

RO Job Performance Measure "A"

Facility: **Vogtle**

Task No: V-LO-TA-63005

Task Title: **Perform AFD Monitoring**

JPM No: V-NRC-JP-14915-HL17

K/A: G2.1.37 RO 4.3 SRO 4.6

Examinee: _____ NRC Examiner: _____

Facility Evaluator: _____ Date: _____

Method of testing:

Simulated Performance _____ Actual Performance _____

Classroom _____ 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: Unit 1 has recently recovered from a load rejection. The unit is at 70% power. Annunciator ALB10-F06 is lit.

I&C has reported that the AFD monitor alarm ALB10-F06 is inoperable.

Initiating Cue: The SS directs you to perform 14915-1 for AFD Monitoring, including Data Sheet 6 and completing section 7.0, Evaluation and Review, for all the following provided data.

Time	NI Channel	Reading	ΔFlux Channel	Reading
0700	1NI-41B	70%	1-N-41C	-15%
0700	1NI-42B	68%	1-N-42C	-22%
0700	1NI-43B	70%	1-N-43C	-25%
0700	1NI-44B	70%	1-N-44C	-15%
0800	1NI-41B	70%	1-N-41C	-17%
0800	1NI-42B	69%	1-N-42C	-21%
0800	1NI-43B	70%	1-N-43C	-23%
0800	1NI-44B	69%	1-N-44C	-17%
0900	1NI-41B	70%	1-N-41C	-18%
0900	1NI-42B	69%	1-N-42C	-20%
0900	1NI-43B	70%	1-N-43C	-22%
0900	1NI-44B	70%	1-N-44C	-18%

Task Standard: AFD monitoring per 14915-1 Data Sheet 6 performed correctly.

Required Materials: 14915-1, Data Sheet 6
Unit 1 Plant Technical Data Book Tab 6.0
Calculator
Red Ink Pen

This JPM is a reuse from Exam 2011-301. The JPM number was V-NRC-JP-19105-004.

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

Critical steps denoted with an asterisk

***Step 1 Determine upper and lower limits of AFD from PTDB-1 Tab 6.0.**

Standard: Candidate fills in date and power level 70% and records the value of the doghouse limit at 70%. Upper limit +19.5% ± 0.5% (calculated value is 19.6%) Lower limit -24% ± 0.5%.

Comment:

Step 2 Record indicated Axial Flux Difference for each operable Excore Channel.

Standard: Candidate records Delta Flux values for all channels.

Comment:

***Step 3 Verify the Axial Flux Difference is within limits of PTDB-1 Tab 6.0.**

Standard: Candidate verifies that three are within limits and initials or signs Verified block to complete the surveillance satisfactory.

Comment:

Step 4 With the indicated AFD outside of the above required limits on 2 or more channels and with THERMAL POWER greater than or equal to 50% of RATED THERMAL POWER, **reduce** THERMAL POWER to less than 50% of RATED THERMAL POWER within 30 minutes.

Per Precautions and Limitations, Step 3.0, 1-NI-43C will be Red Circled as being out of tolerance.

Standard: This step does not apply.

Comment:

DATA SHEET 6 (ANSWER KEY)

DATA SHEET 6
Sheet 2 of 4

**AXIAL FLUX DIFFERENCE
WITH
AFD MONITOR ALARM INOPERABLE**

Date Today's date Power 70%

Upper Limit = +19.5% ± 0.5% (from PTDB Tab 6.0)

Lower Limit = -24% ± 0.5%

TIME	1-NI-41C	1-NI-42C	1-NI-43C	1-NI-44C	VERIFIED
0700	<u>-15%</u>	<u>-22%</u>	<u>-25%</u>	<u>-15%</u>	<u>Initials</u>
0800	<u>-17%</u>	<u>-21%</u>	<u>-23%</u>	<u>-17%</u>	<u>Initials</u>
0900	<u>-18%</u>	<u>-20%</u>	<u>-22%</u>	<u>-18%</u>	<u>Initials</u>

ACCEPTANCE CRITERIA (ANSWER KEY)

7.0 EVALUATION AND REVIEW

7.1 TEST PURPOSE

Special Condition(s):

AFD Monitor Inoperable

Data Sheet(s) completed (Circle Appropriate Sheets):

1 2 3 4a 4b 5 6 7 8 9 10 11 12 13 14 15 16 17
18

7.2 Results obtained through the performance of this procedure meet the ACCEPTANCE CRITERIA of Section 6.0.

YES NO

7.3 IF no was checked, immediately **notify** the SS and **initiate** action in accordance with the actions specified on the data sheet(s) not meeting the acceptance criteria.

7.4 Comments (include any abnormal conditions and corrective actions taken):

None

Test Completed and SS Notified: _____

Supervisory Review: _____
Signature Date Time

Terminating cue: Student returns initiating cue sheet.

Verification of Completion

Job Performance Measure No: V-NRC-JP-14915-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question: _____

Response: _____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Initial Conditions: Unit 1 has recently recovered from a load rejection. The unit is at 70% power. Annunciator ALB10-F06 is lit.

I&C has reported that the AFD monitor alarm ALB10-F06 is inoperable.

Initiating Cue: The SS directs you to perform 14915-1 for AFD Monitoring, including Data Sheet 6 and completing section 7.0, Evaluation and Review, for all the following provided data.

Time	NI Channel	Reading	Δ Flux Channel	Reading
0700	1NI-41B	70%	1-N-41C	-15%
0700	1NI-42B	68%	1-N-42C	-22%
0700	1NI-43B	70%	1-N-43C	-25%
0700	1NI-44B	70%	1-N-44C	-15%
0800	1NI-41B	70%	1-N-41C	-17%
0800	1NI-42B	69%	1-N-42C	-21%
0800	1NI-43B	70%	1-N-43C	-23%
0800	1NI-44B	69%	1-N-44C	-17%
0900	1NI-41B	70%	1-N-41C	-18%
0900	1NI-42B	69%	1-N-42C	-20%
0900	1NI-43B	70%	1-N-43C	-22%
0900	1NI-44B	70%	1-N-44C	-18%

SRO Job Performance Measure "A"

Facility: **Vogtle**

Task No: V-LO-TA-63005

Task Title: **Evaluate Inoperable AFD Monitor Alarm**

JPM No: V-NRC-JP-14915-HL17

K/A: G2.1.37 (SRO 4.6)

Examinee: _____ NRC Examiner: _____

Facility Evaluator: _____ Date: _____

Method of testing:

Simulated Performance _____ Actual Performance _____

Classroom _____ 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: Unit 1 has recently recovered from a load rejection. The unit is at 70% power. Annunciator ALB10-F06 is lit.

I&C has reported that the AFD monitor alarm ALB10-F06 is inoperable.

Initiating Cue: The SS directs you to perform 14915-1 for AFD Monitoring, including Data Sheet 6 and completing section 7.0, Evaluation and Review, for all the following provided data.

Time	NI Channel	Reading	Δ Flux Channel	Reading
0700	1NI-41B	70%	1-N-41C	-15%
0700	1NI-42B	68%	1-N-42C	-22%
0700	1NI-43B	70%	1-N-43C	-25%
0700	1NI-44B	70%	1-N-44C	-15%
0800	1NI-41B	70%	1-N-41C	-17%
0800	1NI-42B	69%	1-N-42C	-21%
0800	1NI-43B	70%	1-N-43C	-23%
0800	1NI-44B	69%	1-N-44C	-17%
0900	1NI-41B	70%	1-N-41C	-18%
0900	1NI-42B	69%	1-N-42C	-20%
0900	1NI-43B	70%	1-N-43C	-22%
0900	1NI-44B	70%	1-N-44C	-18%

Based on the results of the surveillance, is any Technical Specification (TS) LCO NOT met? If any TS LCO is NOT met, THEN determine all TS REQUIRED ACTIONS, if any, for the given plant conditions.

Task Standard: Inoperable AFD monitor alarm ALB10-F06 is evaluated and applicable actions taken (AFD calculated and LCO evaluated).

Required Materials: 14915-1, Data Sheet 6
Unit 1 Plant Technical Data Book Tab 6.0
Tech Specs, Tech Spec Bases, COLR
Calculator
Red Ink Pen

This JPM is a reuse from Exam 2011-301. The JPM number was V-NRC-JP-14915-004.

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

Critical steps denoted with an asterisk

***Step 1 Determine upper and lower limits of AFD from PTDB-Unit 1 Tab 6.0.**

Standard: Candidate fills in date and power level 70% and records the value of the doghouse limit at 70% Upper limit +19.5% ± 0.5% (calculated value is 19.6%) Lower limit -24% ± 0.5%.

Comment:

Step 2 Record indicated Axial Flux Difference for each operable Excore Channel.

Standard: Candidate records Delta Flux values for all channels.

Comment:

***Step 3 Verify the Axial Flux Difference is within limits of PTDB-Unit 1 Tab 6.0.**

Standard: Candidate verifies that all channels are within limits and initials the "verified" column.

Comment:

***Step 4 Determine required action.**

With the indicated AFD outside of the above required limits on 2 or more channels and with THERMAL POWER greater than or equal to 50% of RATED THERMAL POWER, **reduce** THERMAL POWER to less than 50% of RATED THERMAL POWER within 30 minutes.

Note to the examiner: The critical element is to determine the surveillance is SAT. If the candidate determines actions are required, then the critical step is not met.

Standard: Candidate should report no action required.

Comment:

DATA SHEET 6 (ANSWER KEY)

DATA SHEET 6
Sheet 2 of 4

**AXIAL FLUX DIFFERENCE
WITH
AFD MONITOR ALARM INOPERABLE**

Date Today's date Power 70%

Upper Limit = $\pm 19.5\% \pm 0.5\%$ (from PTDB Tab 6.0)

Lower Limit = $-24\% \pm 0.5\%$

TIME	1-NI-41C	1-NI-42C	1-NI-43C	1-NI-44C	VERIFIED
0700	<u>-15%</u>	<u>-22%</u>	<u>-25%</u>	<u>-15%</u>	<u>Initials</u>
0800	<u>-17%</u>	<u>-21%</u>	<u>-23%</u>	<u>-17%</u>	<u>Initials</u>
0900	<u>-18%</u>	<u>-20%</u>	<u>-22%</u>	<u>-18%</u>	<u>Initials</u>

Tech Specs

3.2 POWER DISTRIBUTION LIMITS

3.2.3 AXIAL FLUX DIFFERENCE (AFD) (Relaxed Axial Offset Control (RAOC) Methodology)

LCO 3.2.3 The AFD shall be maintained within the limits specified in the COLR.

-----NOTE-----
The AFD shall be considered outside limits when two or more OPERABLE
excore channels indicate AFD to be outside limits.

APPLICABILITY: MODE 1 with THERMAL POWER \geq 50% RTP.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. AFD not within limits.	A.1 Reduce THERMAL POWER to < 50% RTP.	30 minutes

14915-1 ACCEPTANCE CRITERIA (ANSWER KEY)

7.0 EVALUATION AND REVIEW

7.1 TEST PURPOSE

Special Condition(s):

AFD Monitor Inoperable

Data Sheet(s) completed (Circle Appropriate Sheets):

1 2 3 4a 4b 5 6 7 8 9 10 11 12 13 14 15 16 17
18

7.2 Results obtained through the performance of this procedure meet the ACCEPTANCE CRITERIA of Section 6.0.

YES NO

7.3 IF no was checked, immediately **notify** the SS and **initiate** action in accordance with the actions specified on the data sheet(s) not meeting the acceptance criteria.

7.4 Comments (include any abnormal conditions and corrective actions taken):

None

Test Completed and SS Notified: _____

Supervisory Review: _____
Signature Date Time

Terminating cue: Student returns initiating cue sheet.

Verification of Completion

Job Performance Measure No: V-NRC-JP-14915-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Initial Conditions: Unit 1 has recently recovered from a load rejection. The unit is at 70% power. Annunciator ALB10-F06 is lit.

I&C has reported that the AFD monitor alarm ALB10-F06 is inoperable.

Initiating Cue: The SS directs you to perform 14915-1 for AFD Monitoring, including Data Sheet 6 and completing section 7.0, Evaluation and Review, for all the following provided data.

Time	NI Channel	Reading	Δ Flux Channel	Reading
0700	1NI-41B	70%	1-N-41C	-15%
0700	1NI-42B	68%	1-N-42C	-22%
0700	1NI-43B	70%	1-N-43C	-25%
0700	1NI-44B	70%	1-N-44C	-15%
0800	1NI-41B	70%	1-N-41C	-17%
0800	1NI-42B	69%	1-N-42C	-21%
0800	1NI-43B	70%	1-N-43C	-23%
0800	1NI-44B	69%	1-N-44C	-17%
0900	1NI-41B	70%	1-N-41C	-18%
0900	1NI-42B	69%	1-N-42C	-20%
0900	1NI-43B	70%	1-N-43C	-22%
0900	1NI-44B	70%	1-N-44C	-18%

Based on the results of the surveillance, is any Technical Specification (TS) LCO NOT met? If any TS LCO is NOT met, THEN determine all TS REQUIRED ACTIONS, if any, for the given plant conditions.

RO/SRO Admin Job Performance Measure "B"

Facility: **Vogtle**

Task No: V-LO-TA-27003

Task Title: K_{eff} Determination for Shutdown Banks withdrawn

JPM No: V-NRC-JP-14005-HL17

K/A Reference: G2.1.25 RO 3.9 SRO 4.2

Examinee: _____ NRC Examiner: _____

Facility Evaluator: _____ Date: _____

Method of testing:

Simulated Performance _____ Actual Performance _____

Classroom _____ 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 crew is performing a reactor startup on Unit 1 following a trip from 100% power, steady state conditions.

Initiating Cue: Using the data below, the SS has directed you to "Determine K_{eff} for withdrawal of the Shutdown Banks". Perform calculation to three decimal places.

Reactor Trip occurred 35 hours ago:

Current Plant Conditions

Boron Concentration 1400 ppm
Tavg 557°F
All rods are inserted
ECC Boron Concentration 1400 ppm
ECP Control Rod Position 120 steps CBD

The following values are from Rx Engineering

Cycle Burnup 1250 MWD/MTU
Axial Offset Reactivity Correction 0 pcm
Boron-free Xenon plus Samarium Worth 2350 pcm

Task Standard: K_{EFF} calculated with the shutdown banks withdrawn.

- Required Materials:
1. 14005-1, "Shutdown Margin and K_{EFF} Calculations"
Ver 27.0
 2. PTDB Tab 1.0 for Cycle 17

General References: None

Time Critical Task: No

Validation Time: 20 minutes

Performance Information

Critical steps denoted with an asterisk

14005-1 Data Sheet 3 selected.

Standard: Candidate selects Data Sheet 3.

Comment:

Sheet 1 of Data Sheet 3 completed.

Standard: Candidate completes Sheet 1 as indicated on KEY from plant conditions given.

Comment:

Sheet 2 of Data Sheet 3 completed.

Standard: Candidate completes Sheet 2 using the PTDB as indicated on KEY.

Step J.1 obtained from Table 1.5.4-T1 BOL value.

Step J.2 obtained from Table 1.5.1-T2 at $CBD = 120$.

Step J.3 obtained from plant conditions.

Step J.4 completed from J.1, J.2, J.3 and math performed.

Step J.5 completed from J.4 and math performed.

Comment:

Terminating cue: Candidate returns cue sheet and completed Data sheet 3.

KEY
DATA SHEET 3

Sheet 1 of 2

KEFF WITH SHUTDOWN BANKS WITHDRAWN

G. CONDITIONS PRIOR TO ENTERING MODE 3 (SUBCRITICALITY)

G.1 Mode 3 declared Date Current date minus 35 hours Time current time minus 35 hours

G.2 Cycle Burnup 1250 MWD/MTU
(from Reactor Engineering)

G.3 Power Level 100 %

H. CURRENT/PROJECTED CONDITIONS (circle one)

H.1 Date N/A Time N/A
(If this Keff is being calculated for projected conditions, then enter the projected time.)

H.2 Core Average Temperature 557 ±1 °F

H.3 Length of Shutdown 35 hours

H.4 Estimated Critical Boron Concentration (ECC) at (H.3) hours after Mode 3 entry
1400 ppm

H.5 Estimated Critical Position (ECP) at (H.3) hours after Mode 3 entry
CBC 228 CBD 120

**KEY
DATA SHEET 3**

Sheet 2 of 2

J. KEFF CALCULATION

NOTE

For all calculations, record the ABSOLUTE VALUES of the reactivity values obtained from the PTDB.

- J.1 "Cumulative Control Rod Worth" for D+C+B+A Configuration at HZP and Burnup (G.2) (PTDB TAB 1.5.4-T1) + 3039 pcm
- J.2 Integral "Rod Worth" BOL, MOL or EOL at ECP (H.5) and Burnup (G.2) [If the Length of Shutdown (H.3) is less than 4 hours OR **greater than 12 hours, then USE HZP, HFP-Eq-Xe PTDB TAB 1.5.1-T2, T5, or T8.** If the Length of Shutdown (H.3) is between 4 and 12 hours, then USE HZP, HZP-Peak-Xe PTDB TAB 1.5.1-T3, T6, or T9.] + 366 pcm
- J.3 Axial Offset Reactivity Correction (From Reactor Engineering) + 0 pcm
- J.4 Shutdown Reactivity:
(J.1) - (J.2) - (J.3) =
3039 - 366 - 0 = (+) 2673 pcm
- J.5 Keff: $1.0000 / [1.0000 + ((J.4)/100,000)] =$
 $1.0000 / [1.0000 + (2673 / 100,000)] =$ + 0.974

ACCEPTANCE CRITERIA

Keff (J.5) shall be less than +0.99.

YES NO

Completed By:

SIGNATURE

CURRENT
DATE/TIME

Signature

Date/Time

Verified By:

Signature

Date/Time

Verification of Completion

Job Performance Measure No. V-NRC-JP-14005-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question: _____

Response: _____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Initial Conditions: The crew is performing a reactor startup on Unit 1 following a trip from 100% power, steady state conditions.

Initiating Cue: Using the data below, the SS has directed you to “Determine K_{eff} for withdrawal of the Shutdown Banks”. Perform calculation to three decimal places.

Reactor Trip occurred 35 hours ago.

Current Plant conditions:

Boron Concentration	1400 ppm
T_{avg}	557°F
Current Rod Height	All rods are inserted
ECC Boron Concentration	1400 ppm
ECP Control Rod Position	120 steps CBD

The following values are from Rx Engineering:

Cycle Burnup	1250 MWD/MTU
Axial Offset Reactivity Correction	0 pcm
Boron-free Xenon plus Samarium Worth	2350 pcm

RO Admin Job Performance Measure "C"

Facility: **Vogtle**

Task No: V-LO-TA-63004

Task Title: Determine Tagging Requirements

JPM No: V-NRC-JP-NMP-AD-003-HL17

K/A Reference: G2.2.13 RO 4.1 SRO 4.3

Examinee: _____ NRC Examiner: _____

Facility Evaluator: _____ Date: _____

Method of testing:

Simulated Performance _____ Actual Performance _____

Classroom _____ 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: Unit 1 is at 100% Power. A planned outage for Containment Spray Pump (CSP) Train "A" is required to replace the pump seals.

All electrical components and associated handswitches requiring Tagout for the CSP "A" work are tagged under another referenced Tagout.

All pump motor cooling water required for Tagout for the CSP "A" work are tagged under another referenced Tagout.

Initiating Cue: Determine the appropriate boundary points and required positions of components to isolate the fluid boundary and drain CSP "A", 1-1206-P6-001.

Task Standard: Boundary points for isolation and drains for CSP "A" are determined.

Required Materials: Provide following references to candidate

NMP-AD-003, "Equipment Clearance and Tagging" Ver. 14.0

NMP-AD-003-002 "Tagout Standards" Ver. 7.0

P&ID 1X4DB131 Ver. 35.0

Provide to candidate if requested.

1X4DR003 Ver. 1.0 Fill and Vent Diagram For Containment Spray System

General References: none

Time Critical Task: No

Validation Time: 45 minutes

Performance Information

Critical steps denoted with an asterisk

References NMP-AD-003, NMP-AD-003-002, and P&ID 1X4DB131.

Standard: Candidate uses references.

Comment:

Determines the following components and positions are required to isolate and drain fluid boundary for CSP A.

Standard:

- Candidate correctly identifies the listed points to tag out CSP as listed below.
- **The ones in BOLD are the critical points.**
- The description should describe valve function.
- The description listed is expected description.
- The lineup description is listed in parentheses.
- The additional drains may be added but are not required.

Component Number	Description	Required Position
1-HV-9001A	CSP A Pump Discharge Isolation Valve (CNMT SPRAY ISO)	CLOSED
1-HV-9017A	CSP A RWST Suction Isolation Valve (CNMT SPRAY PUMP A RWST SUCT ISO VLV)	CLOSED
1-HV-9003A	CSP A CNMT Sump Suction Isolation Valve (CNMT SPRAY PUMP A CNMT SUMP SUCT ORC)	CLOSED
1-1206-U4-115	1HV-9003A Bypass Line Isolation Valve (CNMT SPRAY PUMP TRAIN A SUMP SUPPLY HV 9003A BYP)	CLOSED
1-1206-U4-006	CSP A RWST Test line Isolation Valve (CNMT SPRAY PUMP TRAIN A TEST FLOWPATH ISOLATION)	CLOSED
1-1206-U4-034	CSP A Discharge to Eductor Isolation Valve (CNMT SPRAY SPRAY ADD TK DISCH ISO TO EDUCTOR 1)	CLOSED
1-1206-U4-109	CSP A Pump Casing Drain Valve (CNMT SPRAY PUMP TRAIN A DISCHARGE CASING DRAIN)	OPEN
1-1206-U4-112	CSP A Pump Casing Drain Valve (CNMT SPRAY PUMP TRAIN A SUCTION CASING DRAIN)	OPEN
1-1206-U4-108	CSP A Pump Casing Vent Valve (CNMT SPRAY PUMP TRAIN A CASE VENT)	UNFLANGE/OPEN or UNCAP/OPEN
1-1206-X4-108	CSP A Header Vent Valve (CNMT SPRAY HEADER TRAIN A VENT)	UNCAP/OPEN
1-1206-U4-002	CSP A Suction Drain Valve (CNMT SPRAY PUMP TRAIN A SUCTION FLOOR DRAIN ISO)	OPEN
1-1206-X4-005	CSP A RWST Supply Drain Valve (CNMT SPRAY PUMP TRAIN A RWST SUPPLY DRN TO FLOOR)	OPEN
1-1206-X4-009	CSP A Suction Vent Valve (CNMT SPRAY PUMP TRAIN A SUCTION PRESS TEST ROOT)	OPEN

1-1206-X4-026	CSP A Discharge Drain Valve (CNMT SPRAY PUMP TRAIN A DISCHARGE LINE DRAIN)	UNCAP/OPEN
1-1206-X4-013	CSP A Discharge to Eductor Drain Valve (CNMT SPRAY PUMP TRAIN A DISCHARGE TO EDUCTOR DRN)	OPEN
1-1206-X4-035	CSP A Header Drain Valve (CNMT SPRAY HEADER TRAIN A DRAIN)	OPEN
1-1206-U4-011	CSP A Discharge Flush Conn Isolation (CNMT SPRAY PUMP TRAIN A DISCH FLUSH CONN ISO)	UNFLANGE/OPEN or CLOSED

Comment:

Terminating cue: Candidate informs SS of completion of the identified points to Tagout Containment Spray Pump A or returns the cue sheet.

Verification of Completion

Job Performance Measure No. V-NRC-JP-NMP-AD-003-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question: _____

Response: _____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

SRO Admin Job Performance Measure "C"

Facility: **Vogtle**

Task No: V-LO-TA-63004

Task Title: Determine Tagging Requirements

JPM No: V-NRC-JP-NMP-AD-003-HL17

K/A Reference: G2.2.13 RO 4.1 SRO 4.3

Examinee: _____ NRC Examiner: _____

Facility Evaluator: _____ Date: _____

Method of testing:

Simulated Performance _____ Actual Performance _____

Classroom _____ 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: Unit 1 is at 100% Power. A planned outage for Containment Spray Pump (CSP) Train "A" is required to replace the pump seals.

All electrical components and associated handswitches requiring Tagout for the CSP "A" work are tagged under another referenced Tagout.

All pump motor cooling water required for Tagout for the CSP "A" work is tagged under another referenced Tagout.

Initiating Cue: Determine the appropriate boundary points and required positions of components to isolate the fluid boundary and drain CSP "A", 1-1206-P6-001.

Determine the Tech Spec LCO(s), required actions, and completion times (if any) that result from authorizing the given tagout.

Task Standard: Boundary points for isolation and drains for CSP "A" are determined. LCO, required actions, and completion times are determined.

Required Materials: Provide following references to candidate

NMP-AD-003, "Equipment Clearance and Tagging" Ver. 14.0

NMP-AD-003-002 "Tagout Standards" Ver. 7.0

P&ID 1X4DB131 Ver. 35.0

Tech Specs

Provide to candidate if requested.

1X4DR003 Ver. 1.0 Fill and Vent Diagram For Containment Spray System

General References: none

Time Critical Task: No

Validation Time: 45 minutes

Performance Information

Critical steps denoted with an asterisk

References NMP-AD-003, NMP-AD-003-002, and P&ID 1X4DB131.

Standard: Candidate uses references.

Comment:

Determines the following components and positions are required to isolate and drain fluid boundary for CSP A.

Standard:

- Candidate correctly identifies the listed points to tag out CSP as listed below.
- **The ones in BOLD are the critical points.**
- The description should describe valve function.
- The description listed is expected description.
- The lineup description is listed in parentheses.
- The additional drains may be added but are not required.

Component Number	Description	Required Position
1-HV-9001A	CSP A Pump Discharge Isolation Valve (CNMT SPRAY ISO)	CLOSED
1-HV-9017A	CSP A RWST Suction Isolation Valve (CNMT SPRAY PUMP A RWST SUCT ISO VLV)	CLOSED
1-HV-9003A	CSP A CNMT Sump Suction Isolation Valve (CNMT SPRAY PUMP A CNMT SUMP SUCT ORC)	CLOSED
1-1206-U4-115	1HV-9003A Bypass Line Isolation Valve (CNMT SPRAY PUMP TRAIN A SUMP SUPPLY HV 9003A BYP)	CLOSED
1-1206-U4-006	CSP A RWST Test line Isolation Valve (CNMT SPRAY PUMP TRAIN A TEST FLOWPATH ISOLATION)	CLOSED
1-1206-U4-034	CSP A Discharge to Eductor Isolation Valve (CNMT SPRAY SPRAY ADD TK DISCH ISO TO EDUCTOR 1)	CLOSED
1-1206-U4-109	CSP A Pump Casing Drain Valve (CNMT SPRAY PUMP TRAIN A DISCHARGE CASING DRAIN)	OPEN
1-1206-U4-112	CSP A Pump Casing Drain Valve (CNMT SPRAY PUMP TRAIN A SUCTION CASING DRAIN)	OPEN
1-1206-U4-108	CSP A Pump Casing Vent Valve (CNMT SPRAY PUMP TRAIN A CASE VENT)	UNFLANGE/OPEN or UNCAP/OPEN
1-1206-X4-108	CSP A Header Vent Valve (CNMT SPRAY PUMP TRAIN A VENT)	UNCAP/OPEN
1-1206-U4-002	CSP A Suction Drain Valve (CNMT SPRAY PUMP TRAIN A SUCTION FLOOR DRAIN ISO)	OPEN
1-1206-X4-005	CSP A RWST Supply Drain Valve (CNMT SPRAY PUMP TRAIN A RWST SUPPLY DRN TO FLOOR)	OPEN
1-1206-X4-009	CSP A Suction Vent Valve (CNMT SPRAY PUMP TRAIN A SUCTION PRESS TEST ROOT)	OPEN

1-1206-X4-026	CSP A Discharge Drain Valve (CNMT SPRAY PUMP TRAIN A DISCHARGE LINE DRAIN)	UNCAP/OPEN
1-1206-X4-013	CSP A Discharge to Eductor Drain Valve (CNMT SPRAY PUMP TRAIN A DISCHARGE TO EDUCTOR DRN)	OPEN
1-1206-X4-035	CSP A Header Drain Valve (CNMT SPRAY HEADER TRAIN A DRAIN)	OPEN
1-1206-U4-011	CSP A Discharge Flush Conn Isolation (CNMT SPRAY PUMP TRAIN A DISCH FLUSH CONN ISO)	UNFLANGE/OPEN or CLOSED

Comment:

***Candidate determines the Tech Spec LCO(s), required actions, and completion times.**

Standard: Candidate determines the following (bolded items are critical):

LCO 3.6.6 Two containment spray trains and two containment cooling trains shall be **OPERABLE**.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One containment spray train inoperable.	A.1 Restore containment spray train to OPERABLE status.	72 hours* <u>AND</u> 6 days from discovery of failure to meet the LCO*
B. One containment	B.1 Restore containment	72 hours

CONDITION	REQUIRED ACTION	COMPLETION TIME
cooling train inoperable.	cooling train to OPERABLE status.	<u>AND</u> 6 days from discovery of failure to meet the LCO
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	6 hours
	<u>AND</u> C.2 Be in MODE 5.	84 hours

* For the VEGP Unit 2 June 23, 2008 entry into Technical Specification 3.6.6, the Containment Spray Pump B may be inoperable for a period not to exceed 7 days.

Terminating cue: Candidate informs SS of completion of the identified points to Tagout Containment Spray Pump A or returns the cue sheet.

Verification of Completion

Job Performance Measure No. V-NRC-JP-NMP-AD-003-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question: _____

Response: _____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

RO SRO Job Performance Measure "D"

Facility: **Vogtle**

Task No: N/A

Task Title: **Determine Minimum Protective Clothing Requirements and Total Projected Dose, and Determine if task can be completed without exceeding any Radiological Limits**

JPM No: V-NRC-JP-00930-HL-17

K/A Reference: G2.3.7 (3.5 / 3.6)

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance _____

Actual Performance _____

Classroom _____

Simulator _____

Plant _____

Read to the examinee:

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

Initial Conditions: Unit 1 is at 100% power.

You have been assigned to close and danger tag 1-1204-U4-111 in Unit 1 containment.

You have been briefed by HP on the limitations of RWP 12-0101.

HP has permitted the minimum protective clothing requirements stated in the RWP.

Your accumulated dose for this year to date is 960 mrem.

The TOTAL round-trip TRANSIT dose will be 6 mrem.

The TOTAL time at the job site will be 5 minutes.

Assume neutron dose exposure is negligible.

Initiating Cue: Using RWP 12-0101 and the survey map of the Unit 1 containment work area, determine and document in the table below:

- a. Your protective clothing requirements.
- b. Your projected total gamma dose.
- c. If you can or cannot perform the task without exceeding any limits. If not, then state the reason.

Protective clothing requirements	
Projected total gamma dose	
Can you complete this task without exceeding any limits?	(CIRCLE ONE) YES NO
REASON, if applicable	

Task Standard: Upon successful completion of this JPM, the examinee will correctly:

1. Identify the protective clothing requirements.
2. Calculate the projected total gamma dose.
3. Determine if the task can be performed without exceeding any limits, and if not, then state the reason.

Required Materials: Calculator
Containment survey map
RWP 12-0101
NMP-HP-001, "Radiation Protection Standard Practices"

General References: None

Time Critical Task: No

Validation Time: 15 minutes

Performance Information

Critical steps denoted with an asterisk

* **Determine protective clothing requirements.**

Refer to RWP 12-0101 "Protective Clothing Requirements", which states the minimum requirements for a "C" zone are booties, gloves, and a lab coat.

Cue: If asked if the dress requirements were changed per HP direction, state "See initial conditions."

Standard: Correct protective clothing requirements determined.

Comment:

* **Calculate projected total gamma dose.**

Using survey map, a dose rate of 84 mrem/hour at the valve is determined.

The tagging task will take 5 minutes.

$84 \text{ mrem/hour} (1 \text{ hour} / 60 \text{ minutes}) (5 \text{ minutes}) = 7 \text{ mrem}$ [no range on calculated value]

Transit dose of 6 mrem is added to calculated dose.

$7 \text{ mrem} + 6 \text{ mrem} = 13 \text{ mrem}$ [no range on calculated value]

Standard: Projected total dose calculated to be 13 mrem.

Comment:

* **Determine if the task can be performed without exceeding any limits**

From NMP-HP-001, the admin annual dose limit is 1000 mrem.

Total calculated annual dose would be 960 mrem + 13 mrem = 973 mrem (annual limit is not exceeded)

RWP 12-0101 task dose rate limit is 80 mrem/hour. Dose rate at valve is 84 mrem/hour on the survey map (task dose rate limit is exceeded).

RWP 12-0101 task dose limit is 15 mrem. Calculated dose received is 13 mrem (task dose limit is not exceeded)

NOTE TO EXAMINER: Examinee may indicate that 13 mrem exceeds the task dose limit since HP briefings require workers to notify HP when they reach 80% of their task dose limit (12 mrem for this task). This response is acceptable.

Standard: Determination is made that the task can NOT be performed without exceeding a limit.

Comment:

* **State the reason that the task was NOT permitted.**

Examinee identifies that the RWP task dose rate limit is exceeded (dose rate at valve is 84 mrem/hour with an RWP task dose rate limit of 80 mrem/hour)

NOTE TO EXAMINER: Examinee may indicate that 13 mrem exceeds the task dose limit since HP briefings require workers to notify HP when they reach 80% of their task dose limit (12 mrem for this task). This response is acceptable.

Standard: Correct reason is provided for why the task can NOT be performed.

Comment:

Terminating cue: Student returns initiating cue sheet.

KEY

Protective clothing requirements	<i>Booties Gloves Lab Coat</i>
Projected total gamma dose	<i>13 mrem</i>
Can you complete this task without exceeding any limits?	<p>(CIRCLE ONE)</p> <p>YES <input checked="" type="radio"/> NO</p>
REASON, if applicable	<p><i>RWP task dose rate limit of 80 mrem/hour is exceeded</i></p> <p>NOTE: Examinee may indicate that 13 mrem exceeds the task dose limit since HP briefings require workers to notify HP when they reach 80% of their task dose limit (12 mrem for this task). This response is acceptable.</p>

Verification of Completion

Job Performance Measure No. V-NRC-JP-00930-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question: _____

Response: _____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Initial Conditions: Unit 1 is at 100% power.

You have been assigned to close and danger tag 1-1204-U4-111 in Unit 1 containment.

You have been briefed by HP on the limitations of RWP 12-0101.

HP has permitted the minimum protective clothing requirements stated in the RWP.

Your accumulated dose for this year to date is 960 mrem.

The TOTAL round-trip TRANSIT dose will be 6 mrem.

The TOTAL time at the job site will be 5 minutes.

Assume neutron dose exposure is negligible.

Initiating Cue: Using RWP 12-0101 and the survey map of the Unit 1 containment work area, determine and document in the table below:

- a. Your protective clothing requirements.
- b. Your projected total gamma dose.
- c. If you can or cannot perform the task without exceeding any limits. If not, then state the reason.

Protective clothing requirements	
Projected total gamma dose	
Can you complete this task without exceeding any limits?	(CIRCLE ONE) YES NO
REASON, if applicable	

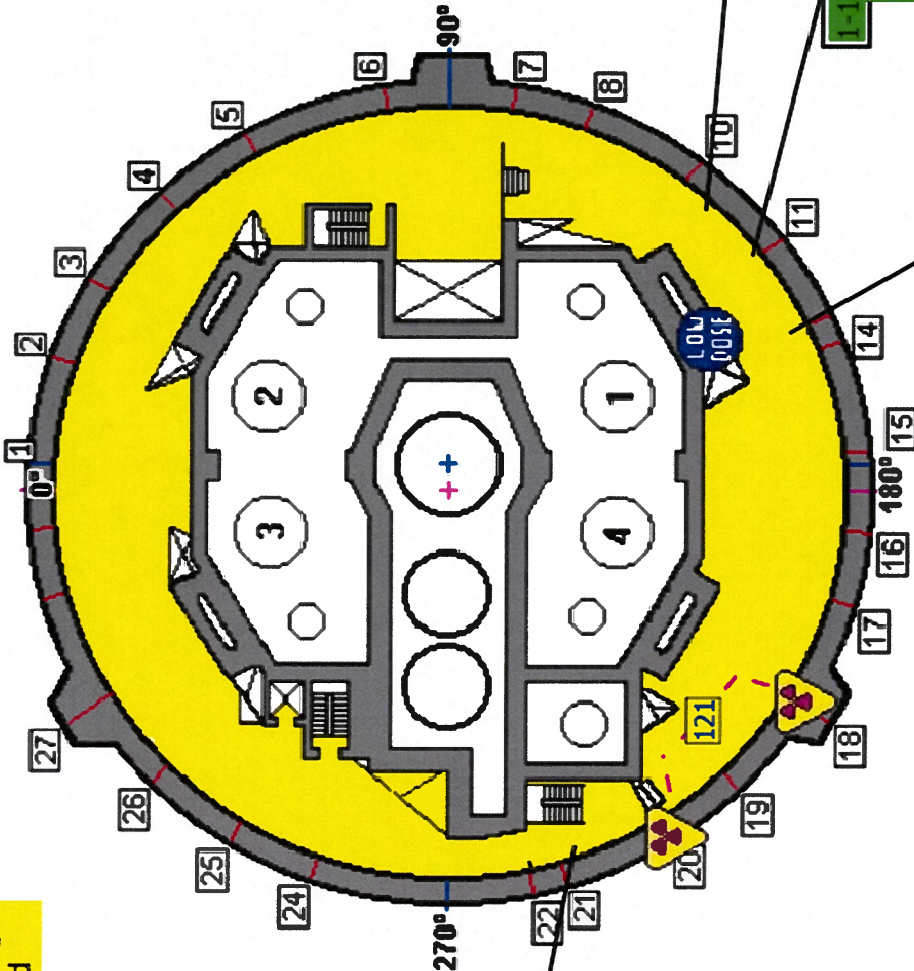
Site Overview

3	261'	
2	238'	
1	220'	
Au	210'	
Al	197'	
B	184'	
C	171'	

Survey #	146131
Date	02/13/2012 13:37
Status	Approved
Submitted By	Hall, Robert
Purpose	Specific Survey
Remarks	U1 ECCS Venting
% Power	100
Rx Mode	1
H2 Inj Lvl	0
Void Lvl	0
System	System Running
Component	N/A
Max Rate	121 mrem/hr
Max Cntrm	1000 dpm/100 cm2
Svy Dose	4.10

Map Links

U-1 CTMT Cage Door Posted



1204-X4-410/411
14 mrem/hr

1-1204-X4-435/436
67 mrem/hr

1-1204-U4-190/290
70 mrem/hr

1-1204-U4-111/285
84 mrem/hr

Radiation Work Permit

Plant Vogtle

12-0101

ACTIVE

Rev

0

Unit

1

Job Description MINOR WORK TASK, OPS TOURS AND SURVEILLANCES IN UNIT ONE CONTAINMENT.

Location GENERAL ENTRY INTO UNIT 1 CONTAINMENT

HP Coverage CONTINUOUS	Authorization SINGLE USE	Briefing SINGLE USE	Start Date 1/1/2012	End Date 12/31/2012 11:59:00 PM
			Job Supv. I KOCHERY	Ext. 3229

Radiological Conditions

AIRBORNE LEVELS: > 0.3 DAC PARTICULATE AND IODINE, >1.0 DAC NOBLE GAS
 CONTAMINATION : > 500,000 DPM/100CM2 BETA/GAMMA, >20 DPM/100CM2 ALPHA
 RAD LEVELS: > 1000 MREM/HR

Dosimetry

OSLD & ED, RELOCATE ONLY PER HP

Protective Clothing Requirements

'MINIMUM REQUIREMENTS IN "C" ZONE
 BOOTIES/GLOVES/LAB COAT
 DRESS REQ. MAY BE CHANGED AS HP DIRECTS

Respirators

NP
 PAPR
 SCBA
 Usage is Conditional per HP

Tasks

Description	DAD Alarms	
	Dose (mr)	Rate (mr/h)
SURVEILLANCES/TRANSMITTER CALS	15	80
WALKDOWNS/INSPECTIONS	15	80
LLRTS	15	80
HP JOB COVERAGE	15	80
CORRECTIVE MAINTENANCE	15	80
PREVENTATIVE MAINTENANCE	15	80
OPERATIONS SUPPORT/TAGGING ACTIVITIES	15	80

Instructions

- * FOLLOW ALL HP INSTRUCTIONS. * STAY IN DESIGNATED LOW DOSE AREAS WHENEVER POSSIBLE.
- * NO ENTRY BEHIND BIOSHIELD IN RX MODES 1 OR 2. * ALL PERSONNEL ARE TO REMAIN IN LINE OF SIGHT OF HP TECH WHEN RX IS IN MODES 1 OR 2.
- * ALARA IS TO BE NOTIFIED IF ANY ONE OF THE FOLLOWING UNEXPECTED RAD CONDITIONS ARE ENCOUNTERED: 1) AREAS > OR = 250 MREM/HR GAMMA (OR)
- 2) AREAS > OR = 100 MREM/HR NEUTRON WHEN COMPOSITE SURVEYS CAN NOT BE USED AND A NEUTRON SURVEY INSTRUMENT IS USED. *AVOID HOT SPOTS.
- * YOUR ENTRY SIGNATURE ON DATA SHEET 1 OF 00303-C INDICATES THAT YOU UNDERSTAND THAT MATERIAL TAKEN INTO CONTAINMENT MUST BE: (A) APPROVED (A PERMIT ISSUED PER PROCEDURE 00309-C) TO BE LEFT IN CONTAINMENT, OR
- * (B) BE ATTENDED AT ALL TIMES AND CAPABLE OF BEING REMOVED IN ONE TRIP.
- * YOUR EXIT SIGNATURE ON DATA SHEET 1 OF 00303-C SIGNIFIES THAT THERE IS NO LOOSE DEBRIS PRESENT IN ALL AREAS THAT YOU ENCOUNTERED THAT COULD BE TRANSPORTED TO THE CONTAINMENT SUMP AND CAUSE RESTRICTION OF THE ECCS PUMP SUCTIONS.
- * IF THE ROBOT IS TO BE USED FOR INSPECTION INSIDE THE BIOSHIELD, THE POTENTIAL EXISTS THAT THE ROBOT MAY BE TIPPED OVER DUE TO THE FORCE OF BLOWN AIR FROM THE CONTAINMENT CIRCULATOR FANS.
- * AS A PRECAUTION, HP SHOULD REQUEST FOR OPERATIONS TO TURN OFF THE CONTAINMENT CIRCULATOR FANS IN THE AFFECTED INSPECTION AREA WHENEVER THE ROBOT IS TO BE USED INSIDE THE BIOSHIELD.
- * THE FANS SHOULD REMAIN OFF UNTIL THE INSPECTION IS COMPLETE.
- * THE UNIT 1 CIRCULATOR FAN NUMBERS ARE AS FOLLOWS: 11503B7008 - WEST BIOSHIELD ENTRANCE, 11503B7004 - EAST BIOSHIELD ENTRANCE, 11503B7006 - BETWEEN LOOPS 1 & 4, AND 11503B7002 - BETWEEN LOOPS 2 & 3.

* RESPIRATORY EQUIPMENT MAY BE USED DEPENDING ON RADIOLOGICAL CONDITIONS OR WORK EVOLUTIONS.

* HP HAS STOP WORK AUTHORITY AS A CONTINGENCY WHEN RADIOLOGICAL CONDITIONS OR WORK PRACTICES DEVIATE SIGNIFICANTLY FROM PRE-JOB PLANNING AND/OR RWP.

* UNLESS DIRECTED BY HP SUPERVISION, WORKERS WILL WEAR AN EPD EXTERNAL ALARMING MODULE DURING AT POWER CONTAINMENT ENTRIES.

LARA BRIEFINGS WILL CLARIFY RWP REQUIREMENTS FOR DOSE RATE SPECIFICATIONS IN THE IMMEDIATE WORK AREA.

Prepared	11/3/2011 10:11 by IJGUY	Approved	12/15/2011 02:39 by GBRENENB	Suspended		Terminated	
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SRO Admin Job Performance Measure "E"

Facility: **Vogtle**

Task No: V-LO-TA-40005

Task Title: Classify an Emergency Event, Complete EN Form

JPM No: V-NRC-JP-NMP-EP-110-HL17

K/A Reference: G2.4.41 SRO 4.6

Examinee: _____ NRC Examiner: _____

Facility Evaluator: _____ Date: _____

Method of testing:

Simulated Performance _____ Actual Performance _____

Classroom _____ 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.

THIS IS A TIME CRITICAL JPM

- Initial Conditions:**
- **Unit 1 is in Mode 3 following a reactor trip from power 20 minutes ago:**
 - **SG # 1 has developed a 375 gpm SGTR, the crew actuated SI and has entered 19030-C, E-3 Steam Generator Tube Rupture.**
 - **1RE-005 and 1RE-006 are both indicating 2.6 E+6 mr/hr.**
 - **The Unit Operator after investigating a Main Steam Safety Leaking annunciator has just reported a Code Safety has lifted for SG # 1 and will NOT reseal.**
 - **The Outside Area Operator has confirmed steam blowing out of the safety valve.**
 - **Wind direction is from 69 degrees at a speed of 5.8 mph.**
 - **Stability class – D, no precipitation.**
 - **RE-12839C is in HIGH alarm.**
 - **WebEOC is not functional at all facilities.**
 - **The ENN communicator has completed roll call.**

Initiating Cue: **Complete Checklist 1-Classification Determination of NMP-EP-110, “Emergency Classification Determination and Initial Action” to determine the HIGHEST emergency classification level, (Do NOT use ED judgment as the basis for classification)**

AND

Complete Figure 1-Emergency Notification Form of NMP-EP-111, “Emergency Notifications.”

Task Standard: A Site Area Emergency declared with Emergency Notification Form (Figure 1) completed. No PARs are required.

Required Materials: 1. NMP-EP-110, "Emergency Classification Determination" Ver 1.0

2. NMP-EP-111, "Emergency Notifications" Ver 4.0

Signoff Checklist 2 steps 1 through 5.

3. NMP-EP-112, "Protective Action Recommendations" Ver 1.0

General References: None

Time Critical Task: YES

Validation Time: 15 minutes separately for both Classification Determination and Emergency Notification Form completion (30 minutes total).

Critical items on Emergency Notification Form are per Procedure 60201-C, "Simulator Training & Documentation", which specifies lines required to be done correctly to be satisfactory performance for Emergency Preparedness NRC Performance Indicator.

Performance Information

Critical steps denoted with an asterisk

**NMP-EP-110 Checklist 1
CLASSIFICATION DETERMINATION**

START TIME CRITICAL FOR CLASSIFICATION DETERMINATION _____

1. Determine the appropriate Initiating Condition Matrix for the classification of the event based on the current operating mode:

- HOT IC/EAL Matrix Evaluation Chart (Go to step 2) to evaluate the Barriers
- COLD IC/EAL Matrix Evaluation Chart (Go to step 3)

Standard: HOT IC/EAL checked and initialed by the ED.

Comment:

2. Evaluate the status of the fission product barrier using Figure 1, Fission Product Barrier Evaluation.

a. Select the condition of each fission product barrier:

	LOSS	POTENTIAL LOSS	INTACT
Fuel Cladding Integrity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reactor Coolant System	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Containment Integrity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b. Determine the highest applicable fission product barrier Initiating Condition (IC):

(select one) FG1 FS1 FA1 FU1 None

Standard: LOSS of RCS Barrier and LOSS of Containment Integrity barriers checked. Fuel Cladding Integrity checked as INTACT.

Comment:

5. Declare the event by approving the Emergency Classification.

_____ Date: ____/____/____ Time: ____
Emergency Director

Standard: Signature, Date and Time filled in.

STOP TIME CRITICAL FOR CLASSIFICATION DETERMINATION _____

Comment:

6. Obtain Meteorological Data (not required prior to event declaration):

Wind Direction (from) 69° Wind Speed 5.8 mph
Stability Class D Precipitation None

Standard: Candidate obtains Met Tower Data from Initial Conditions.

Comment:

7. Initiate Checklist 2, Emergency Plan Initiation

Standard: Complete steps 6 and 7 of Checklist 2, Emergency Plan Initiation.

Comment:

START TIME CRITICAL FOR EMERGENCY NOTIFICATION FORM _____

NMP-EP-111, Attachment 1, Part 1 – Guidance for Initial EN Form
Completion

Standard: Candidate selects NMP-EP-111 Attachment 1, Part 1

Comment:

-
- *1. Item 1: Message Number is automatically assigned during the transmittal process if using the electronic EN Form tool. Message numbers are sequential for the duration of the Event.**

Standard: Block A (Drill) is checked.

Comment:

- *2. Item 2: INITIAL will be checked for any notification associated with the declaration and/or change of an emergency classification.**

Standard: Block A (Initial) is checked.

Comment:

- 3. Item 3: SITE - Confirm the correct site is displayed. The site location is automatically completed based on prior selections.**

CONFIRMATION PHONE NUMBER: Select from the drop down list

Standard: Vogtle is already filled in.

Comment:

***4. Item 4: EMERGENCY CLASSIFICATION**

EAL NUMBER: Select from the drop down list (N/A for Manual method)

EVENT DESCRIPTION: Confirm the brief description of the initiating conditions for the emergency classification declared is auto completed based on the EAL number selected. The event description block cannot be edited. Additional information or information relative to competing events should be included on line 13, REMARKS. (N/A for Manual method)

Standard: SITE AREA EMERGENCY block checked. BASED ON EAL # FS1 filled in.
EAL description: Loss or Potential Loss of ANY Two Barriers.

Comment:

***5. Item 5: PROTECTIVE ACTION RECOMMENDATIONS**

Check Block "A" NONE

Standard: Block "A" NONE is checked.

Comment:

***6. Item 6: EMERGENCY RELEASE**

NOTES: 1. The Emergency Director has the discretion to declare that a radiological release is occurring based on plant conditions that indicate a release is in progress. (i.e., A Steam Generator Tube Rupture with an ARV lifting, site specific effluent radiation monitor readings, etc.)
2. Information for items 6, 7, and 9 are obtained from dose assessment (e.g., Dose Assessment Staff in either the TSC or the EOF, as appropriate).

<u>IF:</u>	<u>THEN:</u>
Dose assessment results (automated or manual) have been completed <u>AND</u> indicate an emergency radiological release is underway	Check <input checked="" type="checkbox"/> B . Is Occurring
At least one effluent monitor* is in alarm, <u>AND</u> completed dose projection results (automated or manual) are not available*	Check <input checked="" type="checkbox"/> B Is Occurring
Elevated indications do not exist on any effluent monitor*	Check <input type="checkbox"/> A . None
Dose assessment results (automated or manual) have been completed <u>AND</u> indicate an emergency radiological release is NOT underway	Check <input type="checkbox"/> A . None
Dose assessment results indicate an emergency radiological release occurred previously <u>AND</u> is no longer underway.	Check <input type="checkbox"/> C . Has Occurred"

*Applicable monitors are listed in Table 3

Standard: Block "B" (Is Occurring) is checked.

Comment:

7. Item 7: RELEASE SIGNIFICANCE (Monitors are listed in table 3)
Use the following table to determine the release significance:

IF an abnormal plant condition exists

<u>AND:</u>	<u>THEN:</u>
Elevated indications do not exist on any effluent monitor*	Check <input type="checkbox"/> A . Not applicable
Elevated indications exist on at least one effluent monitor* <u>AND</u> no effluent monitors are in alarm <u>AND</u> completed dose assessment results (automated or manual) are not available	Check <input type="checkbox"/> D Under evaluation
Item 6B or 6C is marked and <u>NO</u> effluent monitor is or has been in alarm OR has exceeded the specified threshold	Check <input checked="" type="checkbox"/> B Within normal operating limits
6B or 6C is marked and <u>ANY</u> effluent monitor is or has been in alarm OR has exceeded the specified threshold	Check " <input type="checkbox"/> C . Above normal operating limits
Dose assessment results indicate an emergency radiological release occurred previously <u>AND</u> is no longer underway.	Check " <input type="checkbox"/> C . Above normal operating limits

*Applicable monitors are listed in Table 3

Standard: Block "C" Above normal operating limits, is checked.

Comment:

8. Item 8: EVENT PROGNOSIS

Indicative of plant conditions and the ability to prevent core damage (e.g., improving, stable, or degrading).

Mark box A Improving if mitigation efforts appear successful, progressing toward termination.

Mark box B Stable if escalation to a higher classification is unlikely based on current conditions.

Mark box C Degrading if escalation to a higher emergency classification or PAR change is likely.

Standard: Block "B" (Stable) is checked.

Comment:

NOTE:

- 1. All reported meteorological data should be 15 minute average data. Data provided for meteorological parameters should be consistent with data utilized for PARs dose projections reported in line 16, if applicable.**
- 2. Inconsistencies in meteorological data utilized for dose projections and the meteorological data reported on emergency notification forms can result in discrepancies in dose assessments performed by SNC and applicable State and Federal agencies.**

*9. Item 9: METEOROLOGICAL DATA

Record the 15-minute averaged "Wind Direction from", Wind Speed and Precipitation values and check the appropriate "Stability Class (ΔT)". Sources for meteorological data are listed in Table 4.

Standard: Met Tower Data given in Initial Conditions. Wind direction is from **69 degrees** at a speed of **5.8 mph**. Stability class – D, with no precipitation. Only direction and speed are critical.

Comment:

***10. Item 10: DECLARATION or TERMINATION**

Enter the time and date (mm/dd/yy) when the current emergency classification was declared or terminated.

Standard: Block "A" (Declaration) checked. Time and Date filled in from Checklist 1, NMP-EP-110, Emergency Classification Determination.

Comment:

***11. Item 11: AFFECTED UNIT(S) Check the affected unit or "ALL" block if both units are affected by the EAL indicated in item 4. For events involving equipment that is common to both units, "ALL" should be selected.**

Standard: Block "1" checked.

Comment:

<p>NOTE: The unaffected unit's status is not required for initial notifications. However, the unaffected unit's status is required for follow-up notifications.</p>
--

12. Item 12: UNIT STATUS

IF the affected unit is operating, THEN indicate the % power. If the affected unit is shutdown, then enter the time (HH:MM) and date of the shutdown.

Standard: Block "A" (Unit 1) checked. Appropriate power and shutdown time (20 minutes ago) filled in.

No information for Unit 2 is given, no information required.

Comment:

13. Item 13: REMARKS

Standard: None filled in.

Comment:

NOTE: Lines 14 through 16 (FOLLOW-UP ACTIONS) should be completed and transmitted as soon as dose projection information is available after the onset of any release otherwise, GO to Step 17 - APPROVAL.

14. Item 14: RELEASE CHARACTERIZATION

15. Item 15: PROJECTION PARAMETERS

16. Item 16: PROJECTED DOSE

Standard: Items 14 – 16 are left blank.

Comment:

STOP TIME CRITICAL FOR EMERGENCY NOTIFICATION FORM _____

***17. Item 17: Review and Approval**

a. Manual Form - IF possible, obtain a peer check of the completed form. The Emergency Director must approve the form. Verbal authorization may be given to a delegate such as the EOF Manager to sign on behalf of the ED.

Standard: Signature Time and Date filled in within 15 minutes of Classification Declaration Block on Line 10.

Comment:

KEY Darkened boxes and highlighted text are critical
Figure 1 – Emergency Notification Form (page 1 of 2)

1. DRILL ACTUAL EVENT MESSAGE # 1
 2. INITIAL FOLLOW-UP NOTIFICATION: TIME _____ DATE ____/____/____ AUTHENTICATION # _____
 3. SITE: Vogtle Confirmation Phone # 1-706-826-3562(SIM)

4. EMERGENCY CLASSIFICATION: UNUSUAL EVENT ALERT SITE AREA EMERGENCY GENERAL EMERGENCY
 BASED ON EAL# FS1 EAL DESCRIPTION: Loss or Potential Loss of Two Barriers

5. PROTECTIVE ACTION RECOMMENDATIONS: NONE
 EVACUATE _____
 SHELTER _____
 Advise Remainder of EPZ to Monitor Local Radio/TV Stations/Tone Alert Radios for Additional Information and Consider the use of KI (potassium iodide) in accordance with State plans and policy.
 OTHER _____

6. EMERGENCY RELEASE: None Is Occurring Has Occurred

7. RELEASE SIGNIFICANCE: Not applicable Within normal operating limits Above normal operating limits Under evaluation

8. EVENT PROGNOSIS: Improving Stable Degrading

9. METEOROLOGICAL DATA: Wind Direction from 69 degrees* Wind Speed 5.8 mph*

(*May not be available for Initial Notifications)* Precipitation None * Stability Class* A B C D E F G

10. DECLARATION TERMINATION Time Checklist 1 line 5 Date checklist 1 date / /

11. AFFECTED UNIT(S): 1 2 All

12. UNIT STATUS: U1 0 % Power Shutdown at Time T-20 min Date Today / /
 (Unaffected Unit(s) Status Not Required for Initial Notifications) U2 _____ % Power Shutdown at Time _____ Date ____/____/____

13. REMARKS: None

FOLLOW-UP INFORMATION (Lines 14 through 16 Not Required for Initial Notifications)

EMERGENCY RELEASE DATA NOT REQUIRED IF LINE 6 A IS SELECTED.

14. RELEASE CHARACTERIZATION: TYPE: Elevated Mixed Ground UNITS: Ci Ci/sec µCi/sec

MAGNITUDE: Noble Gases: _____ Iodines: _____ Particulates: _____ Other: _____

FORM: Airborne Start Time _____ Date ____/____/____ Stop Time _____ Date ____/____/____
 Liquid Start Time _____ Date ____/____/____ Stop Time _____ Date ____/____/____

15. PROJECTION PARAMETERS: Projection period: _____ Hours Estimated Release Duration _____ Hours
 Projection performed: Time ____/____/____ Date ____/____/____ Accident Type: _____

16. PROJECTED DOSE: DISTANCE TEDE (mrem) Adult Thyroid CDE (mrem)
 Site boundary _____ _____
 2 Miles _____ _____
 5 Miles _____ _____
 10 Miles _____ _____

17. APPROVED BY: Signature Title _____ Time <T+15 from line 10 Date / TODAY /

NOTIFIED BY: _____

RECEIVED BY: _____ Time _____ Date ____/____/____
 (To be completed by receiving organization)

Verification of Completion

Job Performance Measure No. V-NRC-JP-NMP-EP-112-HL17

Examinee's Name:

Examiner's Name:

Date Performed:

Number of Attempts:

Time to Complete:

Question Documentation:

Question: _____

Response: _____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

THIS IS A TIME CRITICAL JPM

- Initial Conditions:**
- Unit 1 is in Mode 3 following a reactor trip from power 20 minutes ago:
 - SG # 1 has developed a 375 gpm SGTR, the crew actuated SI and has entered 19030-C, E-3 Steam Generator Tube Rupture.
 - 1RE-005 and 1RE-006 are both indicating 2.6 E+6 mr/hr.
 - The Unit Operator after investigating a Main Steam Safety Leaking annunciator has just reported a Code Safety has lifted for SG # 1 and will NOT reset.
 - The Outside Area Operator has confirmed steam blowing out of the safety valve.
 - Wind direction is from 69 degrees at a speed of 5.8 mph.
 - Stability class – D, no precipitation.
 - RE-12839C is in HIGH alarm.
 - WebEOC is not functional at all facilities.
 - The ENN communicator has completed roll call.

Initiating Cue: Complete Checklist 1-Classification Determination of NMP-EP-110, "Emergency Classification Determination and Initial Action" to determine the HIGHEST emergency classification level,
(Do NOT use ED judgment as the basis for classification)

AND

Complete Figure 1-Emergency Notification Form of NMP-EP-111, "Emergency Notifications."