The Examinee verifies 1SI-825A and 1SI-825B RWST outlet to SI pump valves are open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 18 Critical <u>Y</u>	<b>9: Establish Flow From One SI Pump:</b> b. <b>Open both train "B" reactor vessel injection valves</b> <ul style="list-style-type: none"><li>• 1SI-878A</li><li>• 1SI-878C</li></ul>
Standard:	The Examinee places the control switches for the train "B" reactor vessel injection valves, 1SI-878A and 1SI-878C to the open position and verifies they open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 19 Critical <u>Y</u>	<b>9: Establish Flow From One SI Pump:</b> c. <b>Start SI pump B</b> <ul style="list-style-type: none"><li>• 1P-15B</li></ul>
Standard:	The Examinee places the control switch for the SI pump "B," 1P-15B to the start position and verifies pump starts and has proper discharge pressure and flow.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____



Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**

Performance Step: 23 Critical <u>N</u>	<b>13. Verify Adequate Injection Flow:</b> <b>a. Check reactor vessel level narrow range – GREATER THAN 27 FT</b>
Standard:	The Examinee checks reactor vessel level narrow range on 1C20 greater than 27 feet.
Evaluator Note:	<b>This is a continuous action step.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 24 Critical <u>N</u>	<b>13. Verify Adequate Injection Flow:</b> <b>b. Check core exit thermocouples STABLE OR TRENDING LOWER</b>
Standard:	The Examinee checks core exit thermocouples at 1C20 stable or trending lower.
Evaluator Note:	<b>This is a continuous action step.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: The evolution is complete.

Stop Time: \_\_\_\_\_

Point Beach Nuclear Plant  
**CONTROL ROOM JPM f.**  
**TURNOVER SHEET**

INITIAL CONDITIONS:

- Unit 1 is in the process of cooling down from hot shutdown to cold shutdown.
- OP-3C in progress; completed through Step 5.21 ready for RHR.
- RCS temperature is approximately 333°F.
- RCS pressure is approximately 340 psig.
- Pressurizer level suddenly begins to lower.

INITIATING CUES:

- The OS1 directs you to respond to the loss of pressurizer level in accordance with SEP-2 Unit 1, Shutdown LOCA Analysis.

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: Shift Component Cooling Water Pumps

JPM NUMBER: CR JPM g. REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): PBN P008.003.COT Operate the CCW System

K/A NUMBERS: 008.A4.04 (2.6\*/2.6)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION:

In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 15 Minutes Time Critical: NO

Alternate Path: NO

## **Job Performance Measure (JPM)**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

### **INITIAL CONDITIONS:**

- 1P-11B Component Cooling Water (CCW) Pump has been aligned for use after being drained for Maintenance.
- 1P-11B Component Cooling Water Pump is filled and vented.
- An AO is standing by at the Unit 1 CCW Pumps for assistance.
- Expected alarms have been briefed.

### **INITIATING CUES:**

- OS1 directs you to start 1P-11B CCW Pump and secure 1P-11A CCW Pump per 1-SOP-CC-001 Component Cooling System Step 5.4.2

### Job Performance Measure (JPM)

#### JPM PERFORMANCE INFORMATION

Required Materials: 1-SOP-CC-001 Component Cooling System Section 5.4

General References: 1-SOP-CC-001 Component Cooling System

Task Standards: Shift from 1P-11A CCW Pump operating to 1P-11B CCW Pump operating per 0-SOP-CC-001 Component Cooling System.

Start Time: \_\_\_\_\_

**NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).**

**IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.**

Performance Step: 1 Critical <u>N</u>	a. Ensure 1P-11B is filled and vented.
Standard:	Examinee sign off 1-SOP-CC-001 per turnover.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2 Critical <u>N</u>	b. Ensure 1P-11B has proper valve alignment per 1-CL-CC-001 Component Cooling valve Lineup: <ul style="list-style-type: none"><li>• 1CC-723B, 1P-11B CC Pump Suction – LOCKED OPEN</li><li>• 1CC-725B, 1P-11B CC Pump Discharge – LOCKED OPEN</li><li>• 1CC-V-23, 1P-11B CC Pump Casing Vent – SHUT &amp; CAPPED</li></ul>
Standard:	Examinee signs off valves in correct position.
Evaluator Cue:	<b>The AO reports valves are in correct position per Step 5.4.2.b and have been IV’d.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Job Performance Measure (JPM)

Performance Step: 3 Critical <u>N</u>	c. Ensure 1T-12 CC Surge Tank is greater than 45% on 1LI-618B
Standard:	Examinee verifies CC Surge Tank >45% level.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical <u>Y</u>	d. Open 1CC-738A <b>OR</b> 1CC-738B, (circle one) RHR HX Shell Side Inlet.
Standard:	Examinee opens 1CC-738A or 1CC-738B and circles.
<b>Evaluator Note:</b>	<b>Critical part of step is opening of one valve only.</b>  <b>Alarms 1C03 1D 1-4 and 1-5 RCP Low Cooling Water Flow come in and are expected.</b>
<b>Evaluator Cue:</b>	<b>If examinee asks or wants to address the alarms, inform them they were briefed as 'expected' alarms during the pre-job brief.</b>  <b>If asked, the AO reports the CCW flows are slightly low at 205 gpm.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical <u>N</u>	e. <b>IF</b> total flow remains less than 2000 gpm on 1FI-619, <b>THEN</b> perform the following:
Standard:	Examinee should determine flow is >2000 gpm and sub-steps under 5.4.2.e are NOT to be performed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Job Performance Measure (JPM)

Performance Step: 6 Critical <u>Y</u>	f. Start 1P-11B CCW Pump and run in parallel with 1P-11A.
Standard:	Examinee starts 1P-11B and runs for 1 minute while verifying system response.
Evaluator Note:	<b>Evaluator can cue examinee that 1 minute has expired if desired.</b>
Evaluator Cue:	<b>If asked, the AO can report personnel are clear of the area and all conditions are normal for starting 1P-11B CCW Pump.</b> <b>If asked, the AO can report the start of 1P-11B is normal.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7 Critical <u>Y</u>	g. Place and hold in STOP 1P-11A CCW Pump control switch for approximately 3 seconds.
Standard:	Examinee stops 1P-11A CCW Pump.
Evaluator Cue:	<b>If asked, the AO can report normal coastdown of 1P-11A CCW Pump and check valve seating was heard for 1P-11A when pump was secured.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8 Critical <u>Y</u>	h. Release 1P-11A CCW Pump control switch and allow it to return to AUTO.
Standard:	Examinee places 1P-11A CCW Pump to AUTO.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Job Performance Measure (JPM)

Performance Step: 9 Critical <u>Y</u>	i. SHUT 1CC-738A <b>OR</b> 1CC-738B RHR HX Shell Inlet
Standard:	Examinee SHUTS 1CC-738A or 1CC-738B, whichever was opened previously.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10 Critical <u>N</u>	If step 5.4.2.e was <b>NOT</b> performed then Steps 5.4.2.j through 5.4.2.l are N/A.
Standard:	Examinee N/A's Steps 5.4.2.j through 5.4.2.l.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 11 Critical <u>N</u>	Examinee informs OS1 shifting of CCW Pumps is complete per 1-SOP-CC-001.
Standard:	Report completion of 1-SOP-CC-001 to shift CCW Pumps.
<b>Evaluator Cue:</b>	<b>Acknowledge completion of 1-SOP-CC-001</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: This completes the JPM.

Stop Time: \_\_\_\_\_

**Job Performance Measure (JPM)**

**TURNOVER SHEET**

INITIAL CONDITIONS:

- 1P-11B Component Cooling Water (CCW) Pump has been aligned for use after being drained for Maintenance.
- 1P-11B Component Cooling Water Pump is filled and vented.
- An AO is standing by at the Unit 1 CCW Pumps for assistance.
- Expected alarms have been briefed.

INITIATING CUES:

- OS1 directs you to start 1P-11B CCW Pump and secure 1P-11A CCW Pump per 1-SOP-CC-001 Component Cooling System Step 5.4.2

### Job Performance Measure (JPM)

SITE: Point Beach

JPM TITLE: Test High Flux at Shutdown Alarm

JPM NUMBER: Control Room JPM h REV. 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): PBN P015.004.COT/ Monitor the Nuclear Instrument System for Proper Operation

K/A NUMBERS: 015.A3.02 (3.7/3.9)

APPLICABLE METHOD OF TESTING:

Discussion:  Simulate/walkthrough:  Perform:

EVALUATION LOCATION: In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 10 Minutes

Time Critical: NO

Alternate Path: NO

## **Job Performance Measure (JPM)**

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

### **INITIAL CONDITIONS:**

- You are the Unit 1 BOP
- Unit 1 has just been drained down in preparation for removing the Reactor Vessel Head.
- The crew is performing RP-1A, Preparation for Refueling Attachment A, Reactor Vessel Head Lift Checkoff Data Sheet.
- Both Source Range Detectors N-31 and N-32 are in service.
- There is an Auxiliary Operator stationed in Containment to support Attachment A evolutions.

### **INITIATING CUES:**

- The SRO has requested that you perform Attachment D, Test the High Flux at Shutdown Alarm, to support the completion of RP-1A Attachment A, Reactor Vessel Head Lift Checkoff Data Sheet.

## Job Performance Measure (JPM)

### JPM PERFORMANCE INFORMATION

Required Materials: RP-1A, Preparation for Refueling, Attachment D

General References: RP-1A, Preparation for Refueling  
RP-1A, Preparation for Refueling, Attachment A, Reactor Vessel Head Lift Check off Data Sheet

Task Standards: High Flux at Shutdown Alarm tested satisfactorily

Start Time: \_\_\_\_\_

**NOTE:** When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

**IMPORTANT:** Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

**NOTE TO EVALUATORS:** This JPM is **NOT** alternate path/faulted. If during the performance of this JPM switches on the NI cabinets do not seem to work properly cue the examinees to ‘wiggle’ the switch or try again. At times these switches stick due to their infrequent use. It is recommended to cycle these switches several times prior to JPM implementation to clean corrosion off switch contacts.

Performance Step: 1 Critical <u>Y</u>	Test N-31 if in service (otherwise N/A) On N-31 place the “Level Trip” switch to bypass, to enable the “Operator Select” switch.
Standard:	Level Trip switch placed in bypass.
Evaluator Note:	<b>An alarm will come in at 1C04 and N-31 cabinet when this switch is positioned.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Job Performance Measure (JPM)

Performance Step: 2 Critical <u>Y</u>	On N-31 position the "Operator Select" switch to the "Level Adjust" position.
Standard:	Operator Select switch placed in the "Level Adjust" position.
Evaluator Note:	<b>An alarm will come in at 1C04 and N-31 cabinet when this switch is positioned.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3 Critical <u>Y</u>	Unlock and increase level adjust potentiometer to increase counts to bring in alarm. Verify alarm in both control and containment.
Standard:	Level adjust potentiometer adjusted up to increase counts <b>AND</b> alarm verified in both control and containment.
Evaluator Note:	<b>An alarm will come in at 1C04 and N-31 cabinet when this pot is adjusted.</b>
Evaluator Cue:	<b>When AO is contacted, inform examinee that the audible alarm has been received in containment.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

### Job Performance Measure (JPM)

Performance Step: 4 Critical <u>N</u>	Reposition level adjust back to zero and lock. Verify alarms clear.
Standard:	Level adjust potentiometer adjusted back to zero. <b>AND</b> Alarms verified clear.
Evaluator Note:	<b>An alarm will clear on 1C04 and N-31 cabinet when this pot is re-positioned.</b>
Evaluator Cue:	<b>When the AO is contacted, report alarm is clear.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical <u>Y</u>	Position "Operator Selector" switch to Normal.
Standard:	Operator Selector switch returned to normal.
Evaluator Note:	<b>An alarm will clear on 1C04 and N-31 cabinet when this switch is re-positioned.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6 Critical <u>Y</u>	Position "Level Trip" switch to Normal.
Standard:	Level Trip switch returned to normal.
Evaluator Note:	<b>An alarm will clear on 1C04 and N-31 cabinet when this switch is re-positioned.</b>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

**Job Performance Measure (JPM)**

Terminating Cues: This completes this JPM

Stop Time: \_\_\_\_\_

## **Job Performance Measure (JPM)**

### **TURNOVER SHEET**

#### **INITIAL CONDITIONS:**

- You are the Unit 1 BOP
- Unit 1 has just been drained down in preparation for removing the Reactor Vessel Head.
- The crew is performing RP-1A, Preparation for Refueling Attachment A, Reactor Vessel Head Lift Checkoff Data Sheet.
- Both Source Range Detectors N-31 and N-32 are in service.
- There is an Auxiliary Operator stationed in Containment to support Attachment A evolutions.

#### **INITIATING CUES:**

- The SRO has requested that you perform Attachment D, Test the High Flux at Shutdown Alarm, to support the completion of RP-1A Attachment A, Reactor Vessel Head Lift Checkoff Data Sheet.