

	<b>JOB PERFORMANCE MEASURE (JPM)</b>
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**SITE:** PRAIRIE ISLAND

**JPM TITLE:** RCS / STEAM GENERATOR TEMPERATURE VERIFICATION

**JPM NUMBER:** ADMIN-92                      **REV.** 0

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** CRO 002 011 01 000 / HEATUP THE REACTOR COOLANT SYSTEM

**K/A NUMBERS:** 2.1.20 (4.6/4.6)

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 8 Minutes                      Time Critical: NO

Alternate Path: NO

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>2/18/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>2/22/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date

**ADMIN-92, RCS / STEAM GENERATOR TEMPERATURE VERIFICATION, REV. 0**

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:**

- Preparations are being made to start the FIRST Reactor Coolant Pump.
- An Out Plant Operator reports SG Skin Temperatures are as follows:
  - 12413, 11 SG SKIN TI = 142°F
  - 12414, 12 SG SKIN TI = 147°F

**INITIATING CUES:**

- The SS directs you to complete step 5.6.3 of 1C1.2-M5, UNIT 1 STARTUP TO MODE 5.

ADMIN-92, RCS / STEAM GENERATOR TEMPERATURE VERIFICATION, REV. 0  
JPM PERFORMANCE INFORMATION

Required Materials: Consumable copy of 1C1.2-M5, step 5.6.3 (pages 31-32).  
ERCS Terminal.

General 1C1.2-M5, UNIT 1 STARTUP TO MODE 5

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Task Examinee determines the SG to RCS  $\Delta T$  is 48°F and the limiting SG to RCS  $\Delta T$  of 50°F has NOT been exceeded.

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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.

## ADMIN-92, RCS / STEAM GENERATOR TEMPERATURE VERIFICATION, REV. 0

<b>Performance Step:</b>	1C1.2-M5, step 5.6.3
<b>Critical <u>N</u></b>	Verify the secondary water temperature of each SG is less than 50°F warmer than the RCS cold leg temperatures before starting an RCP as follows:
	A. Record SG skin temperatures at the SG skin pyrometer locations:
	<ul style="list-style-type: none"> <li>• 12413, 11 SG SKIN TI</li> <li>• 12414, 12 SG SKIN TI</li> </ul>
<b>Standard:</b>	Examinee records 11 and 12 SG Skin Temperatures.
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step:</b>	1C1.2-M5, step 5.6.3
<b>Critical <u>Y</u></b>	Verify the secondary water temperature of each SG is less than 50°F warmer than the RCS cold leg temperatures before starting a RCP as follows:
	B. Record RCS cold leg temperatures:
	<ul style="list-style-type: none"> <li>• 1T0406A, RCS A TCOLD 450B</li> <li>• 1T0426A, RCS B TCOLD 451B</li> </ul>
<b>Standard:</b>	Examinee demonstrates the ability to identify 1T0406A and 1T0426A in ERCS.
<b>Evaluator Cue:</b>	When examinee has demonstrated the ability to locate RCS cold leg temps, then provide the examinee with the following:
	<ul style="list-style-type: none"> <li>• 1T0406A, RCS A TCOLD 450B = 99°F</li> <li>• 1T0426A, RCS B TCOLD 451B = 102°F</li> </ul>
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

## ADMIN-92, RCS / STEAM GENERATOR TEMPERATURE VERIFICATION, REV. 0

<b>Performance Step:</b>	1C1.2-M5, step 5.6.3
<b>Critical <u>N</u></b>	Verify the secondary water temperature of each SG is less than 50°F warmer than the RCS cold leg temperatures before starting a RCP as follows:  B. Record RCS cold leg temperatures: <ul style="list-style-type: none"> <li>• 1T0406A, RCS A TCOLD 450B</li> <li>• 1T0426A, RCS B TCOLD 451B</li> </ul>
<b>Standard:</b>	Examinee records RCS A and B cold leg temperatures.
<b>Evaluator Cue:</b>	When examinee has demonstrated the ability to locate RCS cold leg temps, then provide the examinee with the following: <ul style="list-style-type: none"> <li>• 1T0406A, RCS A TCOLD 450B = 99°F</li> <li>• 1T0426A, RCS B TCOLD 451B = 102°F</li> </ul>
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step:</b>	1C1.2-M5, step 5.6.3.C
<b>Critical <u>Y</u></b>	Determine the limiting SG to RCS temperature difference by subtracting the lowest RCS cold leg temperature from the highest SG skin temperature:  $\frac{\text{Highest SG Skin T}}{\text{Skin T}} \text{ } ^\circ\text{F} - \frac{\text{Lowest RCS cold leg T}}{\text{cold leg T}} \text{ } ^\circ\text{F} = \frac{\Delta\text{T}}{\Delta\text{T}} \text{ } ^\circ\text{F}$
<b>Standard:</b>	Examinee determines the SG to RCS temperature difference is 48°F.
<b>Evaluator Note:</b>	Calculation: 147°F – 99°F = 48°F
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

**ADMIN-92, RCS / STEAM GENERATOR TEMPERATURE VERIFICATION, REV. 0**

<b>Performance Step:</b>	<b>1C1.2-M5, step 5.6.3.D</b>
<b>Critical <u>Y</u></b>	<b>Verify the limiting SG to RCS temperature difference is less than 50°F.</b>
<b>Standard:</b>	<b>Examinee determines the limiting SG to RCS <math>\Delta T</math> is LESS than 50°F and step D is met.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

**Terminating Cues:** When examinee determines the SG to RCS  $\Delta T$  is 48°F and the limiting  $\Delta T$  of 50°F has NOT been exceeded, then this JPM is complete.

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

### ATTACHMENT 3

## TURNOVER SHEET

#### INITIAL CONDITIONS:

- Unit 1 is in MODE 6.
- Preparations are being made to start the FIRST Reactor Coolant Pump.
- An Out Plant Operator reports SG Skin Temperatures are as follows:
  - 12413, 11 SG SKIN TI = 142°F
  - 12414, 12 SG SKIN TI = 147°F

#### INITIATING CUES:

- The SS directs you to complete step 5.6.3 of 1C1.2-M5, UNIT 1 STARTUP TO MODE 5.

	<b>JOB PERFORMANCE MEASURE (JPM)</b>
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**SITE:** PRAIRIE ISLAND

**JPM TITLE:** DETERMINE RECOMMENDED TURBINE STARTUP AND LOAD TIME

**JPM NUMBER:** ADMIN-78                      **REV.** 1

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** CRO 048 012 01 04 000 / ADJUST TURBINE LOAD RATES

**K/A NUMBERS:** 2.1.25 (3.9/4.2)

**APPLICABLE METHOD OF TESTING:**

Discussion:     Simulate/walkthrough:     Perform:

**EVALUATION LOCATION:**    In-Plant:                       Control Room:

   Simulator:                       Other:

   Lab:

Time for Completion: 13 Minutes                      Time Critical: NO

Alternate Path: NO

**TASK APPLICABILITY:**    SRO:     RO:     NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>2/17/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>2/22/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date



**ADMIN-78, DETERMINE RECOMMENDED TURBINE STARTUP AND LOAD TIME, REV. 1**

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:**

- A plant startup is in progress.
- Preparations are in progress to roll the turbine in accordance with 1C1.2-M1, Unit 1 Startup to Mode 1.

**INITIATING CUES:**

- The SS directs you to determine the following in accordance with step 5.3.35 of 1C1.2-M1:
  - Turbine acceleration rate.
  - Maximum recommended loading rate.

**ADMIN-78, DETERMINE RECOMMENDED TURBINE STARTUP AND LOAD TIME, REV. 1**  
**JPM PERFORMANCE INFORMATION**

- Required Materials:** Calculator  
Picture of DEHC screen showing ERCS points 14019, 14020 and 14088.  
Consumable copy of 1C1.2-M1 and Fig. C1-2A.
- General References:** 1C1.2-M1, UNIT 1 STARTUP TO MODE 1  
FIGURE C1-2A, RECOMMENDED STARTUP AND LOADING TIMES
- Task Standards:** Examinee determines the correct turbine acceleration times and maximum recommended loading rate calculated per 1C1.2-M1 Att. 1.

**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:</b>	1C1.2-M1, Step 5.3.35
<b>Critical <u>N</u></b>	A. Using “Turbine Temperatures” screen, determine the following: 1. LP 1 <sup>ST</sup> Stage metal temperatures:  14019 _____ °F for LP1  14020 _____ °F for LP2  2. HP impulse chamber metal temperature:  14088 _____ °F for Imp Chamber
<b>Standard:</b>	Examinee determines 14019 is 55.4°F, 14020 is 56.5°F and 14088 is 190.4 °F.
<b>Evaluator Cue</b>	Provide picture when examinee asks for DEHC.
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

## ADMIN-78, DETERMINE RECOMMENDED TURBINE STARTUP AND LOAD TIME, REV. 1

<b>Performance Step:</b>	<b>1C1.2-M1, Step 5.3.35</b>
<b>Critical <u>N</u></b>	<b>B. Complete Attachment 1, Turbine Loading Calculation.</b>
<b>Standard:</b>	<b>Examinee transitions to 1C1.2 Attachment 1.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>1C1.2-M1, Attachment 1, Step 1</b>
<b>Critical <u>N</u></b>	<b>Record HP Turbine First Stage Metal Temperature from 1C1.2-M1 Step 5.3.35A.2.</b>
	<b>HP Turbine First Stage Metal Temperature _____ °F</b>
<b>Standard:</b>	<b>Examinee records 190.4 °F.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>1C1.2-M1, Attachment 1, Step 2</b>
<b>Critical <u>Y</u></b>	<b>Determine the time to accelerate to synch from Figure C1-2A:</b>
	<b>Time = _____ minutes</b>
<b>Standard:</b>	<b>Examinee determines the time to be 10-15 minutes.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

## ADMIN-78, DETERMINE RECOMMENDED TURBINE STARTUP AND LOAD TIME, REV. 1

<b>Performance Step:</b>	<b>1C1.2-M1, Attachment 1, Step 3</b>
<b>Critical <u>Y</u></b>	<b>Calculate the maximum recommended acceleration rate:</b>
	1800 rpm / _____ minutes = _____ rpm/min
<b>Standard:</b>	<b>Examinee calculates an acceleration rate of 120-180 rpm/min.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>1C1.2-M1, Attachment 1, Step 4</b>
<b>Critical <u>Y</u></b>	<b>Determine the recommended time to hold at approximately 15% reactor power from figure C1-2A:</b>
	Hold for _____ minutes
<b>Standard:</b>	<b>Examinee determines a time of 25-35 minutes.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>1C1.2-M1, Attachment 1, Step 5</b>
<b>Critical <u>Y</u></b>	<b>Determine the time to raise load to 100% from Figure C1-2A:</b>
	Load increase in _____ minutes
<b>Standard:</b>	<b>Examinee determines a time of 85-95 minutes.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

**ADMIN-78, DETERMINE RECOMMENDED TURBINE STARTUP AND LOAD TIME, REV. 1**

<b>Performance Step:</b>	<b>1C1.2-M1, Attachment 1, Step 6</b>
<b>Critical <u>Y</u></b>	<b>Determine the maximum recommended loading rate:</b>
	<b>85%/ _____ minutes = _____ %/min</b>
<b>Standard:</b>	<b>Examinee determines a load rate of 0.85 to 1.0 %/minute.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

**Terminating Cues:** When examinee has calculated turbine acceleration times per 1C1.2-M1, then this JPM is complete.

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

## ATTACHMENT 3

# TURNOVER SHEET

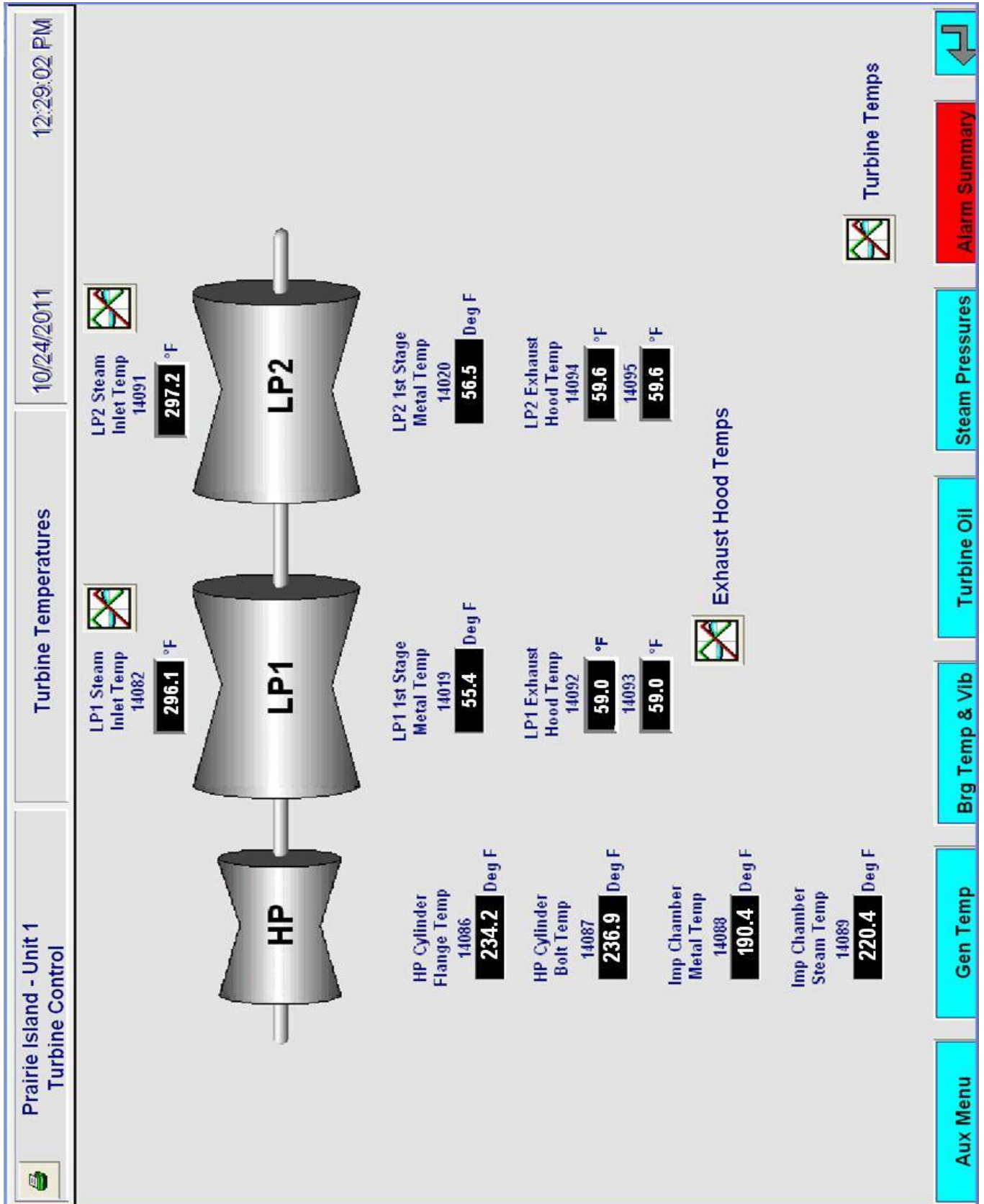
### INITIAL CONDITIONS:

- A plant startup is in progress.
- Preparations are in progress to roll the turbine in accordance with 1C1.2-M1, Unit 1 Startup to Mode 1.

### INITIATING CUES:

- The SS directs you to determine the following in accordance with step 5.3.35 of 1C1.2-M1:
  - Turbine acceleration rate.
  - Maximum recommended loading rate.

ATTACHMENT 3



	<b>JOB PERFORMANCE MEASURE (JPM)</b>
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**SITE:** PRAIRIE ISLAND

**JPM TITLE:** REMOVE AN ANNUNCIATOR FROM SERVICE

**JPM NUMBER:** ADMIN-11                      **REV.** 3

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** CRO 083 ATI 00 00 025 / RESPONSE TO ANNUNCIATOR SYSTEM MALFUNCTION

**K/A NUMBERS:** 2.2.43 (3.0/3.3)

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 8 Minutes                      Time Critical: NO

Alternate Path: NO

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>2/18/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>2/22/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date



### **ADMIN-11, REMOVE AN ANNUNCIATOR FROM SERVICE, REV. 3**

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 100% power.
- 47013-0503, NIS POWER RANGE UPPER DETECTOR HI FLUX DEVIATION OR AUTO DEFEAT, alarm is occurring spuriously and causing a distraction to the Control Room.
- The SS has determined Annunciator 47013-0503 is non-functional.

#### **INITIATING CUES:**

- The SS directs you to complete Part A of PINGP 799, Annunciator Out of Service Record Sheet, for 47013-0503 per C47.0, Control Room Annunciators.

**ADMIN-11, REMOVE AN ANNUNCIATOR FROM SERVICE, REV. 3**  
**JPM PERFORMANCE INFORMATION**

**Required Materials:** Copy C47.0 and C47013-0503  
 Consumable copy of PINGP 799.

**General References:** C47.0 CONTROL ROOM ANNUNCIATORS

**Task Standards:** Examinee completes Part A of PINGP 799.

**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:</b>	<b>C47 Step 5.2.1.A:</b>
<b>Critical <u>Y</u></b>	<b>Complete Part A, Identification of the Annunciator Out of Service Record Sheet (PINGP 799):</b>
	<b>Determine which system the specific annunciator is in using Table 1, Control Room Annunciators.</b>
<b>Standard:</b>	<b>Examinee records 1 for UNIT # and marks NSSS.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>C47 Step 5.2.1.B:</b>
<b>Critical <u>Y</u></b>	<b>Record the nomenclature, annunciator window number, and SER input point(s).</b>
<b>Standard:</b>	<b>Examinee records “NIS POWER RANGE UPPER DETECTOR HI FLUX DEVIATION OR AUTO DEFEAT” or similar words for nomenclature, records 47013-0503 for annunciator window #, and records 169 for SER input point.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

**ADMIN-11, REMOVE AN ANNUNCIATOR FROM SERVICE, REV. 3**

<b>Performance Step:</b>	<b>C47 Step 5.2.1.C:</b>
<b>Critical <u>Y</u></b>	<b>Complete the removal from service justification by documenting the reason for disabling the annunciator.</b>
<b>Standard:</b>	<b>Examinee records removal from service justification, such as “Alarm occurring spuriously”, or “Alarm causing distraction to the Control Room”, or combination of both, or similar words.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

**Terminating Cues:**      **When examinee has completed Part A of PINGP 799, then this JPM is complete.**

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

**ATTACHMENT 3**

**TURNOVER SHEET**

**INITIAL CONDITIONS:**

- Unit 1 is at 100% power.
- 47013-0503, NIS POWER RANGE UPPER DETECTOR HI FLUX DEVIATION OR AUTO DEFEAT, alarm is occurring spuriously and causing a distraction to the Control Room.
- The SS has determined Annunciator 47013-0503 is non-functional.

**INITIATING CUES:**

- The SS directs you to complete Part A of PINGP 799, Annunciator Out of Service Record Sheet, for 47013-0503 per C47.0, Control Room Annunciators.

	<b>JOB PERFORMANCE MEASURE (JPM)</b>
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**SITE:** PRAIRIE ISLAND

**JPM TITLE:** DETERMINE STEAM GENERATOR TUBE LEAK ACTION LEVEL

**JPM NUMBER:** ADMIN-91                      **REV.** 0

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** CRO 002 ATI 00 00 011 / RESPONSE TO SG TUBE LEAK

**K/A NUMBERS:** 2.4.11 (4.0/4.2)

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 12 Minutes                      Time Critical: NO

Alternate Path: NO

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>2/17/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>2/22/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date

**ADMIN-91, DETERMINE STEAM GENERATOR TUBE LEAK ACTION LEVEL, REV. 0**

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 100% power.
- ERCS is out of service.
- The crew is performing 1C4 AOP2, Steam Generator Tube Leak.
- Table 1 of 1C4 AOP2 is being performed for periodic data entry.
  
- 1R-15 is currently reading 1240 CPM.
- Air Ejector flow is currently reading 3.1 CFM.

**INITIATING CUES:**

- Update Table 1 of 1C4 AOP2 for the 1045 entry based on current 1R-15 count rates.
- Determine the current Action Level per step 2.4.9 of 1C4 AOP2.

## ADMIN-91, DETERMINE STEAM GENERATOR TUBE LEAK ACTION LEVEL, REV. 0

JPM PERFORMANCE INFORMATION

**Required Materials:** Copy of 1C4 AOP2 with Table 1 filled out from 1000 to 1045 per Attachment 3.

**General References:** 1C4 AOP2, STEAM GENERATOR TUBE LEAK

**Task Standards:** Examinee determines Steam Generator Tube Leak Action Level 1 is met.

**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:</b>	1C4 AOP2 Table 1 Step B.1
<b>Critical <u>N</u></b>	<u>IF</u> ERCS is out of service <u>OR</u> completing the table for periodic data entry, <u>THEN</u> perform the following: 1. Enter the current date and time in the date/Time column, the current 1R-15 counts in column A, and the air ejector flow in Column H.
<b>Standard:</b>	Examinee records 1240 in Column A for 1R-15 Counts and 3.1 in Column H for air ejector flow.
<b>Evaluator Note:</b>	Current date and time is already entered on Table 1.
<b>Evaluator Cue:</b>	If examinee requests Chemistry to perform another leak rate determination based on sample, then inform examinee that sample results will take 1 hour to complete.
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

## ADMIN-91, DETERMINE STEAM GENERATOR TUBE LEAK ACTION LEVEL, REV. 0

<b>Performance Step:</b>	<b>1C4 AOP2 Table 1 Step B.2</b>
<b>Critical <u>Y</u></b>	<b>Determine the current leak rate by dividing the 1R-15 counts (Column A) by the most recent conversion factor (Column C) and enter in Column F. (Column A ÷ Column C = Column F).</b>
<b>Standard:</b>	<b>Examinee determines the current leak rate is between 30 and 75 GPD.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>1C4 AOP2 Table 1 Step B.2</b>
<b>Critical <u>N</u></b>	<b>Determine the current leak rate by dividing the 1R-15 counts (Column A) by the most recent conversion factor (Column C) and enter in Column F. (Column A ÷ Column C = Column F).</b>
<b>Standard:</b>	<b>Examinee records 40 in Column F for 1R-15 Leak rate and 47 to 48 in Column G for 1R-15 Leak rate ROC.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>1C4 AOP2 Table 1 Step B.3</b>
<b>Critical <u>N</u></b>	<b>Determine the rate of change (ROC) by dividing the change in leak rate (change in Column F) by the change in time (change in Date/Time column in hours) for the most recent entries and enter in Column G. (<math>\Delta</math> Column F ÷ <math>\Delta</math> Hours = Column G).</b>
<b>Standard:</b>	<b>Examinee records a number between 47 and 48 in column G for 1R-15 Leak rate ROC.</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____



## ADMIN-91, DETERMINE STEAM GENERATOR TUBE LEAK ACTION LEVEL, REV. 0

Performance Step: **1C4 AOP2 Step 2.4.9**  
 Critical Y Determine the appropriate procedure section:

Action Level	1U0016A CALC SG TUBE LEAK ROLLING AVG	1U0019A CALC SG TUBE LEAK RATE OF CHANGE	Go To Step
Increased Monitoring	$\geq 5$ GPD $< 30$ GPD	NA	2.5
1	$\geq 30$ GPD $< 75$ GPD	NA	2.6
2	$\geq 75$ GPD sustained for 1 hour	<u>AND</u> $< 30$ GPD/hr	2.7
3	$\geq 75$ GPD	<u>AND</u> $\geq 30$ GPD/hr	2.8
3	$\geq 150$ GPD	<u>AND</u> $< 30$ GPD/hr	2.8

Standard: Examinee determines Action Level 1 is met.

Evaluator Note: Step 2.4.9 of 1C4 AOP2 is a continuous action step.

Performance: SATISFACTORY  UNSATISFACTORY

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

Terminating Cues: When examinee has determined Steam Generator Tube Leak Action Level 1 is met, then this JPM is complete.

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

## ADMIN-91, DETERMINE STEAM GENERATOR TUBE LEAK ACTION LEVEL, REV. 0

Date/Time	Column A 1R-15 Counts (CPM) 1U0018A	Column B Leak rate from Chemist (GPD)	Column C Conversion Factor (CPM/GPD)	Column D 1R-15 Counts for 30 GPD Leak	Column E 1R-15 Counts for 75 GPD leak	Column F 1R-15 Leak rate (GPD)	Column G 1R-15 Leak rate ROC (GPD/HR)	Column H Air Ejector flow (cfm)
6-1-16/1000	620	20	31	430	2325	20	-	3.1
6-1-16/1015	775					25	20	3.1
6-1-16/1030	868					28	12	3.1
6-1-16/1045	1240					40	47.6	3.1

KEY

## ATTACHMENT 3

# TURNOVER SHEET

### INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- ERCS is out of service.
- The crew is performing 1C4 AOP2, Steam Generator Tube Leak.
- Table 1 of 1C4 AOP2 is being performed for periodic data entry.
  
- 1R-15 is currently reading 1240 CPM.
- Air Ejector flow is currently reading 3.1 CFM.

### INITIATING CUES:

- Update Table 1 of 1C4 AOP2 for the 1045 entry based on current 1R-15 count rates.
- Determine the current Action Level per step 2.4.9 of 1C4 AOP2.



	<b>JOB PERFORMANCE MEASURE (JPM)</b>
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**SITE:** PRAIRIE ISLAND

**JPM TITLE:** REVIEW THE UNIT 1 CONTROL ROOM LOG

**JPM NUMBER:** ADMIN-35                      REV.    2

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** SS 341 010 03 03 000 / REVIEW LOGS FOR TRENDS/OUT-SPEC CONDITIONS

**K/A NUMBERS:** 2.1.18 (3.6/3.8)

**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  

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>3/8/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>3/15/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date

**ADMIN-35, REVIEW THE UNIT 1 CONTROL ROOM LOG, REV. 2**

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 100% power.
- Unit 2 is at 100% power.
- All systems are functioning properly.
- No equipment is tagged out.

**INITIATING CUES:**

- Review the 1800 – 0600 Unit 1 Control Room Log, SP 1001B.
- Inform the evaluator of discrepancies.

**ADMIN-35, REVIEW THE UNIT 1 CONTROL ROOM LOG, REV. 2**

**JPM PERFORMANCE INFORMATION**

**Required Materials:** Consumable Copy of SP 1001B with discrepancies  
 Blank sheet of paper for writing down discrepancies  
 Calculator

**General References:** SP 1001B, UNIT 1 CONTROL ROOM LOG – MODES 1 AND 2  
 SWI O-200.5, PERIODIC DATA ACQUISITIONS & LOG KEEPING

**Task Standards:** Examinee identifies out of specifications in the Control Room Log.

**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:</b>	Step 5.C, Check CST useable contents $\geq$ 100,000 gallons per operating unit.
<b>Critical <u>Y</u></b>	
<b>Standard:</b>	Examinee identifies CST useable contents are less than 200,000 gallons.
<b>Evaluator Note:</b>	CST useable contents are 195,000 Gallons (page 10 of SP 1001B).
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step:</b>	Step 20, Control Bank Rod Position, within Deviation Limits.
<b>Critical <u>Y</u></b>	
<b>Standard:</b>	Examinee identifies Control Bank D Deviation Limits are NOT acceptable.
<b>Evaluator Note:</b>	Control Bank D Rod K-7 is at 198, Control Bank D Step Counter is at 213 steps, and deviation is greater than 12 steps (page 19 of SP 1001B).
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

**ADMIN-35, REVIEW THE UNIT 1 CONTROL ROOM LOG, REV. 2**

<b>Performance Step:</b>	<b>Step 25.B, Check each accumulator pressure <math>\geq</math> 710 psig and <math>\leq</math> 770 psig.</b>
<b>Critical <u>Y</u></b>	
<b>Standard:</b>	<b>Examinee identifies 12 SI Accumulator Pressure is less than 710 psig.</b>
<b>Evaluator Note:</b>	<b>12 Accumulator pressure 709 psig on 1PI-936 and 699 psig on 1PI-937 (page 21 of SP 1001B).</b>
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

**Terminating Cues:** When examinee has identified the out of specifications in the Control Room Log, then this JPM is complete.

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



**ATTACHMENT 3**

**TURNOVER SHEET**

**INITIAL CONDITIONS:**

- Unit 1 is at 100% power.
- Unit 2 is at 100% power.
- All systems are functioning properly.
- No equipment is tagged out.

**INITIATING CUES:**

- Review the 1800 – 0600 Unit 1 Control Room Log, SP 1001B.
- Inform the evaluator of discrepancies.

	<b>JOB PERFORMANCE MEASURE (JPM)</b>
---	--------------------------------------

**SITE:** PRAIRIE ISLAND  
**JPM TITLE:** VERIFY TIME TO BOILING DURING REDUCED INVENTORY  
**JPM NUMBER:** ADMIN-63 **REV.** 1  
**RELATED PRA INFORMATION:** NONE  
**TASK NUMBERS / TASK TITLE(S):** SS 342 ATI 00 00 029 / ASSURE CONTAINMENT BOUNDARY CONTROL DURING COLD SHUTDOWN OR REFUELING  
**K/A NUMBERS:** 2.1.25 (3.9/4.2)

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

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

Time for Completion: 8 Minutes Time Critical: NO

Alternate Path: NO

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>3/2/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>3/15/2016</b>
	Validator	Date
	(See JPM Validation Checklist, Attachment 1)	
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date

**ADMIN-63, VERIFY TIME TO BOILING DURING REDUCED INVENTORY, REV. 1**

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:**

- It is November 19, 2009 at 0400.
- Unit 2 is in a refueling outage.
- During the shutdown, the Unit 2 Reactor was manually tripped on November 8th at 0800.
- Inventory Integrity is set.
- The crew is implementing 2C1.6, Shutdown Operations – Unit 2.
- Reactor Vessel level is 1 foot below the Reactor Vessel Flange.
- Maintenance has requested to have both doors of the personnel airlock open to move equipment. During the equipment movement, it will take 20 minutes to close the airlock.
- The Reactor Operator has determined the current Time To Boiling is 21 minutes in accordance with step 5.2.3 of 2C1.6, Shutdown Operations – Unit 2.
- The Reactor Operator also determined that Maintenance will be allowed to move equipment in accordance with C19.10, Containment Airlock Door Control At Shutdown, Limitation 4.3. due to the time to boiling is greater than 20 minutes.

**INITIATING CUES:**

- Review and verify the time to boiling determination and ensure C19.10 Limitation 4.3 is assessed correctly.
- Report your findings to the evaluator.

## ADMIN-63, VERIFY TIME TO BOILING DURING REDUCED INVENTORY, REV. 1

JPM PERFORMANCE INFORMATION

**Required Materials:** 2C1.6, Shutdown Operations – Unit 2, page 9.  
Figure C1-32, Boiling Curve.  
C19.10, Containment Airlock Door Control At Shutdown, Pages 6 & 7.  
See JPM setup information on page 7.

**General References:** 2C1.6, SHUTDOWN OPERATIONS – UNIT 2  
C19.10, CONTAINMENT AIRLOCK DOOR CONTROL AT SHUTDOWN  
FIG C1-32, BOILING CURVE

**Task Standards:** Examinee determines the time to boiling is less than 20 minutes and Limitation 4.3 of C19.10 is NOT met.

**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:</b>	2C1.6, SHUTDOWN OPERATIONS –UNIT 2
<b>Critical <u>Y</u></b>	Step 5.2.3 Determine the time to boiling from Figure C1-32 or Nuclear Engineer, if necessary.
<b>Standard:</b>	Examinee determines time to boiling is less than 20 minutes.
<b>Evaluator Cue:</b>	Time between November 11 at 0800 and November 19 at 0400 is 260 hours.
<b>Evaluator Cue:</b>	If examinee request support from Nuclear Engineer, inform examinee no engineers are available.
<b>Performance:</b>	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
<b>Comments:</b>	_____

**ADMIN-63, VERIFY TIME TO BOILING DURING REDUCED INVENTORY, REV. 1**

<b>Performance Step:</b>	<b>C19.10, CONTAINMENT AIRLOCK DOOR CONTROL AT SHUTDOWN</b>
<b>Critical <u>Y</u></b>	<b>Limitation 4.3</b> If inventory Integrity is required, THEN at least one (1) door in each containment airlock SHALL be operable and capable of being CLOSED under the control provided in this procedure prior to the Time to boiling or 4 (4) hours, whichever is less.
<b>Standard:</b>	Examinee determines time to boiling is less than the time to close the personnel airlock door and Limitation 4.3 of C19.10 is NOT met.
<b>Performance:</b>	<b>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></b>
<b>Comments:</b>	_____

**Terminating Cues:** When the examinee has determined the time to boiling is less than 20 minutes and Limitation 4.3 of C19.10 is NOT met, then this JPM is complete.

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

## ATTACHMENT 3

# TURNOVER SHEET

### INITIAL CONDITIONS:

- It is November 19, 2009 at 0400.
- Unit 2 is in a refueling outage.
- During the shutdown, the Unit 2 Reactor was manually tripped on November 8th at 0800.
- Inventory Integrity is set.
- The crew is implementing 2C1.6, Shutdown Operations – Unit 2.
- Reactor Vessel level is 1 foot below the Reactor Vessel Flange.
- Maintenance has requested to have both doors of the personnel airlock open to move equipment. During the equipment movement, it will take 20 minutes to close the airlock.
- The Reactor Operator has determined the current Time to Boiling is 21 minutes in accordance with step 5.2.3 of 2C1.6, Shutdown Operations – Unit 2.
- The Reactor Operator also determined that Maintenance will be allowed to move equipment in accordance with C19.10, Containment Airlock Door Control at Shutdown, Limitation 4.3 due to the time to boiling is greater than 20 minutes.

### INITIATING CUES:

- Review and verify the time to boiling determination and ensure C19.10 Limitation 4.3 is assessed correctly.
- Report your findings to the evaluator.

	<b>JOB PERFORMANCE MEASURE (JPM)</b>
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**SITE:** PRAIRIE ISLAND

**JPM TITLE:** PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM

**JPM NUMBER:** ADMIN-93                      **REV.** 0

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** SS 342 ATI 00 00 030 / PERFORM SHUTDOWN SAFETY ASSESSMENT

**K/A NUMBERS:** 2.2.18 (2.6/3.9)

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 21 Minutes                      Time Critical: NO

Alternate Path: NO

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>3/8/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>3/15/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date

**ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0**

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 2 is in a refueling outage.
- A screenshot of DC1 ERCS SCREEN (ATTACHMENT 4) is provided.
- Instrument readings on DC1 ERCS SCREEN match corresponding in-plant indications.
- The following equipment is OUT OF SERVICE:
  - 21 Battery Charger.
  - 21 Battery.
  
  - Portable Battery Charger.
  
  - 42 Battery Charger.
  - 42 Battery.

**INITIATING CUES:**

- Perform a Shutdown Safety Assessment for DC Power Availability ONLY.
- Determine the current condition for DC Power Availability.



ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0

JPM PERFORMANCE INFORMATION

Required Materials: Consumable copy of PINGP 1103 and 5AWI 15.6.1.

General 5AWI 15.6.1, SHUTDOWN SAFETY ASSESSMENT  
F PINGP 1103, UNIT 2 SHUTDOWN SAFETY ASSESSMENT  
e  
f  
e  
r  
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:

Task Examinee determines DC Power Availability is an ORANGE condition.  
S  
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:

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.

ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0

Performance Step:  
Critical Y

Safeguards Train A 125V DC Energized

Yes No

**Charger Functional** (Yes, if any of the following are Yes)

Yes No

ERCS display DC1 shows 21 Battery Charger Amps greater than 5 & Volts greater than 119

21 Batt Chg: Amps greater than 5; Volts greater than 119, & 21 Battery Charger Isol Bkr ON (inside 21 Battery Charger DC Transfer Switch)

Portable Batt Chg: Amps greater than 5; Volts greater than 119, & 21 Portable Battery Charger Isol Bkr ON (inside 21 Battery Charger DC Transfer Switch)

42 Batt Chg: Amps 10 to 150; Volts 124 to 140, and:

- 42 MAINT/TIE SW is in the "ON" position, and
- 31-42 BATT/XFRSW is in the "42 MAINT/TIE SW" position, and
- U1-U2 BATT/XFRSW is in the "21-22 BATT/XFRSW" position, and
- 21-22 BATT/XFRSW is in the "21-42 DCBT/DISC SW" position, and
- 21-42 DCBT/DISC SW is in the "ON" position.

(0-1) 0

Standard: Examinee allocates zero points for Safeguards Train A 125V DC Charger.

Evaluator Cues: If examinee states that a plant tour is required to determine the status of breakers/switches, provide the following information as needed:

- 21 Battery Charger Isolation Breaker is OFF.
- 21 Portable Battery Charger Isolation Breaker is OFF.
- 42 Maintenance Tie Switch is OFF.
- 31-42 Battery Transfer Switch is OFF.
- U1-U2 Battery Transfer Switch is OFF.
- 21-22 Battery Transfer Switch is OFF.
- 21-42 DC Battery Disconnect Switch is OFF.

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

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

ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0

Performance Step:  
Critical Y

Safeguards Train A 125V DC Energized (cont)

Yes No

**Battery Functional** (Yes, if any of the following are Yes)

Yes No

21 Battery Disc. SW ON & 21 Battery Volts on 21 Batt/Disc SW Panel within 5 volts of Panel 21 volts.

- 42 Battery: Volts ≥124, and:
- 42 MAINT/TIE SW is in the "ON" position, and
  - 31-42 BATT/XFRSW is in the "42 MAINT/TIE SW" position, and
  - U1-U2 BATT/XFRSW is in the "21-22 BATT/XFRSW" position, and
  - 21-22 BATT/XFRSW is in the "21-42 DCBT/DISC SW" position, and
  - 21-42 DCBT/DISC SW is in the "ON" position.

(0-1) 0

**Standard:** Examinee allocates zero points for Safeguards Train A 125V DC Battery.

**Evaluator Cues:** If examinee states that a plant tour is required to determine the status of breakers/switches, provide the following information as needed:

- 21 Battery Disconnect SW is OFF.
- 42 Maintenance Tie Switch is OFF.
- 31-42 Battery Transfer Switch is OFF.
- U1-U2 Battery Transfer Switch is OFF.
- 21-22 Battery Transfer Switch is OFF.
- 21-42 DC Battery Disconnect Switch is OFF.

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

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

ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0

Performance Step:  
Critical Y

Safeguards Train B 125V DC Energized

Yes No

**Charger Functional** (Yes, if any of the following are Yes)

Yes No

ERCS display DC1 shows 22 Battery Charger Amps greater than 5 & Volts greater than 119

22 Batt Chg: Amps greater than 5; Volts greater than 119, & 22 Battery Charger Isol SW ON (inside 22 Battery Charger DC Transfer Switch)

Portable Batt Chg: Amps greater than 5, Volts greater than 119, & 22 Portable Battery Charger Isol SW ON (inside 22 Battery Charger DC Transfer Switch)

42 Batt Chg: Amps 10 to 150; Volts 124 to 140, and:

- 42 MAINT/TIE SW is in the "ON" position, and
- 31-42 BATT/XFRSW is in the "42 MAINT/TIE SW" position, and
- U1-U2 BATT/XFRSW is in the "21-22 BATT/XFRSW" position, and
- 21-22 BATT/XFRSW is in the "22-42 DCBT/DISC SW" position, and
- 22-42 DCBT/DISC SW is in the "ON" position.

(0-1) 1

Standard: Examinee allocates one point for Safeguards Train B 125V DC Charger.

Evaluator Cues: If examinee states that a plant tour is required to determine the status of breakers/switches, provide the following information as needed:

- 22 Battery Charger Isolation Breaker is ON.
- 22 Portable Battery Charger Isolation Breaker is OFF.
- 42 Maintenance Tie Switch is OFF.
- 31-42 Battery Transfer Switch is OFF.
- U1-U2 Battery Transfer Switch is OFF.
- 21-22 Battery Transfer Switch is OFF.
- 22-42 DC Battery Disconnect Switch is OFF.

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

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

ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0

Performance Step:  
Critical Y

Safeguards Train B 125V DC Energized (cont)

Yes No

**Battery Functional** (Yes, if any of the following are Yes)

Yes No

22 Battery Disc. SW ON & 22 Battery Volts on 22 Batt/Disc SW Panel within 5 volts of Panel 22 volts.

- 42 Battery: Volts ≥124, and:
- 42 MAINT/TIE SW is in the "ON" position, and
  - 31-42 BATT/XFRSW is in the "42 MAINT/TIE SW" position, and
  - U1-U2 BATT/XFRSW is in the "21-22 BATT/XFRSW" position, and
  - 21-22 BATT/XFRSW is in the "22-42 DCBT/DISC SW" position, and
  - 22-42 DCBT/DISC SW is in the "ON" position.

(0-1) 1

**Standard:** Examinee allocates one point for Safeguards Train B 125V DC Battery.

**Evaluator Cues:** If examinee states that a plant tour is required to determine the status of breakers/switches, provide the following information as needed:

- 22 Battery Disconnect SW is ON.
- 42 Maintenance Tie Switch is OFF.
- 31-42 Battery Transfer Switch is OFF.
- U1-U2 Battery Transfer Switch is OFF.
- 21-22 Battery Transfer Switch is OFF.
- 22-42 DC Battery Disconnect Switch is OFF.

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

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

ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0

Performance Step: **Critical** Y

**Normal 125 Volt DC Line-up** (One Point if all four high level categories are Yes)

Yes  No

**Normal Charger (A Train)** (Yes, if any of the following are Yes)

Yes  No

- ERCS Display DC1 shows 21 Battery Charger Amps greater than 5, Volts greater than 119, and alarm "NORMAL" is displayed
- 21 Batt Chg: Amps greater than 5, Volts greater than 119, & 21 Battery Charger Isol Bkr ON (inside 21 Battery Charger DC Transfer Switch)

Yes  No

**Normal Charger (B Train)** (Yes, if any of the following are Yes)

Yes  No

- ERCS Display DC1 shows 22 Battery Charger Amps greater than 5, Volts greater than 119, and alarm "NORMAL" is displayed
- 22 Batt Chg: Amps greater than 5; Volts greater than 119, & 22 Battery Charger Isol Bkr ON (inside 22 Battery Charger DC Transfer Switch)

Yes  No

**Normal Battery (A Train)** (Yes, if both of the following are Yes)

Yes  No

- 21 Batt. Disc. SW ON
- 21-42 DCBT/DISC SW is in the "OFF" position.

Yes  No

**Normal Battery (B Train)** (Yes, if both of the following are Yes)

Yes  No

- 22 Batt. Disc. SW ON
- 22-42 DCBT/DISC SW is in the "OFF" position.

(0-1) 0

Standard: **Examinee allocates zero points for Normal 125 Volt DC Line-up.**

Evaluator Cues: **If examinee states that a plant tour is required to determine the status of breakers/switches, provide the following information as needed:**

- **21 Battery Charger Isolation Breaker is OFF.**
- **22 Battery Charger Isolation Breaker is ON.**
- **21 Battery Disconnect SW is OFF.**
- **22 Battery Disconnect SW is ON.**

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

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

**ADMIN-93, PERFORM SHUTDOWN SAFETY ASSESSMENT FOR DC SYSTEM, REV. 0**

<b>Performance Step:</b>	Total Points "POWER AVAILABILITY" (DC)	Total (0-5)	<b>2</b>
<b>Critical</b> <u>Y</u>			
<b>Standard:</b>	<b>Examinee allocates a total of two points for DC Power Availability and determines DC Power Availability is in an ORANGE condition.</b>		
<b>Performance:</b>	<b>SATISFACTORY</b> _____	<b>UNSATISFACTORY</b> _____	
<b>Comments:</b>	_____		

**Terminating Cues:** When examinee has determined DC Power Availability is in an ORANGE condition, then this JPM is complete.

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

## ATTACHMENT 3

# TURNOVER SHEET

### INITIAL CONDITIONS:

- Unit 2 is in a refueling outage.
- A screenshot of DC1 ERCS SCREEN (ATTACHMENT 4) is provided.
- Instrument readings on DC1 ERCS SCREEN match corresponding in-plant indications.
- The following equipment is OUT OF SERVICE:
  - 21 Battery Charger.
  - 21 Battery.
  
  - Portable Battery Charger.
  
  - 42 Battery Charger.
  - 42 Battery.

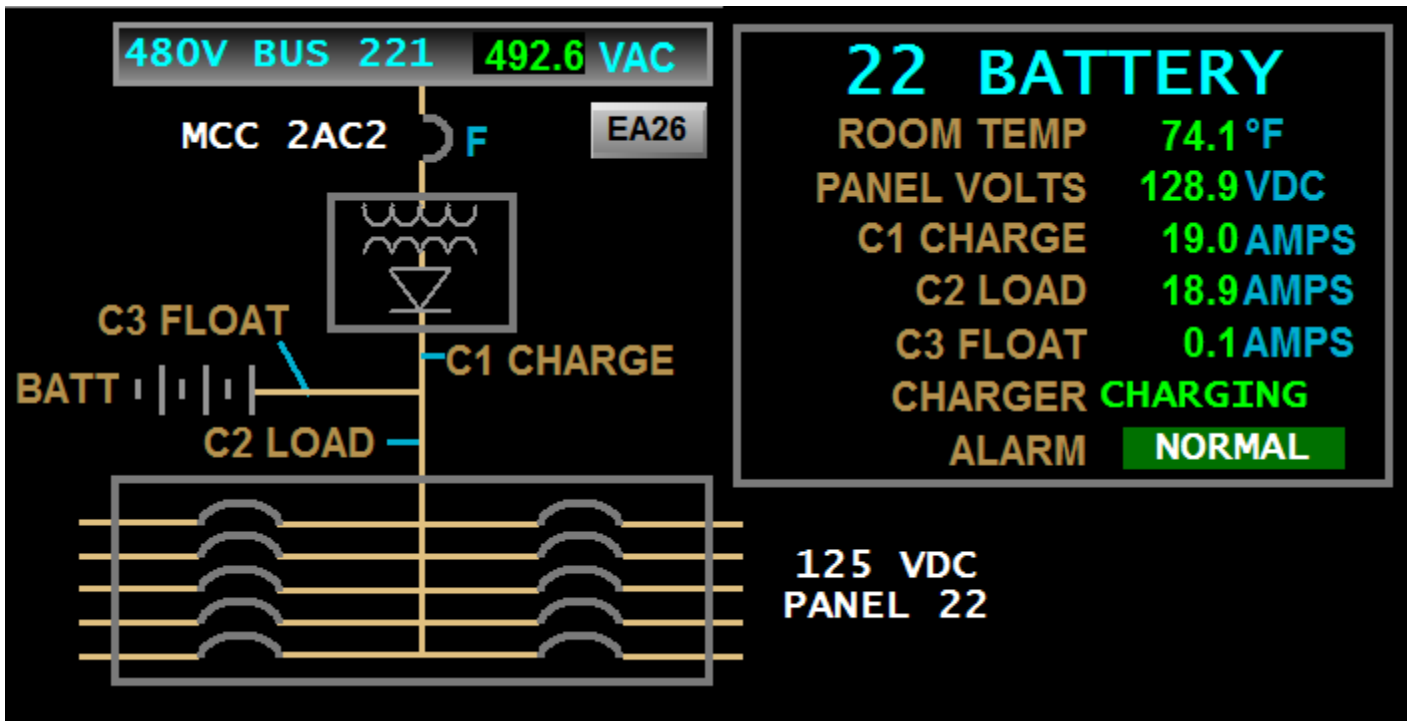
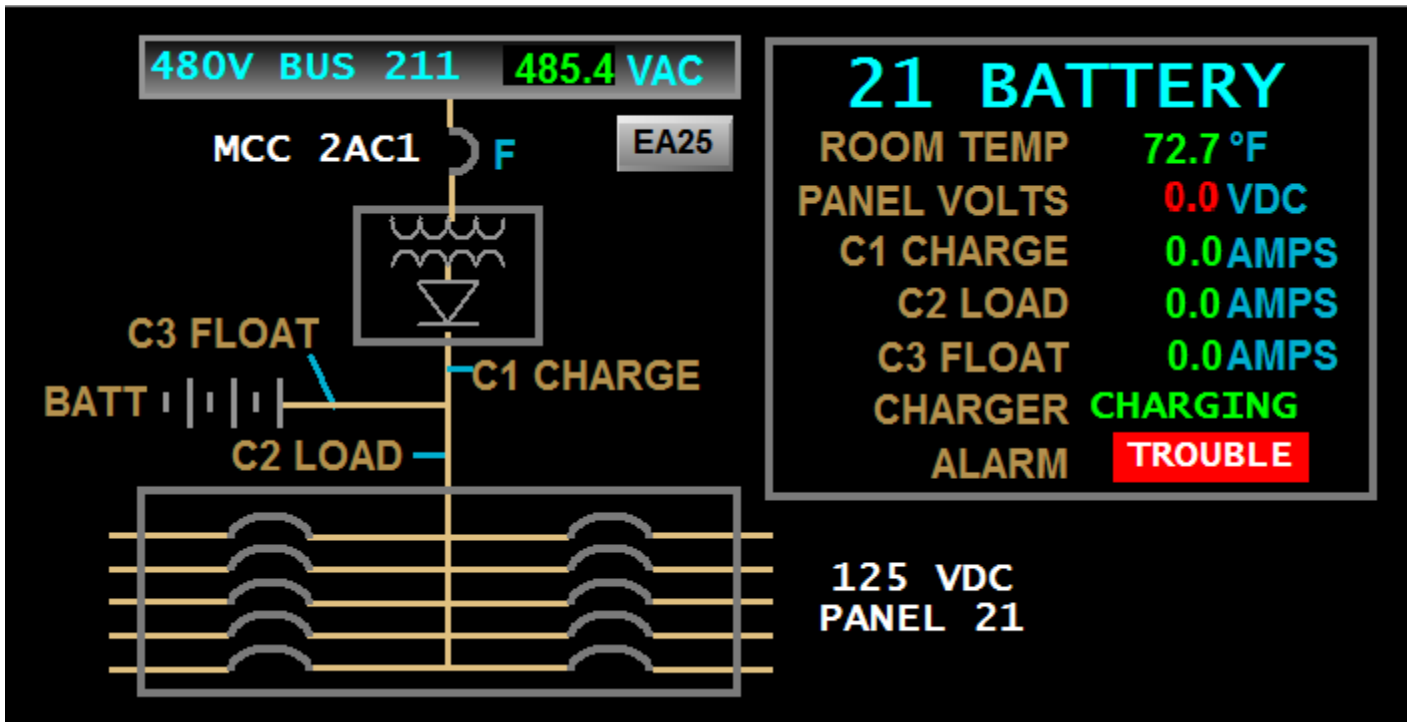
### INITIATING CUES:

- Perform a Shutdown Safety Assessment for DC Power Availability ONLY.
- Determine the current condition for DC Power Availability.



ATTACHMENT 3

DC1 ERCS SCREEN



	<b>JOB PERFORMANCE MEASURE (JPM)</b>
---	--------------------------------------

**SITE:** PRAIRIE ISLAND

**JPM TITLE:** ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL

**JPM NUMBER:** ADMIN-95                      **REV.** 0

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** SS 342 ATI 00 00 029 / ASSURE CONTAINMENT BOUNDARY CONTROL DURING COLD SHUTDOWN OR REFUELING

**K/A NUMBERS:** 2.3.13 / (3.4/3.8)

**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

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Fredrick Collins</b>	<b>5/4/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>5/5/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Shawn Sarrasin</b>	
	Training Supervisor	Date

**ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0**

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 MODE 5.
- 11 CFCU is isolated for maintenance by CLEARANCE ORDER # 54321.
- Applicable section of C19.9-1, INVENTORY AND REFUELING INTEGRITY CONTAINMENT BOUNDARY CHECKLIST – UNIT 1, for 11 CFCU isolation is available for review.
- MV-32377, 11 FC CLG WTR INLT ISOL MV, is required to be OPEN per Maint. Work Order # 1234567.
- MV-32377 is located in the Auxiliary Building, Elevation: 746', J.9 / 6.3.
- Per W/O # 1435123, the closure method is LOCAL, MANUAL closure of MOV.
- Penetration closure responsibility belongs to Non-Licensed Operator John Smith, pager number 7530.
- Closure can be attained in 5 MINUTES.
- Shutdown Safety Assessment Time to Boil is 13 MINUTES.
- No other containment penetrations are open.

**INITIATING CUES:**

- As the Unit 1 Shift Supervisor, complete steps 5.2.1 through 5.2.6 of C19.9, Containment Boundary Control during MODE 5, Cold Shutdown and MODE 6, Refueling, for INVENTORY INTEGRITY ONLY.

ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0

JPM PERFORMANCE INFORMATION

Required Materials: Consumable copies of the following:  
• PINGP 1173  
• C19.9

General  
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• C19.9, Containment Boundary Control during MODE 5, Cold Shutdown and  
MODE 6, Refueling  
• C19.9-1, Inventory and Refueling Integrity Containment Boundary Checklist  
– Unit 1  
• PINGP 1173, Substitute Penetration Control Method

Task  
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Examinee correctly fills out Table 1 of C19.9, Parts 1 & 2 of PINGP 1173, and signs for SS on PINGP 1173.

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.

## ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0

<b>Performance Step:</b>	<b>C19.9, step 5.2.1:</b>
<b>Critical <u>Y</u></b>	<b>In Table 1, enter the penetration number for the penetration to be controlled.</b>
<b>Standard:</b>	<b>Examinee enters penetration number 37B on Table 1 for 'PEN NO' per key ATTACHMENT 1.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>C19.9, step 5.2.2:</b>
<b>Critical <u>Y</u></b>	<b>In Table 1, enter a check mark for the penetration OPEN or alternate isolation.</b>
<b>Standard:</b>	<b>Examinee enters a checkmark (or equivalent) for 'OPEN PENT' per key ATTACHMENT 1.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>C19.9, step 5.2.3:</b>
<b>Critical <u>N</u></b>	<b>In Table 1, enter the document number that is holding the penetration OPEN or requiring the alternate isolation.</b>
<b>Standard:</b>	<b>Examinee enters "w/o 1234567" in 'REASON FOR CHANGE' per key ATTACHMENT 1.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

## ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0

<b>Performance Step:</b>	<b>C19.9, step 5.2.4.A:</b>
<b>Critical <u>N</u></b>	<b>If the penetration is OPEN, then complete the following steps:</b>
	<b>In PINGP 1173, complete Parts 1 &amp; 2.</b>
<b>Standard:</b>	<b>Examinee fills out PINGP 1173 Parts 1 and 2.</b>
<b>Evaluator Cue:</b>	<b>When examinee indicates need for PINGP 1173, then provide examinee with blank copy of PINGP 1173.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>PINGP 1173, page 1:</b>
<b>Critical <u>Y</u></b>	<b>PART 1</b>
<b>Standard:</b>	<b>Examinee fills out PINGP 1173 Part 1 for penetration number, description, and location per key ATTACHMENT 2.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

## ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0

<b>Performance Step:</b>	PINGP 1173, page 1:	
<b>Critical</b> <u>Y</u>	PART 2	
<b>Standard:</b>	Examinee fills out PINGP 1173 Part 2 for closure designee, pager number, procedure and description of closure method, and indicates C19.9 estimated closure time requirement is met per key ATTACHMENT 2.	
<b>Evaluator Note:</b>	<ul style="list-style-type: none"> <li>• If examinee has already determined and indicated closure designee and/or contact number per step 5.2.4.B, then this step is NOT critical.</li> <li>• If examinee has already determined and indicated penetration closure time requirements are met in C19.9, step 5.2.4.C.1, then this step is NOT critical.</li> </ul>	
<b>Performance:</b>	SATISFACTORY _____	UNSATISFACTORY _____
<b>Comments:</b>	_____	

<b>Performance Step:</b>	PINGP 1173, page 1:	
<b>Critical</b> <u>Y</u>	DATE / TIME / SIGNATURE	
<b>Standard:</b>	Examinee gives approval for substitute penetration control method.	
<b>Evaluator Note:</b>	Examinee may give approval for alternate opening control via this form OR on C19.9, Table 1 (per step 5.2.6). If examinee gives approval via Table 1, then this step is NOT critical.	
<b>Performance:</b>	SATISFACTORY _____	UNSATISFACTORY _____
<b>Comments:</b>	_____	

## ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0

<b>Performance Step:</b> Critical <u>N</u>	<b>PINGP 1173, page 2:</b>  Person designated for closure is available and knowledgeable about closure req., time, and the applicable procedure. Log on back.
<b>Standard:</b>	Examinee enters NAME, current DATE, and current TIME on page 2 of PINGP 1173.
<b>Performance:</b>	SATISFACTORY _____ UNSATISFACTORY _____
<b>Comments:</b>	_____

<b>Performance Step:</b> Critical <u>Y</u>	<b>C19.9, step 5.2.4.B:</b> If the penetration is OPEN, then complete the following steps:  In Table 1, enter CLOSURE responsibility and contact number.
<b>Standard:</b>	Examinee enters John Smith and/or pgr # 7530 (or similar description) in 'CLOSURE RESP. & CONTACT #' per key ATTACHMENT 1.
<b>Evaluator Note:</b>	If examinee has already determined and indicated closure designee and/or pager number on PINGP 1173, then this step is NOT critical.
<b>Performance:</b>	SATISFACTORY _____ UNSATISFACTORY _____
<b>Comments:</b>	_____

<b>Performance Step:</b> Critical <u>Y</u>	<b>C19.9, step 5.2.4.C.1:</b> If the penetration is OPEN, then complete the following steps:  Verify that all OPEN penetrations can be CLOSED within the following time limits for Inventory Integrity.
<b>Standard:</b>	Examinee verifies MV-32377 can be closed prior to Time to Boil.
<b>Evaluator Note:</b>	If examinee has already determined and indicated penetration closure time requirements are met on PINGP 1173, then this step is NOT critical.
<b>Performance:</b>	SATISFACTORY _____ UNSATISFACTORY _____
<b>Comments:</b>	_____



## ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0

<b>Performance Step:</b> Critical <u>N</u>	<b>C19.9, step 5.2.4.C.2:</b> If the penetration is OPEN, then complete the following steps:  Verify that all OPEN penetrations can be CLOSED within the following time limits for Refueling Integrity.
<b>Standard:</b>	Examinee determines this step is not applicable.
<b>Performance:</b>	SATISFACTORY _____ UNSATISFACTORY _____
<b>Comments:</b>	_____

<b>Performance Step:</b> Critical <u>N</u>	<b>C19.9, step 5.2.5:</b> If an alternate isolation is to be used, then complete the following steps:
<b>Standard:</b>	Examinee determines this step is not applicable.
<b>Performance:</b>	SATISFACTORY _____ UNSATISFACTORY _____
<b>Comments:</b>	_____

<b>Performance Step:</b> Critical <u>Y</u>	<b>C19.9, step 5.2.6:</b> In Table 1, log active time, date, and your initials.
<b>Standard:</b>	Examinee enters current time, date, and their initials in Table 1 per key ATTACHMENT 1.
<b>Evaluator Notes:</b>	<ul style="list-style-type: none"> <li>Examinee may give approval for alternate opening control via Table 1OR on PINGP 1173. If examinee gives approval via PINGP 1173, then this step is NOT critical.</li> <li>Only the examinee's initials, for the purpose of approving alternate penetration closure control, are critical in this step. If examinee does not enter time and date, then this is NOT a JPM failure.</li> </ul>
<b>Performance:</b>	SATISFACTORY _____ UNSATISFACTORY _____
<b>Comments:</b>	_____

**ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0**

**Terminating Cues:**

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



**ADMIN-95, ASSURE CONTAINMENT INVENTORY INTEGRITY BOUNDARY CONTROL, REV. 0**

**ATTACHMENT 2**

PINGP 1173, Rev. 2  
 Page 1 of 2 (FRONT)  
 Document Type: 4.907  
 Retention: 2 years

SUBSTITUTE PENETRATION CONTROL METHOD

**PART I**

PENETRATION NUMBER 37B UNIT 1  UNIT 2

PENETRATION DESCRIPTION MV-32377, 11 CFCU ISOL (or similar description)

PENETRATION LOCATION Aux Bldg, elev. 746', J.9 / 6.3 (or similar description)

<b>PART II</b> <u>OPENINGS</u>	<b>PART III</b> <u>ALTERNATE ISOLATION</u>
SUPERVISOR OR DESIGNEE FOR CLOSURE <u>JOHN SMITH</u> PAGER NUMBER <u>PGR # 7530</u> ESTIMATED TIME FOR CLOSURE: <u>5</u> MINUTES FOR EQUIPMENT HATCH ONLY (DURING REFUELING INTEGRITY) ESTIMATED TIME FOR COVERING: <u>N/A</u> MINUTES PROCEDURE and DESC. OF CLOSURE METHOD: <u>W/O 1234567</u> <u>LOCALMANUAL CLOSURE OF MOV</u> <u>SS VERIFICATION</u> Time to boiling from Shutdown Safety Assessment <u>13</u> min. Verify Estimated closure time(s) meets C19.9 requirements: <u>YES (or similar affirmative answer)</u> Person designated for closure is available and knowledgeable about closure req., time, and the applicable procedure. Log on back.	WORK ORDER NO. _____ ALTERNATE ISOLATION ID _____ ATTACH "Tag Section" TO THIS FORM  <u>SS VERIFICATION:</u> ISOLATION REVIEWED _____ ISOLATION INSTALLED AND IV ACCEPTABLE _____

DATE: CURRENT DATE TIME: CURRENT TIME SS: SIGNATURE

PINGP 1173, Rev. 2  
 Page 2 of 2 (BACK)

**CLOSURE RESPONSIBILITY SIGN-OFF SHEET**

NAME	DATE	TIME IN	TIME OUT	COMMENTS
JOHN SMITH	CURRENT DATE	CURRENT TIME		

## ATTACHMENT 5

# TURNOVER SHEET

### INITIAL CONDITIONS:

- Unit 1 is in MODE 5.
- 11 CFCU is isolated for maintenance by CLEARANCE ORDER # 54321.
- Applicable section of C19.9-1, INVENTORY AND REFUELING INTEGRITY CONTAINMENT BOUNDARY CHECKLIST – UNIT 1, for 11 CFCU isolation is available for review.
- MV-32377, 11 FC CLG WTR INLT ISOL MV, is required to be OPEN per Maint. Work Order # 1234567.
- MV-32377 is located in the Auxiliary Building, Elevation: 746', J.9 / 6.3.
- Per W/O # 1435123, the closure method is LOCAL, MANUAL closure of MOV.
- Penetration closure responsibility belongs to Non-Licensed Operator John Smith, pager number 7530.
- Closure can be attained in 5 MINUTES.
- Shutdown Safety Assessment Time to Boil is 13 MINUTES.
- No other containment penetrations are open.

### INITIATING CUES:

- As the Unit 1 Shift Supervisor, complete steps 5.2.1 through 5.2.6 of C19.9, Containment Boundary Control during MODE 5, Cold Shutdown and MODE 6, Refueling, for INVENTORY INTEGRITY ONLY.

## ATTACHMENT 6

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

INTEGRATED CHECKLIST

<b>C</b> CHECKLIST	<b>INVENTORY AND REFUELING INTEGRITY CONTAINMENT BOUNDARY CHECKLIST - UNIT 1</b>	NUMBER:	C19.9-1
		REV:	25
		Page 22 of 41	

## 11 CONTAINMENT FAN COIL

<del>NOTE:</del>	Select Option 1 or Option 2. N/A the unused option.
------------------	---

## OPTION 1 - 11 FAN COIL IN SERVICE

PEN #	COMPONENTS	DESCRIPTION	STATUS	INITIAL	IV
37B 38B	11 FCU	11 FAN COIL UNIT FACES AND PIPING INSIDE CONTAINMENT	INTACT	N/A	N/A

## OPTION 2 - 11 FAN COIL ISOLATED

PEN #	COMPONENTS	DESCRIPTION	STATUS	INITIAL	IV
37B	MV-32377	11 FC CLG WTR INLT ISOL MV ST <u>54321</u>	CLOSED	KA	SL
	CS-46487	11 FCU CLG WTR INLET ISOL MV-32377 ES ST <u>54321</u>	AUTO/ CLOSED	KA	SL
	MCC 1L1-D2 BKR 112E-3	11 FCU CLG WTR INLT ISOL MV-32377 ST <u>54321</u>	OFF	KA	SL
	CL-57-3	11 CONTAINMENT FAN COIL UNIT - RELIEF VLV	INTACT	KA	SL

PEN #	COMPONENTS	DESCRIPTION	STATUS	INITIAL	IV
38B	CL-22-1	11 CNTMT FCU OUTLET PRESSURIZATION ISOL ST <u>54321</u>	CLOSED	KA	SL
	MV-32133	11 FC CLG WTR RTRN ISOL MV B ST <u>54321</u>	CLOSED	KA	SL
	CS-46014	11 FCU CLG WTR RETURN ISOL MV-32133 ES ST <u>54321</u>	AUTO/ CLOSED	KA	SL
	MCC 1L1-D1 BKR 112E-2	11 FCU CLG WTR RTRN ISOL MV-32133 ST <u>54321</u>	OFF	KA	SL

	<b>JOB PERFORMANCE MEASURE (JPM)</b>
---	--------------------------------------

**SITE:** PRAIRIE ISLAND

**JPM TITLE:** REVIEW EMERGENCY NOTIFICATION REPORT

**JPM NUMBER:** ADMIN-94                      **REV.** 0

**RELATED PRA INFORMATION:** NONE

**TASK NUMBERS / TASK TITLE(S):** SS 344 023 03 03 000 / DIRECT EMERGENCY RESPONSE FOR THE EMERGENCY DIRECTOR

**K/A NUMBERS:** 2.4.40 (2.7/4.5)

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:

Simulator:  Other:

Lab:

Time for Completion: 10 Minutes                      Time Critical: YES

Alternate Path: NO

**TASK APPLICABILITY:** SRO:  RO:  NLO

Additional site-specific signatures may be added as desired.

<b>Developed by:</b>	<b>Shawn Sarrasin</b>	<b>3/13/2016</b>
	Developer	Date
<b>Validated by:</b>	<b>Justin Hasner</b>	<b>3/15/2016</b>
	Validator (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	<b>Mike Petersen</b>	<b>3/25/2016</b>
	Training Supervisor	Date

**ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0**

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:**

- Catastrophic damage occurred to the Unit 1 Main Turbine Generator.
- A turbine blade missile resulted in VISIBLE damage to the Control Room penetrations to the Turbine Building.
- NO radiological releases are in progress.
- The Shift Manager declared an ALERT for HA1.4 at 1005 AM on June 3, 2016.
- The Shift Manager has completed filling out the PINGP 577, Emergency Notification Report Form.
- The completed PINGP 577 (ATTACHMENT 4) is provided.
- A screenshot of U1 EPZ Map and Met Summary ERCS Screen (ATTACHMENT 5) is provided.
- It is currently 1010 AM on June 3, 2016.

**INITIATING CUES:**

- Review the filled out PINGP 577, Emergency Notification Report Form.
- Report any discrepancies to the evaluator.
- Determine if the Emergency Notification Report Form is ready to be given to the Emergency Communicator to be faxed out.
  
- **This JPM is TIME CRITICAL.**

**NOTE: RECORD THE START TIME ON THE NEXT PAGE AS THE TIME WHEN THE EXAMINEE TELLS YOU THEY ARE READY TO BEGIN. THE TIME CRITICAL PORTION OF THIS JPM BEGINS WHEN THE EXAMINEE REVIEWS THE TURNOVER INFORMATION AND TELLS THE EXAMINER THAT HE/SHE IS READY TO BEGIN. THE ELAPSED TIME MUST BE LESS THAN 10 MINUTES.**



ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0

JPM PERFORMANCE INFORMATION

Required Materials: Consumable copy of PINGP 577 (including instructions).

General PINGP 577, EMERGENCY NOTIFICATION REPORT FORM  
 F SWI O-200.4, EP CLASSIFICATION EXPECTATIONS  
 e  
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Task Examinee identifies BOTH of the errors and determines the PINGP 577 form is  
 S NOT ready to be given to the Emergency Communicator within 10 minutes of  
 t the start time.  
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 :

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.

## ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0

<b>Performance Step:</b>	<b>PINGP 577 Block 1</b>
<b>Critical</b>	<b><u>N</u></b>
	1. <b>REASON FOR CALL</b> <input checked="" type="radio"/> (A) Initial Report [B] Emergency Class Change [C] PAR Change [D] Release Status Change Only
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 1.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>PINGP 577 Block 2</b>
<b>Critical</b>	<b><u>N</u></b>
	2. <b>STATUS</b>
	<input type="radio"/> (A) ACTUAL EVENT
	<input checked="" type="radio"/> (B) DRILL/EXERCISE
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 2.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>PINGP 577 Block 3</b>
<b>Critical</b>	<b><u>N</u></b>
	3. <b>AFFECTED STATION</b>
	<input checked="" type="radio"/> (C) PRAIRIE ISLAND NUCLEAR GENERATING PLANT
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 3.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

## ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0

<b>Performance Step:</b>	<b>PINGP 577 Block 4</b>
<b>Critical</b> <u>N</u>	<b>4. <u>ONSITE CLASSIFICATION</u></b>
	<input type="checkbox"/> [A] UNUSUAL EVENT <input checked="" type="checkbox"/> [B] ALERT <input type="checkbox"/> [C] SITE AREA EMERGENCY <input type="checkbox"/> [D] GENERAL EMERGENCY <input type="checkbox"/> [E] RECOVERY <input type="checkbox"/> [F] TERMINATED
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 4.</b>
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>PINGP 577 Block 5</b>
<b>Critical</b> <u>N</u>	<b>5. <u>TIME &amp; DATE OF CLASSIFICATION / PAR CHANGE / TERMINATION</u></b>
	<input checked="" type="checkbox"/> [A] CLASSIFICATION    TIME <u>1005</u> DATE <u>6/3/2016</u> EAL # <u>HA1.4</u> <input type="checkbox"/> [B] PAR CHANGE        TIME _____    DATE _____ <input type="checkbox"/> [C] TERMINATION        TIME _____    DATE _____ <input type="checkbox"/> [D] RELEASE STATUS CHANGE ONLY
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 5.</b>
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	_____

<b>Performance Step:</b>	<b>PINGP 577 Block 6</b>
<b>Critical</b> <u>Y</u>	<b>6. <u>EVENT RELEASE STATUS</u></b>
	<input type="checkbox"/> [A] NONE <input type="checkbox"/> [B] OCCURRING <input checked="" type="checkbox"/> [C] TERMINATED
<b>Standard:</b>	<b>Examinee determines Block 6 is incorrectly annotated with release status as "TERMINATED" instead of "NONE".</b>
<b>Evaluator Cue:</b>	<b>If the examinee returns the form to the evaluator prior to identifying BOTH errors, instruct the examinee to continue reviewing the document for additional errors.</b>
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	_____

**ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0**

**Performance Step:** PINGP 577 Block 7  
**Critical N** **7. TYPE OF RELEASE**  
 (A) NOT APPLICABLE       (B) AIRBORNE  
     (C) LIQUID

**Standard:**                 **Examinee determines there are NO discrepancies with PINGP 577 Block 7.**

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

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

**Performance Step:** PINGP 577 Block 8  
**Critical N** **8. WIND DIRECTION** (Use current 15 minute average and Table 1 to choose currently affected downwind Sectors, if < 5 mph all sectors are affected.)  
 FROM 141.3 DEGREES  
 DOWNWIND SECTORS A B C D E F G H J K L M N P Q R  
 (Circle currently affected sectors.)

**Standard:**                 **Examinee determines there are NO discrepancies with PINGP 577 Block 8.**

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

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

**Performance Step:** PINGP 577 Block 9  
**Critical N** **9. WIND SPEED & STABILITY CLASS** (Use current 15 minute average.)  
 MILES/HR.: 11.3  
 STABILITY CLASS: A B C D E F G  
    unstable <= => stable

**Standard:**                 **Examinee determines there are NO discrepancies with PINGP 577 Block 9.**

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

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

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<b>Performance Step:</b> <b>Critical <u>Y</u></b>	<b>PINGP 577 Block 10</b> 10. <b>PRECAUTIONARY MEASURES and PROTECTIVE ACTION RECOMMENDATIONS</b> (Use Table 1 to choose affected downwind Sectors and geopolitical Subareas.) [A] NONE [B] EVACUATE (or SHELTER) _____ SECTORS OUT TO <u>2</u> MILES EVACUATE (or SHELTER) _____ SECTORS FROM <u>2</u> MILES TO <u>5</u> MILES EVACUATE (or SHELTER) _____ SECTORS FROM <u>5</u> MILESTO <u>10</u> MILES Affected SUBAREAS: (circle all that apply) 2 5N 5E 5S 5W 10NW 10N 10NE 10E 10SE 10SW 10W AND PUBLIC IN THOSE AFFECTED SUBAREAS TAKE KI IF AVAILABLE; AND REMAINDER OF PLUME EPZ TO MONITOR RADIO/TV BROADCASTS FOR FURTHER INFORMATION. (Clarifying notes, if needed) _____ [C] PRECAUTIONARY MEASURE FOR CASINO SHUTDOWN AND DISMISSAL OF STAFF AND PATRONS. <input checked="" type="radio"/> [D] PRECAUTIONARY MEASURE TO ADVISE CASINO AND RESIDENTS WITHIN A 2 MILE RADIUS TO STAY INDOORS AND CONTINUE TO MONITOR RADIO/TV BROADCASTS FOR FURTHER INFORMATION. [E] OTHER: _____ _____
<b>Standard:</b>	<b>Examinee determines Block 10 is incorrectly annotated with “D” circled for precautionary measure instead of “A” being circled for no precautionary measures or protective action recommendations.</b>
<b>Evaluator Cue:</b>	<b>If the examinee returns the form to the evaluator prior to identifying BOTH errors, instruct the examinee to continue reviewing the document for additional errors.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

<b>Performance Step:</b> <b>Critical <u>N</u></b>	<b>PINGP 577 Block 11</b> 11. <b>ADDITIONAL INFORMATION</b> (Apply the EAL Gum Label or write the event descriptions based on the EAL. If PAR Change, write "None", "PAR Change" or other PAR information. If Release Status Change Only, specify time of change. If terminating, specify reason.)  <b>HA1.4</b> Turbine failure-generated missiles result in any VISIBLE DAMAGE to or penetration of any of the following plant areas (Table H-1).
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 11.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

**ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0**

<b>Performance Step:</b>	<b>PINGP 577 Block 12</b>
<b>Critical <u>N</u></b>	<u>APPROVAL SIGNATURE</u> <i>John Smith</i> EMERGENCY DIRECTOR/EMERGENCY MANAGER
<b>Standard:</b>	<b>Examinee determines there are NO discrepancies with PINGP 577 Block 12.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

ADMIN-94, REVIEW EMERGENCY NOTIFICATION REPORT, REV. 0

<b>Performance Step:</b>	<b>SWI O-200.4 Step 6.9</b>
<b>Critical <u>Y</u></b>	<b>When the SM has completed the PINGP 577, including signing the PINGP 577, then they will relieve the STA/3<sup>rd</sup> SRO from oversight. The STA/3<sup>rd</sup> SRO will then perform a peer check of the PINGP 577, utilizing the MET Data printed out by the SEC.</b>
<b>Standard:</b>	<b>Examinee determines the PINGP 577 form is NOT ready to be given to the Emergency Communicator within 10 minutes of the start time.</b>
<b>Evaluator Cue:</b>	<b>If the examinee returns the form to the evaluator prior to identifying BOTH errors, instruct the examinee to continue reviewing the document for additional errors.</b>
<b>Performance:</b>	<b>SATISFACTORY _____ UNSATISFACTORY _____</b>
<b>Comments:</b>	_____

**Terminating Cues:** When the examinee has identified at BOTH of the errors and determined the PINGP 577 form is NOT ready to be given to the Emergency Communicator within 10 minutes of the start time, then this JPM is complete.

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

### ATTACHMENT 3

## TURNOVER SHEET

#### INITIAL CONDITIONS:

- Catastrophic damage occurred to the Unit 1 Main Turbine Generator.
- A turbine blade missile resulted in VISIBLE damage to the Control Room penetrations to the Turbine Building.
- NO radiological releases are in progress.
- The Shift Manager declared an ALERT for HA1.4 at 1005 AM on June 3, 2016.
- The Shift Manager has completed filling out the PINGP 577, Emergency Notification Report Form.
- The completed PINGP 577 (ATTACHMENT 4) is provided.
- A screenshot of U1 EPZ Map and Met Summary ERCS Screen (ATTACHMENT 5) is provided.
- It is currently 1010 AM on June 3, 2016.

#### INITIATING CUES:

- Review the filled out PINGP 577, Emergency Notification Report Form.
- Report any discrepancies to the evaluator.
- Determine if the Emergency Notification Report Form is ready to be given to the Emergency Communicator to be faxed out.
- **This JPM is TIME CRITICAL.**



**ATTACHMENT 4**

PINGP 577, Rev 57  
 Page 1 of 9  
 Doc Type/Sub Type: N/A  
 Retention: N/A

**EMERGENCY NOTIFICATION REPORT FORM**

<b>1. REASON FOR CALL</b> <input checked="" type="radio"/> [A] Initial Report [B] Emergency Class Change [C] PAR Change [D] Release Status Change Only	
<b>2. STATUS</b> <input type="radio"/> [A] ACTUAL EVENT <input checked="" type="radio"/> [B] DRILL/EXERCISE	<b>3. AFFECTED STATION</b> <input checked="" type="radio"/> [C] PRAIRIE ISLAND NUCLEAR GENERATING PLANT
<b>4. ONSITE CLASSIFICATION</b> <input type="radio"/> [A] UNUSUAL EVENT <input checked="" type="radio"/> [B] ALERT <input type="radio"/> [C] SITE AREA EMERGENCY <input type="radio"/> [D] GENERAL EMERGENCY <input type="radio"/> [E] RECOVERY <input type="radio"/> [F] TERMINATED	<b>5. TIME &amp; DATE OF CLASSIFICATION / PAR CHANGE / TERMINATION</b> <input checked="" type="radio"/> [A] CLASSIFICATION TIME <u>1005</u> DATE <u>6/3/2016</u> EAL # <u>HA1.4</u> <input type="radio"/> [B] PAR CHANGE TIME _____ DATE _____ <input type="radio"/> [C] TERMINATION TIME _____ DATE _____ <input type="radio"/> [D] RELEASE STATUS CHANGE ONLY
<b>6. EVENT RELEASE STATUS</b> <input type="radio"/> [A] NONE <input type="radio"/> [B] OCCURRING <input checked="" type="radio"/> [C] TERMINATED	<b>7. TYPE OF RELEASE</b> <input checked="" type="radio"/> [A] NOT APPLICABLE <input type="radio"/> [B] AIRBORNE <input type="radio"/> [C] LIQUID
<b>8. WIND DIRECTION</b> (Use current 15 minute average and Table 1 to choose currently affected downwind Sectors, if < 5 mph all sectors are affected.) FROM <u>141.3</u> DEGREES DOWNWIND SECTORS: <input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/> G <input type="radio"/> H <input type="radio"/> J <input type="radio"/> K <input type="radio"/> L <input type="radio"/> M <input checked="" type="radio"/> N <input type="radio"/> P <input type="radio"/> Q <input type="radio"/> R (Circle currently affected sectors.)	<b>9. WIND SPEED &amp; STABILITY CLASS</b> (Use current 15 minute average.) MILES/HR.: <u>11.3</u> STABILITY CLASS: A B C <input checked="" type="radio"/> D E F G unstable <= => stable
<b>10. PRECAUTIONARY MEASURES and PROTECTIVE ACTION RECOMMENDATIONS</b> (Use Table 1 to choose affected downwind Sectors and geopolitical Subareas.) <input type="radio"/> [A] NONE <input type="radio"/> [B] EVACUATE (or SHELTER) _____ SECTORS OUT TO <u>2</u> MILES EVACUATE (or SHELTER) _____ SECTORS FROM <u>2</u> MILES TO <u>5</u> MILES EVACUATE (or SHELTER) _____ SECTORS FROM <u>5</u> MILE TO <u>10</u> MILES Affected SUBAREAS: (circle all that apply) <u>2 5N 5E 5S 5W 10NW 10N 10NE 10E 10SE 10SW 10W</u> AND PUBLIC IN THOSE AFFECTED SUBAREAS TAKE KI IF AVAILABLE; AND REMAINDER OF PLUME EPZ TO MONITOR RADIO/TV BROADCASTS FOR FURTHER INFORMATION. (Clarifying notes, if needed) _____ <input type="radio"/> [C] PRECAUTIONARY MEASURE FOR CASINO SHUTDOWN AND DISMISSAL OF STAFF AND PATRONS. <input checked="" type="radio"/> [D] PRECAUTIONARY MEASURE TO ADVISE CASINO AND RESIDENTS WITHIN A 2 MILE RADIUS TO STAY INDOORS AND CONTINUE TO MONITOR RADIO/TV BROADCASTS FOR FURTHER INFORMATION. <input type="radio"/> [E] OTHER: _____	
<b>11. ADDITIONAL INFORMATION</b> (Apply the EAL Gum Label or write the event descriptions based on the EAL. If PAR Change, write "None", "PAR Change" or other PAR information. If Release Status Change Only, specify time of change. If terminating, specify reason.)  <b>HA1.4</b> Turbine failure-generated missiles result in any VISIBLE DAMAGE to or penetration of any of the following plant areas (Table H-1).	<b>APPROVAL SIGNATURE</b> <u>John Smith</u> EMERGENCY DIRECTOR/EMERGENCY MANAGER <b>12. EMERGENCY COMMUNICATOR</b> (Print Name) _____ (Circle or indicate the appropriate callback number.) <ul style="list-style-type: none"> <li>• TSC Callback (651) 388-1121 Ext. 4369</li> <li>• Other Callback _____</li> <li>• Security Event SEC _____</li> <li>• EOF Callback (651) 388-1121 Ext. 5241</li> <li>• Backup EOF Callback (612) 330-5753</li> </ul>

*\*Italic words provide guidance for the person completing this form. See Directions for more guidance on completing form*

ATTACHMENT 5

