Facility: Oyster Creek Task No.: 2000301401

Task Title: Complete the Technical Specifications Log Sheet

Job Performance Measure No.: NRC JPM ADMIN RO1 (RO)

K/A Reference: Generic 2.1.18 (RO 2.9)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom _____ Simulator X Plant _____

Read to the Examinee:

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

1. The plant is rated power.
2. You are the on-shift Reactor Operator on the 4-12 shift.
3. The current date/time is April 20, 2008 at 1700.

Task Standard: Page E1-1 of the Technical Specifications Log Sheet is correctly completed and the discrepancies are noted.

Required Materials: A completed page E1-1 (for the 11-7 and 7-3 shifts) of Procedure 681.4.004, Technical Specification Log Sheet.

General References:

1. Procedure 681.4.004, Technical Specifications Log Sheet, revision 12.

Initiating Cue: Complete page E1-1 only of the Technical Specification Log Sheet, Procedure 681.4.004, Technical Specification Log Sheet. Notify the Unit Supervisor when complete and of any discrepancies or actions that may be required.

Time Critical Task: No.

Validation Time: 10 Minutes.

Denote critical steps with a check mark ✓

Note 1: The values may be recorded in any order.

Note 2: The discrepancies noted while completing the log may be reported at the time of discovery or some other time during the JPM.

Note 3: Hand the Candidate the partially completed procedure.

_____	Performance Step: 1
	Procedure Step: Provides repeat back of initiating cue.
Standard:	Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back.*
	JPM Start Time: _____
Comment:	_____
	_____
	_____
SAT/UNSAT	

_____	Performance Step: 2
	Procedure Step: Records position of AOG valve V-7-31.
Standard:	Records position of valve AOG V-7-31 as closed on Panel 10XF
Comment:	_____
	_____
	_____
SAT/UNSAT	

Performance Step: 3

Procedure Step: Records Torus water level from the following instruments:

- LT-37
- LT-38
- Narrow Range on Panel 9XR

Standard: Records Torus water level from the following instruments as on the KEY:

- LT-37 (Indicator on Panel 1F/2F)
- LT-38 (Indicator on Panel 1F/2F)
- Narrow Range Recorder on Panel 9XR

Comment:

SAT/UNSAT

Performance Step: 4

Procedure Step: Records Torus water temperature from the following indicators:

- DIV I
- DIV II

Standard: Records Torus water temperature from the following indicators as on the KEY: (Indicator on Panel 1F/2F)

- DIV I
- DIV II

Comment:

SAT/UNSAT

Performance Step: 5

Procedure Step: Records Isolation Condenser area temperatures from the following instruments:

- IB06A
- IB06B
- IB06C
- IB06D

Standard: Records Isolation Condenser area temperatures from the following instruments as on the KEY: (Panel 10R)

- IB06A
- IB06B
- IB06C
- IB06D

Comment:

SAT/UNSAT

Performance Step: 6

Procedure Step: Records Isolation Condenser levels from the following instruments:

- IG06A
- IG06B

Standard: Records Isolation Condenser levels from the following instruments as on the KEY: (Indicator on Panel 1F/2F)

- IG06A
- IG06B

Comment:

SAT/UNSAT

✓ Performance Step: 7

Procedure Step: Record Nitrogen Makeup and calculate nitrogen use for the shift and for the day.

Standard: Records Nitrogen Makeup and calculates nitrogen use for the shift, as on the KEY.

Calculates and records nitrogen use for the day by subtracting the previous day 3-11 integrator reading from the current 3-11 integrator reading, as on the KEY.

Recognizes/reports that the daily nitrogen use is > 250 units.

Comment:

SAT/UNSAT

Performance Step: 8

Procedure Step: Record RB 119' radiation levels from:

- Radiation monitor B-9
- Radiation monitor C-9

Standard: Records RB 119' radiation levels from:

- Radiation monitor B-9
- Radiation monitor C-9 as on the key.

Comment:

SAT/UNSAT

Performance Step: 9

Procedure Step: Record RB Vent Radiation Monitor levels:

- Radiation monitor Channel 1
- Radiation monitor Channel 2

Standard: Procedure Step: Records RB Vent Radiation Monitor levels:

- Radiation monitor Channel 1
- Radiation monitor Channel 2, as on the KEY.

Comment: _____

SAT/UNSAT

Performance Step: 10

Procedure Step: Record the Shutdown Cooling Room lowest temperature.

Standard: Records the Shutdown Cooling Room lowest temperature, as on the KEY. (Panel 10R)

Comment: _____

SAT/UNSAT

	Performance Step: 11
	Procedure Step: Calculate Fuel Pool Slab ΔT
Standard:	Calculates Fuel Pool Slab ΔT by subtracting the Shutdown Cooling Room temperature from the Fuel Pool temperature, as on the key.
Comment:	
SAT/UNSAT	

✓	Performance Step: 12
	Procedure Step: Record the previous day lowest Torus water level, today's highest Torus water level, and the differential.
Standard:	Records the previous day lowest Torus water level, today's highest Torus water level, and the differential, as on the KEY. Reports the differential level is greater than allowed (actual is > 250 Units allowed).
Cue:	The previous day's lowest Torus water level from Panel 9XR is 150.0 °F.
Comment:	
SAT/UNSAT	

Terminating Cue: Page E1-1 of the Technical Specifications Log Sheet is correctly completed and the discrepancies are noted.

JPM Stop Time: _____

Validation of Completion

JPM Number: NRC JPM ADMIN RO1

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____

Simulator Setup

1. Reset to full power IC-65
2. Insert the following:
   a. SWI-RMS050A to 1.1 (RB 119 B9 rad)
   b. SWI-RMS063A to 1.1 (RN 119 rad C9)
   c. SWI-RMS066A to 1.0 (RB vent rad mon)
   d. SWI-RMS067A to 1.0 (RB vent rad mon)
3. Have ready a 681.4.004 Attachment 1, completed for the 11-7 and 7-3 shifts (see Completed 681.4.004)

STUDENT HANDOUT

Initial Conditions:

1. The plant is rated power.
2. You are the on-shift Reactor Operator on the 4-12 shift.
3. The current date/time is April 20, 2008 at 1700.

Task Cue:

Complete page E1-1 only of the Technical Specification Log Sheet, Procedure 681.4.004, Technical Specification Log Sheet. Notify the Unit Supervisor when complete and of any discrepancies or actions that may be required.

Facility: Oyster Creek Task No.: 2000101404

Task Title: Perform a Manual Core Heat Balance Calculation

Job Performance Measure No.: NRC JPM ADMIN RO2 (RO)

K/A Reference: Generic 2.1.20 (RO 4.3)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom _____ Simulator X Plant _____

Read to the Examinee:

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

1. The reactor has been steady at full power for several hours.
2. The PPC is currently unavailable but is expected back shortly.
3. All prerequisites to perform this procedure have been met.

Task Standard: A manual core heat balance has been completed IAW Procedure 1001.6, Core Heat Balance and Feedwater Flow Calculation – Power Range.

Required Materials: Calculator.

General References:

1. Procedure 1001.6, Core Heat Balance and Feedwater Flow Calculation – Power Range, revision 27.

Initiating Cue: Perform a manual core heat balance IAW Procedure 1001.6, Core Heat Balance and Feedwater Flow Calculation – Power Range. Compare this calculation to the reactor power displayed on the PPC when the PPC is returned to service.

Time Critical Task: No.

Validation Time: 19 minutes

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back.*

Comment: _____

SAT/UNSAT

Performance Step: 2

Procedure Step: Reviews Precautions and Limitations.

Standard: Reviews Precautions and Limitations.

Comment: _____

SAT/UNSAT

Note: The expected values are provided in the KEY.

Performance Information

✓ Performance Step: 3

Procedure Step: 5.1.1.1

Records local total Feedwater ΔP in inches of water from the venture transmitter (FT-422-1) in the Feedwater Pump Room.

Standard: Directs EO to read local total Feedwater ΔP in inches of water from the venture transmitter (FT-422-1) in the Feedwater Pump Room, and records on the Feedwater Flow Calculation Worksheet, Line A.

Cue: As the EO, report reading on the venture transmitter (FT-422-1) in the Feedwater Pump Room as 492.5 inches.

Comment:

SAT/UNSAT

✓ Performance Step: 4

Procedure Step: 5.1.1.2

Record Feedwater temperature (ID 101) from Panel 5F/6F recorder to the nearest whole degree.

Standard: Reads Feedwater temperature (ID 101) from Panel 5F/6F recorder to the nearest whole degree and records on the Feedwater Flow Calculation Worksheet, Line B.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 5

Procedure Step: 5.1.1.3

Obtain the specific volume (v) at the Feedwater at 110 psia and the temperature recorded in Step 5.1.1.2 from Attachment 1001.6-3 or ASME approved steam tables.

Standard: Obtain the specific volume (v) ~~at~~ OF the Feedwater at 110 psia and the temperature recorded in Step 5.1.1.2 from Attachment 1001.6-3 or ASME approved steam tables, and records on the Feedwater Flow Calculation Worksheet, Line C.

Comment:

SAT/UNSAT

✓ Performance Step: 6

Procedure Step: 5.1.1.4

Calculates total Feedwater flow using the following equation:

$F = 0.0429387 \text{ SQRT } (\Delta P/v)$

Standard: Calculates total Feedwater flow using the following equation:

$F = 0.0429387 \text{ SQRT } (\Delta P/v)$ and records on the Feedwater Flow Calculation Worksheet, Line D.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 7

Procedure Step: 5.2.1

Record reactor pressure to the nearest whole pound (Narrow range recorder – Panel 5F/6F)

Standard: Reads reactor pressure to the nearest whole pound (Narrow range recorder – Panel 5F/6F) and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line A.

Comment:

SAT/UNSAT

✓ Performance Step: 8

Procedure Step: 5.2.2

Record Feedwater temperature to the nearest whole degree (Recorder Panel 5F/6F)

Standard: Reads Feedwater temperature to the nearest whole degree (Recorder Panel 5F/6F) or transfers the Feedwater temperature obtained earlier, and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line B.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 9

Procedure Step: 5.2.3

Record recirculation flow to the nearest thousand gpm (Recorder Panel 3F).

Standard: Reads recirculation flow to the nearest thousand gpm (Recorder Panel 3F), and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line C.

Comment:

SAT/UNSAT

✓ Performance Step: 10

Procedure Step: 5.2.4

Calculate the reactor absolute pressure by adding the value of step 5.2.1 + 14.7 pounds pressure.

Standard: Calculate the reactor absolute pressure by adding the value of step 5.2.1 + 14.7 pounds pressure, and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line D.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 11

Procedure Step: 5.2.5

Record Main Steam enthalpy from Attachment 1001.6-5 or an ASME approved steam table, at saturated conditions using calculated absolute pressure.

Standard: Reads Main Steam enthalpy from Attachment 1001.6-5 or an ASME approved steam table, at saturated conditions using calculated absolute pressure in step 5.2.4 and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line E.

Comment:

SAT/UNSAT

✓ Performance Step: 12

Procedure Step: 5.2.6

Record the Feedwater enthalpy from Attachment 1001.6-6 or ASME approved steam table for compressed water at 1100 psia using Feedwater temperature.

Standard: Reads the Feedwater enthalpy from Attachment 1001.6-6 or ASME approved steam table for compressed water at 1100 psia using Feedwater temperature in step 5.2.2, and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line F.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 13

Procedure Step: 5.2.7

Calculate the difference of the Main Steam and Feedwater enthalpies.

Standard: Calculates the difference of the Main Steam and Feedwater enthalpies by subtracting Feedwater enthalpy in step 5.2.6 from Main Steam enthalpy in step 5.2.5, and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line G.

Comment:

SAT/UNSAT

✓ Performance Step: 14

Procedure Step: 5.2.8

Record total Feedwater flow FLO (tot) for differential pressure 3 loop and/or local venture (single element) methods from the Feedwater Flow Calculation Worksheet.

Standard: Copies total Feedwater flow FLO (tot) for differential pressure 3 loop and/or local venture (single element) methods from the Feedwater Flow Calculation Worksheet, Line D, onto the Heat Balance Data, Calculation, and Analysis Worksheet, Line H.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 15

Procedure Step: 5.2.9

Calculate the product of the Feedwater flow and the enthalpy difference to obtain MBTU/hr.

Standard: Calculates the product of the Feedwater flow in step 5.2.8 and the enthalpy difference in step 5.2.7 to obtain MBTU/hr, and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line I.

Comment:

SAT/UNSAT

✓ Performance Step: 16

Procedure Step: 5.2.10

Convert MBTU/hr to Megawatts (MBTU/hr x 0.293).

Standard: Converts MBTU/hr to Megawatts by multiplying MBTU/hr in step 5.2.9 by 0.293, records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line J.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 17

Procedure Step: 5.2.11

Record RWCU flow to the nearest gpm (recorder Panel 3F) on Line K of Attachment 1001.6-2.

Standard: Reads RWCU flow to the nearest gpm (recorder Panel 3F) and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line K.

Comment:

SAT/UNSAT

✓ Performance Step: 18

Procedure Step: 5.2.12

Calculate the CRD, recirc. pump power, RWCU and ambient losses adjustment (Fixed Losses), per the following equation. Enter the appropriate value for Fixed Losses on Line L of Attachment 1001.6-2.

Fixed Losses = [(K) x 0.0136] + 9.0

Standard: Calculates the CRD, recirc. pump power, RWCU and ambient losses adjustment (Fixed Losses), per the following equation, and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line L.

Fixed Losses = [(Line K) x 0.0136] + 9.0

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 19

Procedure Step: 5.2.13

Add the Fixed Losses from Line L to the Megawatts from Line J and record the Calculated CTP on Line N.

Standard: Adds the Fixed Losses from step 5.2.12 to the Megawatts from step 5.2.10 and record the Calculated CTP on Line N on the Heat Balance Data, Calculation, and Analysis Worksheet.

Comment:

SAT/UNSAT

✓ Performance Step: 20

Procedure Step: 5.2.14

Record PPC Core Thermal Power (CTP) in Line M.

Cue: The PPC has been returned to service long enough to establish the 15 minute average Core Thermal Power (CTP). The current CTP value is 1927 MWth.

Standard: Records the PPC 15 minute average Core Thermal Power (CTP) on the Heat Balance Data, Calculation, and Analysis Worksheet, Line M.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 21

Procedure Step: 5.2.15

Subtract the Calculated CTP from the PPC Core Thermal Power [Line M – Line N]. If this value is positive, the comparison is considered conservative. If negative, the comparison is non-conservative. Place an X in the appropriate box.

Standard: Subtracts Calculated Core Power in step 5.2.13 from the PPC Core Thermal Power in step 5.2.14 and records on the Heat Balance Data, Calculation, and Analysis Worksheet, Line O.

Checks the negative value → Non-Conservative box on the Heat Balance Data, Calculation, and Analysis Worksheet.

Comment:

SAT/UNSAT

Performance Step: 22

Procedure Step: 5.3

Verify that the RWCU system differential temperature is < 80 deg F.

Cue: Another Operator will verify the RWCU system differential temperature is < 80 deg F. This complete this JPM.

Standard:

Comment:

SAT/UNSAT

Performance Information

Terminating Cue: A manual core heat balance has been completed IAW Procedure 1001.6, Core Heat Balance and Feedwater Flow Calculation – Power Range.

JPM Stop Time: _____

Validation of Completion

JPM Number: NRC JPM ADMIN RO2

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____ _____

Simulator Setup

1. Reset to full power IC-65.
2. Insert the following:
    a. SWI-NSS021A to 1020.0 psig (Reactor press recorder 5F/6F)
    b. SWI-CFW002A to 311 °F (FW temperature recorder 5F/6F)
    c. SWI-NIS001B to 150090 lb/hr (recirculation flow recorder 3F)
    d. SWI-RCU002A to 400.1 gpm (RWCU flow recorder 3F)
3. Have a blank copy of procedure 1001.6 ready.
4. Provide the Candidate a calculator.

STUDENT HANDOUT

Initial Conditions:

1. The reactor has been steady at full power for several hours.
2. The PPC is currently unavailable but is expected back shortly.
3. All prerequisites to perform this procedure have been met.

Task Cue:

Perform a manual core heat balance IAW Procedure 1001.6, Core Heat Balance and Feedwater Flow Calculation – Power Range. Compare this calculation to the reactor power displayed on the PPC when the PPC is returned to service.

Facility: Oyster Creek Task No.: 2150101023

Task Title: Perform APRM Drawer Count

Job Performance Measure No.: NRC JPM ADMIN RO3 (RO)

K/A Reference: Generic 2.2.12 (RO 3.0)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom _____ Simulator X Plant _____

Read to the Examinee:

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

1. The plant is at rated power.

Task Standard: Section 2 of Attachment 202.1-1, APRM Status Check, for APRM 8 is complete and LPRM 44-25D does not indicate bypassed.

Required Materials: A completed attachment 403-2, with no APRMs bypassed, and LPRMs 36-17B, 28-09D and 44-25D shown as bypassed.

General References:

1. Procedure 202.1, Power Operation, revision 109.
2. Procedure 403, LPRM-APRM System Operations, revision 13.

Initiating Cue: Perform Section 2 of Attachment 202.1-1, APRM Status Check, for APRM 8. Notify the Unit Supervisor of your results.

Time Critical Task: No.

Validation Time: 13 minutes

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back.*

Comment:

SAT/UNSAT

Performance Step: 2

Procedure Step: 1 of Attachment 202.1-1.

Place an X in the box next to the LPRMs that are Bypassed.

Standard: Places an X in the box next to LPRMs 36-17B, 28-09D, and 44-25D in the APRM 8 column.

Comment:

SAT/UNSAT

Performance Information

Performance Step: 3

Procedure Step: 2 of Attachment 202.1-1.

Place the number of un-bypassed inputs in the last row.

Standard: Places the number of un-bypassed inputs (5) in the last row for APRM 8, marked UN-BYPASSED.

Comment:

SAT/UNSAT

Performance Step: 4

Procedure Step: 5.3.3.8.1 of Procedure 403.

Obtains permission from the US for LPRM input to APRM drawer count.

Standard: Obtains permission from the US for LPRM input to APRM drawer count.

CUE: The candidate may or may not ask permission since he was directed to perform the task. If the candidate does ask, state that they have permission to perform the APRM drawer count.

Comment:

SAT/UNSAT

STUDENT HANDOUT

Initial Conditions:

1. The plant is at rated power.

Task Cue:

Perform Section 2 of Attachment 202.1-1, APRM Status Check, for APRM 8. Notify the Unit Supervisor of your results.

Facility: Oyster Creek Task No.: 2000501433

Task Title: Determine RPV Water Level Instrument Availability

Job Performance Measure No.: NRC JPM ADMIN RO4 (RO)

K/A Reference: Generic 2.4.21 (RO 3.7)

Examinee: Examiner:

Facility Evaluator: Date:

Method of Testing:

Simulated Performance Actual Performance X

Classroom X Simulator Plant

Read to the Examinee:

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

Initial Conditions:

1. The Plant was at rated power when a LOCA occurred in the Primary Containment.
2. The Primary Containment Control EOP has been entered.
3. RPV pressure is 200 psig and stable.
4. The table below contains data recorded from Recorder TR-IA55 on Panel 8R, for the instrument reference leg vertical run temperatures, along with the current water level indications:

Level Instrument	RPV Water Level Reading	Temp. Instrument No.	Recorder Point	Temperature °F
NR GEMAC A	89"	TE-103-450	40	340
NR GEMAC B	91"	TE-103-451	41	335
WR GEMAC	130"	TE-103-452	42	360
YARWAY A	88"	TE-103-453	43	405
YARWAY B	83"	TE-103-454	44	375

Task Standard: IAW the reference provided, the Candidate has determined that only NR GEMAC B is available for RPV water level indication.

Required Materials: None.

General References:

1. EMG-SP28, Level Instrumentation Availability, revision 0.

Initiating Cue: IAW EMG-SP28, Level Instrumentation Availability, and the information provided, state whether each RPV water level instrument is available for RPV water level indication or is not available.

Time Critical Task: No.

Validation Time: 7 minutes

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back.*

Comment:

SAT/UNSAT

✓ Performance Step: 2

Procedure Step: 3.4

Verify that the instrument reference leg temperatures are in the SAFE REGION of the RPV Saturation Temperature Curve.

Standard: Compares the provided reference leg temperatures for all level instruments at the given RPV pressure against the RPV Saturation Temperature curve. Determines that YARWAY A is not in the SAFE REGION and thus is not available for RPV water level instrumentation.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 3

Procedure Step: 3.5

For each instrument below, the instrument reads in the Safe Region of its respective curve.

Standard: Compares the NR GEMAC A and NR GEMAC B indicated water levels at the given reference leg temperatures on the GEMAC NARROW RANGE curve. Determines that NR GEMAC A is not in the Safe Region and thus is not available for RPV water level instrumentation.

Determines that NR GEMAC B is in the Safe Region and thus is available for RPV water level instrumentation.

Comment:

SAT/UNSAT

✓ Performance Step: 4

Procedure Step: 3.5

For each instrument below, the instrument reads in the Safe Region of its respective curve.

Standard: Compares the YARWAY B indicated water level at the given reference leg temperatures on the YARWAY curve. Determines that YARWAY B is not in the Safe Region and thus is not available for RPV water level instrumentation.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 5

Procedure Step: 3.5

For each instrument below, the instrument reads in the Safe Region of its respective curve.

Standard: Compares the WR GEMAC indicated water level at the given reference leg temperatures on the GEMAC Wide Range curve. Determines that WR GEMAC is not in the Safe Region and thus is not available for RPV water level instrumentation.

Comment: _____

_____

_____

SAT/UNSAT

Terminating Cue: IAW the reference provided, the Candidate has determined that only NR GEMAC B is available for RPV water level indication.

JPM Stop Time: _____

Validation of Completion

JPM Number: NRC JPM ADMIN RO4

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____

Simulator Setup

1. None.
2. Have a blank copy of Support Procedure 28, EMG-SP28, Level Instrumentation Availability ready.

STUDENT HANDOUT

Initial Conditions:

1. The Plant was at rated power when a LOCA occurred in the Primary Containment.
2. The Primary Containment Control EOP has been entered.
3. RPV pressure is 200 psig and stable.
4. The table below contains data recorded from Recorder TR-IA55 on Panel 8R, for the instrument reference leg vertical run temperatures, along with the current water level indications:

Level Instrument	RPV Water Level Reading	Temp. Instrument No.	Recorder Point	Temperature °F
NR GEMAC A	89"	TE-103-450	40	340
NR GEMAC B	91"	TE-103-451	41	335
WR GEMAC	130"	TE-103-452	42	360
YARWAY A	88"	TE-103-453	43	405
YARWAY B	83"	TE-103-454	44	375

Task Cue:

IAW EMG-SP28, Level Instrumentation Availability, and the information provided, state whether each RPV water level instrument is available for RPV water level indication or is not available.

Level Instrument	Available? Yes/No
NR GEMAC A	
NR GEMAC B	
WR GEMAC	
YARWAY A	
YARWAY B	

Name: _____

Facility: Oyster Creek Task No.: COO00030

Task Title: Review a Shift Turnover Checklist

Job Performance Measure No.: NRC JPM ADMIN SRO1 (SRO)

K/A Reference: Generic 2.1.3 (SRO 3.4)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom X Simulator _____ Plant _____

Read to the Examinee:

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

Initial Conditions:

1. The plant is at rated power.
2. You are the oncoming Unit Supervisor after being off for the last 12 hours.
3. Your last shift was completed at 2400 on April 18, 2008.
4. The current date/time is April 19, 2008 at 1200.

Task Standard: The Candidate has reviewed the turnover checklist and noted the discrepancies and any associated actions.

Required Materials: None.

General References:

1. OP-OC-100-1002, Main Control Room Turnover Checklist (Operating Mode), revision 5.
2. Technical Specifications 3.7, Auxiliary Electrical Power.
3. Procedure OP-OC-108-104-1001, Guidance for Limiting and Administrative Conditions for Operations, revision 0.
4. Procedure 324, Thermal Dilution Pumps, revision 69.

Initiating Cue: As the oncoming Unit Supervisor, review the completed Main Control Room Turnover Checklist (Operating Mode) and note any discrepancies and/or any required actions.

Time Critical Task: No.

Validation Time: 22 minutes

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back. Provide the completed Turnover Sheet.*

Comment:

SAT/UNSAT

Note: The following steps may be performed in any order.

✓ Performance Step: 2

Procedure Step: Reviews the Turnover Checklist.

Standard: Reviews the Turnover Checklist and notes the following:

- The TORUS/DW VENT & PURGE ISOL VLVS HI RAD BYP CHAN 2 switch position is not annotated. (The switch should be in NORMAL.)

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 3

Procedure Step: Reviews the Turnover Checklist.

Standard: Reviews the Turnover Checklist and notes the following:

- Technical Specification 3.7.C.2 states that if one diesel generator becomes inoperable during power operation, repairs shall be initiated immediately and the other diesel shall be operated at least one hour every 24 hours at greater than 80% rated load until repairs are completed. Procedure OP-OC-108-104-1001, Guidance for Limiting and Administrative Conditions for Operations, states that EDG 2 shall be satisfactorily tested by 2000 on April 19, 2008. This is 24 hours from when EGD 1 was declared inoperable – not 24 hours from when EDG 1 was tagged out for repair. To comply with Technical Specifications, EDG 2 needs to be tested (636.4.013, EDG 2 Load Test) by 2000 on April 19, 2008.

Comment: _____

_____

SAT/UNSAT _____

Performance Information

✓ Performance Step: 4

Procedure Step: Reviews the Turnover Checklist.

Standard: Reviews the Turnover Checklist and notes the following:

- IAW Procedure 324, if all dilution pumps are tripped (which is the case of a loss of power to the dilution plant) and cannot be immediately restarted, reduce power as necessary to maintain main condenser outlet temperature < 97 °F to minimize the impact on the environment. A 2-hour report to the DEP via the NJDEP Environmental Hotline (1-877-927-6337) shall be made. A written report shall be generated IAW the NJPDES part IV if bridge temperature exceeds 97 °F.

Comment: _____

_____

_____

SAT/UNSAT

Terminating Cue: The Candidate has reviewed the turnover checklist and noted the discrepancies and any associated actions.

JPM Stop Time: _____

Validation of Completion

JPM Number: NRC JPM ADMIN SRO1

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____

Simulator Setup

1. None.

STUDENT HANDOUT

Initial Conditions:

1. The plant is at rated power.
2. You are the oncoming Unit Supervisor after being off for the last 12 hours.
3. Your last shift was completed at 2400 on April 18, 2008.
4. The current date/time is April 19, 2008 at 1200.

Task Cue:

As the oncoming Unit Supervisor, review the completed Main Control Room Turnover Checklist (Operating Mode) and note any discrepancies and/or any required actions.

MAIN CONTROL ROOM TURNOVER CHECKLIST
(OPERATING MODE)

Date	4-19-08	Shift	0000 - 1200

Plant Status

POWER	Core	1927	MWth	FLOW	Recirc	15.0	XE4GPM
	Electric	654	Mwe		Feedwater	7.2	XE6 lbm/hr
	Plant Risk level	Green	Color		Steam	7.2	XE6 lbm/hr
	Condenser vac	28	"Hg		Intake temp.	51	degrees F

Operating Status

ORAM Sentinel Risk Color	Yellow	Basis	EDG 1 Inoperable
Steady state power (circle)	(Y)	N	If N explain

Xenon (Check one)	Rising		Falling		Stable	X

Load limited by	None
Surveillance(s) in progress	Reactor Hi/Lo Level Bistable Test and Calibration, 619.3.113. Stack RAGEMS Sample and Effluent Flow – Functional Test, 621.3.024.
Activities in progress	Main Generator Exciter Brush Inspection. Fire Hose Station, Hose House and Fire Hydrant Inspection, 645.6.003, following a fire drill earlier in the shift. Nitrogen is being unloaded.

Safety System Status

Identify system or components that are in a degraded mode of operation permitted by the Technical Specifications. For each system, compare the length of time it is degraded with the Technical Specification Action Statement. Specify the frequency of redundant system verification or testing and the date/time of the last test

APRM 1 is in BYPASS due to failure of the APRM Surveillance Test – Front Panel Check (620.4.002). All other APRMs operable.

EDG 1 tagged out of service at 2300 on 4/18/08. 7-day LCO. EDG 2 testing every 24 hours.

Compensatory Comments

List any compensatory actions in effect as a result of Procedure CC-AA-112 (Temp Mod), Procedure WC-AA-101 (On-Line Maintenance), out of service plant equipment or components, or as directed by the SM or OS.

EDG 2 and associated systems are protected IAW Procedure 341 due to EDG 1 inoperable. (annunciators T4b, T5b)

Recording Offgas Radiation Monitor levels every hour due to AOG trip. No adverse trends noted.

Turnover Comments

EDG 1 declared inoperable at 2000 on 4/18/08, and tagged out for repair at 2300 on 4/18/08. Electrical Maintenance reports a ground in the control system and is continuing to investigate. There is currently no estimate on the return-to-service time. IAW Technical Specifications, EDG 2 must complete a satisfactory surveillance by 2300 on 4/19/08.

The Dilution Plant tripped at 0900 on 4/19/08. Alternate power cannot be tied-in. Electrical Maintenance suspects a short and are continuing to investigate. Intake temperature is 50 °F. No actions have occurred yet except to investigate. (Annunciators 12XR2-4, 12XR2-6, 12XR3-4, 12XR3-5, and 12XR3-6)

AOG tripped 1600 4/18/08 and remains out of service. All required actions completed. (Annunciators 10F3b, 10XF3d, 10XF4d)

Off Going Shift	Reactor Operators	**On Coming Shift ***	Reactor Operators *
	Unit Supervisor		Unit Supervisor *

* Signature acknowledges all qualifications to stand watch are current and any changes in medical status have been reported IAW OP-AA-105-101.

MAIN CONTROL ROOM TURNOVER CHECKLIST
(CONTINUED)

Control Panel Switch Check								
Panel 1F/2F								
EMRVs not in auto (list any)	All in AUTO							
Panel 4F								
SRM/IRM/APRM bypass (list any)	APRM 1							
LPRM to APRM bypass (list any)								
RWM bypassed (Check)	X	Yes		No				
Panel 8F/9F								
EDG1 Status		Available	X	Inoperable	Mode Switch in peaking	X	Yes	
? X								
EDG2 Status	X	Available		Inoperable	Mode Switch in peaking	X	Yes	
S1A Breaker up light lit	X	Yes		No	S1B Breaker up light lit	X	Yes	No
Panel 11F								
V-24-29 isolation signal bypass switch in normal	X	Yes		No				
V-24-30 isolation signal bypass switch in normal	X	Yes		No				
TORUS/DW VENT & PURGE ISOL VLVS HI RAD BYP CHAN 1 in normal	X	Yes		No				
TORUS/DW VENT & PURGE ISOL VLVS HI RAD BYP CHAN 2 in normal		Yes		No				
Panel 11R								
SBGTS select switch		system 1	X	system 2				
EF 1-8 control switch in auto	X	Yes		No				
EF 1-9 control switch in auto	X	Yes		No				
Panel 13R								
Pond Pump select switch One pump in auto, one pump in manual	X	Yes		No				
Panel 12XR								
CNTMT VENT AND PURGE ISOLATION BYPASS in normal	X	Yes		No				
Panel 11XR								
Main Generator Digital Protective Relay System (DPRS A and B) operating with no abnormal indications	X	Yes		No				
Panels 12XR, 13R, 14R (rear of panels)								
Confirm fans on rear of panels operating	X	Yes		No				
Panels 1R,2R,3R,4R,5R								
Confirm Drawers are pushed in and secured	X	Yes		No				
Panel 10XF								
AOG in service		Yes	X	No				

General Turnover Checks		
Core Maneuvering Daily Instruction Sheet, Attachment 1001.22-3 is current and reflects plant operating conditions.	X	Yes
Control room panel walkdown performed near end of shift.	X	Yes
Reviewed reasons for annunciated alarms with all operators	X	Yes
Control room panel walkdown performed with oncoming shift.	X	Yes
Performed light test on alarm windows.	X	Yes

Control Room Alarm Sheet

Page 1

Shift 0000 - 1200 Date 4/19/08

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								
7								
8								

1F/2F-"B"

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								
7								
8								

1F/2F-"C"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

3F-"D"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

3F-"E"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

3F-"F"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

3F-"G"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

5F/6F-"H"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

5F/6F-"J"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

5F/6F-"K"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

5F/6F-"L"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

7F-"M"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

7F-"N"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

7F-"P"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

7F-"Q"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

8F/9F-"R"

Control Room Alarm Sheet

Page2

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

8F/9F-"S"

	A	B	C	D	E	F
1						
2						
3						
4		X				
5		X				
6						
7						
8						

8F/9F-"T"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

8F/9F-"U"

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						

9XF

	A	B	C	D	E	F
1						
2						
3				X		
4				X		
5						
6						
7						
8						

10XF

	A	B	C	D	E	F	G	H	K	M
1										
2										
3		X								
4										

10F

	1	2	3	4	5	6
1						
2				X		X
3				X	X	X
4						

12XR-Dilution

	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

12F

	1	2	3	4	5	6	7	8	9	10
1										
2										
3										

12XR Feed/Cond Pump Temp.

RO_____

Remarks

_____

_____

_____

Reviewed By:_____

Facility: Oyster Creek Task No.:

Task Title: Plant Personnel Event Notification

Job Performance Measure No.: NRC JPM ADMIN SRO2 (SRO)

K/A Reference: Generic 2.1.14 (SRO 3.3)

Examinee: Examiner:

Facility Evaluator: Date:

Method of Testing:

Simulated Performance Actual Performance X

Classroom X Simulator Plant

Read to the Examinee:

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

Initial Conditions:

1. A plant startup is in progress.
2. The REACTOR MODE SELECTOR switch is in STARTUP.
3. All IRMs indicate midscale on Range 8.
4. All APRMs indicate 1%.
5. Annunciator 9XF7d, 24 VDC PP-A PWR LOST alarmed 20 minutes ago.
6. Electrical maintenance suspects a short circuit.
7. The current date/time is April 19, 2008 at 1000.
8. A recovery plan has not been established.

Task Standard: The Candidate completes the Shift Manager's Notification Worksheet IAW OP-AA-106-101, Significant Event Reporting, and determines notification is required due to an unexpected ½ scram and entry into a ≤ 72-hour shutdown LCO.

Required Materials: None.

General References:

1. Technical Specifications. (have available)
2. Procedure OP-AA-106-101, Significant Event Reporting, revision 8. (**Note**: ONLY provide Attachment 2 of the procedure.) (handout)
3. Procedure RAP-9XF7d, 24 VDC PP-A LOST, revision 0. (handout)
4. Procedure OP-OC-108-104-1001, Guidance for Limiting and Administrative Conditions for Operations, revision 0.
5. EP-AA-1010, Exelon Nuclear Radiological Emergency Plan Annes for Oyster Creek Station, revision 0 (have available)
6. Exelon Reportability Manual (have available)

Initiating Cue: Complete Attachment 2, Shift Manager's Notification Worksheet, of OP-AA-106-101, Significant Event Reporting, for receipt of the 24 VDC PP-A PWR LOST annunciator. Determine who the Shift Manager notifies of this event. Determining the requirement for a written report and LER will be performed by another Operator.

Time Critical Task: No.

Validation Time: 22 minutes

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back.*

Comment:

SAT/UNSAT

Performance Step: 2

Procedure Step: Record date/time of the event on Attachment 2.

Standard: Records date/time of the event on Attachment 2 as 4/19/08 1000.

Note: Completion of the Attachment may be performed in any order.

Comment:

SAT/UNSAT

Performance Information

Performance Step: 3

Procedure Step: Records current power/mode on Attachment 2.

Standard: Records current power/mode on Attachment 2 as 1%, Startup, or midscale on Range 8 of the IRMs, Startup.

Note: Only Performance Step 3 or performance Step 4 is critical, with STARTUP mode listed.

Comment: _____

_____

_____

SAT/UNSAT

Performance Step: 4

Procedure Step: Records prior power/mode on Attachment 2.

Standard: Records prior power/mode on Attachment 2 as 1%, Startup, or midscale on Range 8 of the IRMs, Startup.

Comment: _____

_____

_____

SAT/UNSAT

Performance Information

Performance Step: 5

Procedure Step: Records description.

Standard: Records a short description of the event: receipt of annunciator 24 VDC PP-A LOST, or loss of 24 VDC PP-A, or similar wording. The description may contain the plant impact of ½ scram as well.

Comment:

SAT/UNSAT

Performance Step: 6

Procedure Step: Determines if the event requires an EP declaration.

Standard: Determines that the event does not require an EP declaration.

Comment:

SAT/UNSAT

Performance Information

Performance Step: 7

Procedure Step: Determines if the event requires reporting to the NRC via ENS or to an outside agency per the Exelon Reportability Reference Manual.

Standard: Determines that the event does not require reporting to the NRC via ENS or to an outside agency per the Exelon Reportability Reference Manual.

Comment:

SAT/UNSAT

Performance Step: 8

Procedure Step: Determines if an oil discharge into/upon waters or adjoining shoreline.

Standard: Determines there is no oil discharge into/upon waters or adjoining shoreline.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 9

Procedure Step: Determines if a leak or discharge of petroleum product or hazardous substance from the warehouse drop tank; or a spill or discharge of hazardous materials in a quantity that constitutes a reportable discharge into or upon surface waters, groundwater, or onto the ground.

Standard: Determines there is no leak or discharge of petroleum product or hazardous substance from the warehouse drop tank; or a spill or discharge of hazardous materials in a quantity that constitutes a reportable discharge i r onto the ground.

WHY IS THIS STEP CRITICAL?

Comment:

SAT/UNSAT

Performance Step: 10

Procedure Step: Determines if a release of designated hazardous substances in amounts equal to or in excess of EPA reportable quantity.

Standard: Determines no release of designated hazardous substances in amounts equal to or in excess of EPA reportable quantity.

Comment:

SAT/UNSAT

Performance Information

Performance Step: 11

Procedure Step: Determines if any of the following occurred: RCRA Program Exception Report submitted, or Environmental Noncompliance endangering health or environment.

Standard: Determines none of the following occurred: RCRA Program Exception Report submitted, or Environmental Noncompliance endangering health or environment.

Comment:

SAT/UNSAT

Performance Step: 12

Procedure Step: Determines if the event is threatening health or environment or release equal to or in excess of EPA reportable quantity.

Standard: Determines the event is not threatening health or environment or release equal to or in excess of EPA reportable quantity.

Comment:

SAT/UNSAT

Performance Information

Performance Step: 13

Procedure Step: Determines if any of the following occurred: loss of 10 or more sirens, or spurious activation signal with 1 or more sirens still sounding.

Standard: Determines none of the following occurred: loss of 10 or more sirens, or spurious activation signal with 1 or more sirens still sounding.

Comment:

SAT/UNSAT

✓ Performance Step: 14

Procedure Step: Determines if any of the following occurred: reactivity management event; hazardous material incident; fitness for duty; injury resulting in offsite medical attention; major enforcement action; non-routine communication to/from the NRC; reactor water condition above EPRI Action Level II; any event outside the plant design basis; any event proceeds differently than expected: unexpected ½ scram, unexpected and significant plant transient, LCO action that will not be met within deadline, initiation of a prompt investigation, or, an unexplained risk change.

Standard: Determines that an unexpected ½ scram has occurred. Checks YES to perform notifications and notifies the SOS/OD, DSM, and NRC Resident Inspector.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 15

Procedure Step: Determines if any of the following occurred: the event forced entry into a ≤ 72 hour shutdown LCO; the event forced a plant shutdown or unplanned power reduction; the event involved a significant breakdown of plant radiological or environmental controls.

Standard: Procedure Step: Determines that the event forced entry into a ≤ 72 hour shutdown LCO (loss of this Bus is a 30 hour shutdown IAW TS 3.7.B. Checks YES to perform notifications and notifies the SOS/OD, DSM, and NRC Resident Inspector.

Comment: _____

_____

_____

SAT/UNSAT

Performance Information

Performance Step: 16

Procedure Step: Determines if any of the TS 6.9.3 Unique Reportability Requirements occurred.

Standard: Determines that none of the TS 6.9.3 Unique Reportability Requirements occurred.

Comment:

SAT/UNSAT

Terminating Cue: The Candidate completes the Shift Manager's Notification Worksheet IAW OP-AA-106-101, Significant Event Reporting, and determines notification is required due to an unexpected ½ scram and entry into a ≤ 72-hour shutdown LCO. SOS/OD, DSM and NRC Resident Inspector notifications are required.

JPM Stop Time: _____

Validation of Completion

JPM Number: NRC JPM ADMIN SRO2

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____

Simulator Setup

1. None.

STUDENT HANDOUT

Initial Conditions:

1. A plant startup is in progress.
2. The REACTOR MODE SELECTOR switch is in STARTUP.
3. All IRMs indicate midscale on Range 8.
4. All APRMs indicate 1%.
5. Annunciator 9XF7d, 24 VDC PP-A PWR LOST alarmed 20 minutes.
6. Electrical maintenance suspects a short circuit.
7. The current date/time is April 19, 2008 at 1000.
8. A recovery plan has not been established.

Task Cue:

- Complete Attachment 2, Shift Manager's Notification Worksheet, of OP-AA-106-101, Significant Event Reporting, for receipt of the 24 VDC PP-A PWR LOST annunciator.
- Determine who the Shift Manager notifies of this event.
- Determining the requirement for a written report and LER will be performed by another Operator.

Facility: Oyster Creek Task No.: 2260201402

Task Title: Review Acceptance Criteria for a Completed Surveillance Test

Job Performance Measure No.: NRC JPM ADMIN SRO3

K/A Reference: Generic 2.2.12 (SRO 3.4)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom X Simulator _____ Plant _____

Read to the Examinee:

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

1. The plant is at rated power.
2. Surveillance test, 607.4.004, Containment Spray and Emergency Service Water System 1 Pump Operability and Comprehensive/Preservice/Post-Maintenance Inservice Test, has just been completed.
3. The test was a normally scheduled test.

Task Standard: The Candidate reviews the surveillance test Acceptance Criteria, recognizes the component discrepancies, and states the required action for each component discrepancy.

Required Materials: None.

General References:

1. Procedure 607.4.004, Containment Spray and Emergency Service Water System 1 Pump Operability and Comprehensive/Preservice/Post-Maintenance Inservice Test, revision 62.
2. AD-AA-101, Processing of Procedures and T&RMs, revision 18.

Initiating Cue: Perform the Acceptance Criteria section of the completed surveillance test, 607.4.004. Write your observations on the attached sheets. State any test discrepancies and any required actions for any noted discrepancy. Some Steps have already been evaluated as Satisfactory and are complete.

- State if the step is SAT or UNSAT
- If UNSAT, state the reason and the required actions

Time Critical Task: No.

Validation Time: 20 minutes.

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back. Provide the Candidate with the section of the completed procedure and the attached sheets.*

Comment: _____

_____

SAT/UNSAT _____

ACCEPTANCE CRITERIA

Step	SAT/UNSAT	Required Action if UNSAT/Reason
7.1.1	SAT	None
7.1.2	SAT	None
7.1.3	SAT	None
7.1.4	UNSAT CRITICAL	Incorrect use of temporary procedure change for TS surveillance acceptance criteria of ESW flow > 3000 gpm. Declare ESW Pump 52A inoperable and apply TS due to low flow.
7.1.5	SAT	None
7.1.6	SAT	None
7.2.1	SAT	None

ACCEPTANCE CRITERIA

Step	SAT/UNSAT	Required Action if UNSAT/Reason
7.2.2	SAT	
7.2.3	UNSAT CRITICAL	Containment Spray Pump 51B vibration 4A is above the action range. Declare Containment Spray Pump 51B inoperable and apply TS.
7.2.4	UNSAT CRITICAL	Valve V-21-17 strokes outside the accept range but less than the limiting value. Retest immediately or declare inoperable and apply TS.
7.3	SAT	None
7.4	SAT	None

Validation of Completion

JPM Number: NRC JPM ADMIN SRO3

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____

Simulator Setup

1. None.
2. Provide pages 43 through E4-4 ONLY of 607.4.004.
3. Make the following steps unsat on the test:
    a. Step 7.1.4: Lineout 3100 and insert 3000. Initial and date.
    b. On the IST Pump Summary Sheet table, insert ESW 52A flow at 3050 gpm. Have all other flows acceptable.
    c. On the vibration table for point 4A for Containment Spray Pump 51B, insert a value greater than the ACTION limit. Mark all other vibrations below the ALERT values. (0.26 in/sec)
    d. In the valve stroke summary table, make the OPENING time for V-21-18 greater than the ACCEPT RANGE, but less than the LIMITING VALUE. Mark all others in the ACCEPT RANGE (37.4 seconds)
    e. In the IST Valve Summary Sheet, lineout 3100 gpm and insert 3000 gpm for ESW Pump 52A flow. Initial and date.

STUDENT HANDOUT

Initial Conditions:

1. The plant is at rated power.
2. Surveillance test, 607.4.004, Containment Spray and Emergency Service Water System 1 Pump Operability and Comprehensive/Preservice/Post-Maintenance Inservice Test, has just been completed.
3. The test was a normally scheduled test.

Task Cue:

Perform the Acceptance Criteria section of the completed surveillance test, 607.4.004. Write your observations on the attached sheets. State any test discrepancies and any required actions for any noted discrepancy. Some Steps have already been evaluated as Satisfactory and are complete.

- State if the step is SAT or UNSAT
- If UNSAT, state the reason and the required actions

STUDENT HANDOUT

ACCEPTANCE CRITERIA

Step	SAT/UNSAT		Required Action if UNSAT/Reason
7.1.1	SAT	None	
7.1.2	SAT	None	
7.1.3	SAT	None	
7.1.4			
7.1.5			
7.1.6			
7.2.1			

STUDENT HANDOUT

ACCEPTANCE CRITERIA

Step	SAT/UNSAT	Required Action if UNSAT/Reason
7.2.2		
7.2.3		
7.2.4		
7.3	SAT	None
7.4	SAT	None

Facility: Oyster Creek Task No.: _____

Task Title: Initiate Dose Control Extension Forms

Job Performance Measure No.: NRC JPM ADMIN SRO4 (SRO)

K/A Reference: Generic 2.3.1 (SRO 3.0)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom X Simulator _____ Plant _____

Read to the Examinee:

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

Initial Conditions:

1. The plant was shutdown for an extended outage to replace valves in Reactor Recirculation Loop A.
2. No Reactor Recirculation Pumps are running.
3. The following job is scheduled for next shift:
   a. Grease the suction valve limitorque in Recirculation Loops B and C.
   b. Manually cycle the valve once (O → C, C → O) after lubrication.
   c. Perform RBCCW valve lineups on Reactor Recirculation Pumps and Motors B and C.
   d. The job will be performed by 2 Equipment Operators; each performing the work on 1 Reactor Recirculation Pumps/Motors.
   e. The dose rate in the work area is 325 mrem/hr.
   f. Greasing each valve will take 10 minutes.
   g. Manually cycling the valve (O → C, C → O) will take 10 minutes.
   h. The RBCCW valve lineup for each pump/motor will take 10 minutes.
   i. Independent verifications on the valve lineup will be performed later.
4. The available Equipment Operators next shift are listed below. No other qualified individuals with lower current year routine TEDE will be available to perform this work.

Name	SSN	Current year TEDE mrem	EO Status
Bill Block	111-11-1111	1950	Fully qualified EO
Carol Casper	222-22-2222	350	Fully qualified EO; Declared pregnant on 1/1/08
Dave Draper	333-33-3333	1750	Fully qualified EO
Frank Fick	444-44-4444	1575	EO candidate in the OJT Phase
Greg Galler	555-55-5555	1875	Fully qualified EO

Task Standard: Dave Draper and Greg Galler are selected to perform the job. A Dose Control Level Extension Form is initiated for each individual.

Required Materials: Calculator.

General References:

1. Procedure RP-AA-203, Exposure Control and Authorization, revision 3.

Initiating Cue:

- Select the 2 Equipment Operators to perform the job.
- Initiate Section 1 of Attachment 1, Dose Control Level Extension Form, to Procedure RP-AA-203, Exposure Control and Authorization, for the individuals selected to perform the job, if required.
- The selected individual(s) will sign the form if the form is required, after initiation.

Time Critical Task: No.

Validation Time: 22 minutes

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back.*

Comment:

SAT/UNSAT

Note: The step below is not proceduralized but is necessary to determine the dose to be received while performing the job.

✓ Performance Step: 2

Procedure Step: Determines dose received to each worker.

Standard: Determines dose received to each worker:

- 10 minutes to grease the suction valve limitorque
- 10 minutes to cycle the suction valve
- 10 minutes to perform valve lineup
  - Total time per pump: 30 minutes
  - Total exposure for each worker: 0.5 hr x 325 mrem/hr = 162.5 mrem

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 3

Procedure Step: Determines who is eligible to perform the job.

Standard: Determines who is eligible to perform the job.

- Determines that Carol Casper cannot perform the job since the dose received is greater than allowed for a declared pregnant worker (500 mR)
- Determines that Frank Fick cannot perform the job since he is not qualified.
- Determines that of the 3 workers left, that Dave Draper and Greg Galler have the lowest current yearly accumulated dose and should be selected.

Comment:

SAT/UNSAT

✓ Performance Step: 4

Procedure Step: Determines total dose to the workers

Standard:

- Dave Draper: 1750 + 162.5 = 1912.5 mrem
  - Because his total does is less than the administrative limit of 2000 mrem, no dose extension is required
- Greg Galler: 1875 + 162.5 = 2037.5 mrem
  - Because his total does is greater than the administrative limit of 2000 mrem, a Dose Control Level Extension Form is required

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 4

Procedure Step: Initiates Section 1 of the Dose Control Level Extension Form for Greg Galler.

Standard: Initiates Section 1 of the Dose Control Level Extension Form for Greg Galler:

- Name: Greg Galler (critical step)
- SSN: 555-55-5555 (critical step)
- Answers NO to the question: Are other qualified individuals with a lower current year routine TEDE available to perform this work? (not critical step)
- States why an extension above 2000 mrem routine TEDE for the year is necessary for this individual: To perform limitorque greasing, valve cycling, and valve lineups (or similar). (not critical)
- Requests a dose extension to 2500 mrem (1875 + 162.5 = 2037.5 mrem.) (critical step)
- Signs the form as the Requestor and dates (not critical)

Comment: _____

_____

SAT/UNSAT _____

Terminating Cue: Dave Draper and Greg Galler are selected to perform the job. A Dose Control Level Extension Form is initiated for Greg Galler.

JPM Stop Time: _____

Validation of Completion

JPM Number: NRC JPM ADMIN SRO4

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____ _____

Simulator Setup

1. None.

STUDENT HANDOUT

Initial Conditions:

1. The plant was shutdown for an extended outage to replace valves in Reactor Recirculation Loop A.
2. No Reactor Recirculation Pumps are running.
3. The following job is scheduled for next shift:
   a. Grease the suction valve limitorque in Recirculation Loops B and C.
   b. Manually cycle the valve once (O → C, C → O) after lubrication.
   c. Perform RBCCW valve lineups on Reactor Recirculation Pumps and Motors B and C.
   d. The job will be performed by 2 Equipment Operators; each performing the work on 1 Reactor Recirculation Pumps/Motors.
   e. The dose rate in the work area is 325 mrem/hr.
   f. Greasing each valve will take 10 minutes.
   g. Manually cycling the valve (O → C, C → O) will take 10 minutes.
   h. The RBCCW valve lineup for each pump/motor will take 10 minutes.
   i. Independent verifications on the valve lineup will be performed later.
4. The available Equipment Operators next shift are listed below. No other qualified individuals with lower current year routine TEDE will be available to perform this work.

Name	SSN	Current year TEDE mR	EO Status
Bill Block	111-11-1111	1950	Fully qualified EO
Carol Casper	222-22-2222	300	Fully qualified EO; Declared pregnant on 1/1/08
Dave Draper	333-33-3333	1750	Fully qualified EO
Frank Fick	444-44-4444	1575	EO candidate in the OJT Phase
Greg Galler	555-55-5555	1875	Fully qualified EO

Task Cue:

- Select the 2 Equipment Operators to perform the job.
- Initiate Section 1 of Attachment 1, Dose Control Level Extension Form, to Procedure RP-AA-203, Exposure Control and Authorization, for the individuals selected to perform the job, if required.
- The selected individual(s) will sign the form if the form is required after initiation.

Facility: Oyster Creek Task No.: 2000502401

Task Title: Determine Emergency Classification and Protective Action Recommendations

Job Performance Measure No.: NRC JPM ADMIN SRO5 (SRO)

K/A Reference: Generic 2.4.29 (SRO 4.0)

Examinee: _____ Examiner: _____

Facility Evaluator: _____ Date: _____

Method of Testing:

Simulated Performance _____ Actual Performance X

Classroom X Simulator _____ Plant _____

Read to the Examinee:

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

Initial Conditions:

The plant was at rated power when an automatic scram occurred 45 minutes ago. The following conditions currently exist:

- All but 8 control rods indicate full-in
- APRMs indicate downscale
- Reactor Engineering has determined that the reactor will remain shutdown under all conditions without boron
- RPV water level is –60" with Core Spray injecting
- Drywell pressure is 28 psig
- Drywell temperature is 270 °F
- Main Stack RAGEMS indicates 4.1 µCi/cc HRN
- Drywell hydrogen indicates 3.1%
- CHRRMS #1 indicates 1320 R/hr
- CHRRMS #2 is downscale due to a loss of power
- Dose assessment shows the highest dose at or beyond the site boundary is 115 mRem

Task Standard: The emergency has been classified and the PARs have been determined.

Required Materials: None.

General References:

1. EP-AA-1010, Radiological Emergency Plan Annez for Oyster Creek Station, revision 0.
2. EP-AA-111, Emergency Classification and Protective Action Recommendations, revision 13.
3. EP-AA-111-F-10, Oyster Creek Plant Based PAR Flowchart, revision A.

Initiating Cue: Classify the emergency event IAW EP-AA-1010 (include the EAL designation). State the reason for this classification.

Time Critical Task: Yes.

Validation Time: 12 minutes Part 1

10 minutes Part 2

Performance Information

Denote critical steps with a check mark ✓

Performance Step: 1

Procedure Step: Provides repeat back of initiating cue.

JPM Start Time: _____

Standard: Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back. Handout first page of STUDENT HANDOUT.*

Comment:

SAT/UNSAT

✓ Performance Step: 2

Procedure Step: Classifies the emergency as a General Emergency (FG1).

Standard: Classifies the emergency as a General Emergency (FG1). This classification is made within 15 minutes from the JPM Start Time.

Reasons: Loss of Fuel Clad barrier (RPV water level < -20"); Loss of Reactor Coolant barrier (RPV water level < 0"); and Potential Loss of Primary Containment barrier (CHRRMS > 1210 R/hr less than 2 hours after shutdown).

Note: Record time that the first page of the STUDENT HANOUT is received from each Candidate.

Comment:

SAT/UNSAT

Performance Information

✓ Performance Step: 3 **JPM Start Time**: _____

Note: Once the first page of the STUDENT HANDOUT is collected from all Candidates, provide the second page, read the Additional Conditions, the Cue, and record new start time for this section.

Cue: Determine the Protective Action Recommendations (PARs) IAW EP-AA-111 and EP-AA-111-F-10. Provides repeat back of initiating cue. *Evaluator acknowledges the repeat back*

Procedure Step: Determines the Protective Action Recommendations (PARs):

- Evacuate 2-mile radius and 5-mile downwind; shelter areas not evacuated (since there are no travel impediments). These areas 5-miles downwind include the SSW, SW, and WSW
- Recommend KI for the General Public within the EPZ
- Advise the EPZ to monitor EAS messages

Standard: Determines the Protective Action Recommendations (PARs):

- Evacuate 2-mile radius and 5-mile downwind; shelter areas not evacuated (since there are no travel impediments). These areas 5-miles downwind include the SSW, SW, and WSW
- Recommend KI for the General Public within the EPZ
- Advise the EPZ to monitor EAS messages
- The PARs are determined within 15 minutes from the General Emergency classification.

Note: Record time that the second page of the STUDENT HANOUT is received from each Candidate.

Comment: _____

_____

_____

SAT/UNSAT

Performance Information

Terminating Cue: The emergency has been classified and the PARs have been determined. Record stop time on each Candidates' second page.

Validation of Completion

JPM Number: NRC JPM ADMIN SRO5

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question:

_____

_____

_____

Response:

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's Signature and Date: _____

Simulator Setup

1. None.

STUDENT HANDOUT

Initial Conditions:

The plant was at rated power when an automatic scram occurred 45 minutes ago. The following conditions currently exist:

- All but 8 control rods indicate full-in
- APRMs indicate downscale
- Reactor Engineering has determined that the reactor will remain shutdown under all conditions without boron
- RPV water level is –60" with Core Spray injecting
- Drywell pressure is 28 psig
- Drywell temperature is 270 °F
- Main Stack RAGEMS indicates 4.1 µCi/cc HRN
- Drywell hydrogen indicates 3.1%
- CHRRMS #1 indicates 1320 R/hr
- CHRRMS #2 is downscale due to a loss of power
- Dose assessment shows the highest dose at or beyond the site boundary is 115 mRem

Task Cue:

Classify the emergency event IAW EP-AA-1010 (include the EAL designation) and state the reason for this classification.

Emergency Classification: _____

Emergency Action Level designation: _____

Reason: _____

_____

_____

_____

_____

Name: _____ Time: _____

(NRC Only)

When complete, hand in this page.

STUDENT HANDOUT

Initial Conditions:

The plant was at rated power when an automatic scram occurred 45 minutes ago. The following conditions currently exist:

- All but 8 control rods indicate full-in
- APRMs indicate downscale
- Reactor Engineering has determined that the reactor will remain shutdown under all conditions without boron
- RPV water level is –60" with Core Spray injecting
- Drywell pressure is 28 psig
- Drywell temperature is 270 °F
- Main Stack RAGEMS indicates 4.1 μCi/cc HRN
- Drywell hydrogen indicates 3.1%
- CHRRMS #1 indicates 1320 R/hr
- CHRRMS #2 is downscale due to a loss of power
- Dose assessment shows the highest dose at or beyond the site boundary is 115 mRem

Additional Initial Conditions:

- Environmental conditions show that the wind is from 50° at 20 mph
- There are no travel impediments

Task Cue:

Determine the Protective Action Recommendations (PARs) ~~IAW EP-AA-111 and EP-AA-111-F-10~~.

Protective Action Recommendations:

_____

_____

_____

_____

_____

_____

Name: _____ Time: _____

(NRC Only)