

Final Submittal

**VOGTLE MAY 2005 EXAM  
50-424, 425/2005-301**

**MAY 17 - 25, 2005  
MAY 27, 2005 (WRITTEN)**

Administrative JPMs



*Energy to Serve Your World™*

**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**DETERMINE MODE CHANGE REQUIREMENTS**

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** Unit 1 is currently in mode 5, with loops filled, preparing for a post refueling start up with the following conditions:

RCS temperature 190 degrees F, loops filled  
RCP's 1 & 4 are running  
PZR level at 25%, with steam bubble established  
RHR A in service for Decay Heat Removal  
RHR B in standby for Decay Heat Removal  
SG's NR level at 65%

**Equipment OOS:**

CCP-1A  
NSCT Train A fan #2  
MDAFWP 1A  
SG ARV loop 2  
Both SI pumps in PTL  
PZR level channel 461 failed low – B/S tripped  
RE-2562A, CNMT process particulate radiation monitor  
Piping Penetration Area Filtration & Exhaust Fan Train A

**Assigned Task:** Determine if Tech Spec requirements for mode 4 entry satisfied. If not, correctly identify all restraints for mode 4 entry.

JPM INFORMATION

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_/\_\_\_/\_\_\_

JPM TITLE: Determine mode change requirements

COMPLETION TIME: 30 minutes

Application: RO/SRO

Task Number: 63013

K/A Number: G2.1.10

RO: 2.7 SRO: 3.9

10CFR55.45 Ref.: 13

Evaluation Method  Performed

Simulated

Evaluation Location  Simulator

Control Room

Unit 1

Unit 2

Performance Time: \_\_\_\_\_minutes

**OVERALL JPM EVALUATION**

**SATISFACTORY**

**UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

## INSTRUCTIONS TO EXAMINER

Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "©..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:**
1. Technical Specifications and Bases
  2. Technical Requirements Manual

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**Initial Conditions:** Unit 1 is currently in mode 5, with loops filled, preparing for a post refueling start up with the following conditions:

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RCP's 1 & 4 are running  
PZR level at 25%, with steam bubble established  
RHR A in service for Decay Heat Removal  
RHR B in standby for Decay Heat Removal  
SG's NR level at 65%

**Equipment OOS:**

CCP-1A  
NSCT Train A fan #2  
MDAFWP 1A  
SG ARV loop 2  
Both SI pumps in PTL  
PZR level channel 461 failed low – B/S tripped  
RE-2562A, CNMT process particulate radiation monitor  
Piping Penetration Area Filtration & Exhaust Fan Train A

**ASSIGNED TASK:** Determine if Tech Spec requirements for mode 4 entry satisfied. If not, correctly identify all restraints for mode 4 entry.

**TASK STANDARD:** Appropriate mode 4 restraints, if any, identified.

JPM STEPS

START TIME: \_\_\_\_\_

**STEP 1**

**CRITICAL (◆)**

SAT  UNSAT

**Determine LCO's impacted**

• CCP-1A

LCO 3.5.3 ECCS – Shutdown, applies but is still met (INFO LCO)

◆ NSCT Train A fan #2

LCO 3.7.9 Ultimate Heat Sink (UHS), applies and condition B applicable

• MDAFW Pump 1A

LCO 3.7.5 Auxiliary Feedwater (AFW) System, does not apply until mode 3

• SG ARV loop 2

LCO 3.7.4 Atmospheric Relief Valves (ARVs), does not apply until mode 3

• Both SI pumps in PTL

LCO 3.4.12 Cold Overpressure Protection Systems (COPS), applicable and met

• PZR level transmitter 461 failed low – B/S tripped

LCO 3.3.1 Reactor Trip System (RTS) Instrumentation, Functional Unit 9,  
does not apply until mode 1 > P-7

• 1RE-2562A, CNMT process particulate radiation monitor

LCO 3.4.15 RCS Leakage Detection Instrumentation, applies but is still met (INFO LCO)

◆ Piping Penetration Area Filtration Unit & Exhaust Fan Train A

LCO 3.7.13 PPAFES, applies and condition A applicable

JPM STEPS

STEP 2

CRITICAL (♦)

SAT  UNSAT

**Determine that Mode 4 entry is restrained**

- ♦ LCO 3.7.9 condition B applies to mode 4 and LCO 3.0.4 is applicable. This condition would NOT allow continued operation of the unit for an unlimited period of time.
- ♦ LCO 3.7.13 condition A applies to mode 4 and LCO 3.0.4 is applicable. This condition would NOT allow continued operation of the unit for an unlimited period of time

STEP 3

SAT  UNSAT

**Report to SS**

- Mode 4 entry reviewed and is restrained by NSCT Train 'A' fan #2 and Piping Penetration Area Filtration & Exhaust Fan Train "A" being out of service

STOP TIME: \_\_\_\_\_

**Field Notes**



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PLANT VOGTLE

CONTROL ROOM OPERATOR  
JOB PERFORMANCE MEASURE

DETERMINE MODE CHANGE REQUIREMENTS

- Deleted: RG-JP-
- Deleted: 37021-001-02A
- Deleted: 19200-001
- Deleted: MONITOR / EVALUATE CSFSTS - CORE COOLING
- Deleted: Revision
- Deleted: 2
- Deleted: 31
- Deleted: February 10, 1998
- Deleted: April 30, 2001
- Deleted: Written By :
- Deleted: George Gunn
- Deleted: M. C. Henry Date:
- Deleted: 2
- Deleted: 4/
- Deleted: 10
- Deleted: 30/
- Deleted: 98
- Deleted: 2001
- Deleted: 2
- Deleted: 7
- Deleted: x
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- Deleted: 10
- Deleted: 09
- Deleted: xx
- Deleted: /
- Deleted: 98
- Deleted: 2001

This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

**Initial Conditions:** Unit 1 is currently in mode 5, with loops filled, preparing for a post refueling start up with the following conditions:

RCS temperature 190 degrees F, loops filled  
RCP's 1 & 4 are running  
PZR level at 25%, with steam bubble established  
RHR A in service for Decay Heat Removal  
RHR B in standby for Decay Heat Removal  
SG's NR level at 65%

**Equipment OOS:**

CCP-1A  
NSCT Train A fan #2  
MDAFPW 1A  
SG ARV loop 2  
Both SI pumps in PTL  
PZR level channel 461 failed low -- B/S tripped  
RE-2562A, CNMT process particulate radiation monitor  
Piping Penetration Area Filtration & Exhaust Fan Train A

**Assigned Task:** Determine if Tech Spec requirements for mode 4 entry satisfied. If not, correctly identify all restraints for mode 4 entry.

**Deleted:** Following a transition from 19000-C, the crew determined that Critical Safety Function monitoring should be implemented.

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**Assigned Task:** The USS has directed you to "Evaluate the CSFSTs and identify any required transition". ¶

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**Task Standard:** Appropriate FRP identified for existing CSF challenges. ¶

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JPM INFORMATION

Deleted: RQ-JP-  
Deleted: 37021-001-02A  
Deleted: 19200-001

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_/\_\_\_/\_\_\_

JPM TITLE: Determine mode change requirements

COMPLETION TIME: 30 minutes

Application: RO/SRO  
Task Number: 63013  
K/A Number: G2.1.10 RO: 2.7 SRO: 3.9  
10CFR55.45 Ref.: 13

Deleted: Monitor / Evaluate CSFSTs - Core Cooling  
Deleted: REVISION:  
Deleted: 2  
Deleted: 3  
Deleted: February 10, 1998  
Deleted: April 30, 2001  
Deleted: 8  
Deleted: 37004  
Deleted: 030011EG12  
Deleted: 4.0  
Deleted: 4.1  
Deleted: 12

Evaluation Method  Performed  Simulated

Evaluation Location  Simulator  Control Room  Unit 1  Unit 2

Performance Time: \_\_\_\_\_ minutes

OVERALL JPM EVALUATION  SATISFACTORY  UNSATISFACTORY

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

INSTRUCTIONS TO EXAMINER

Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "©..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:
1. Technical Specifications and Bases
  2. Technical Requirements Manual

DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**Initial Conditions:** Unit 1 is currently in mode 5, with loops filled, preparing for a post refueling start up with the following conditions:

- RCS temperature 190 degrees F, loops filled
- RCP's 1 & 4 are running
- PZR level at 25%, with steam bubble established
- RHR A in service for Decay Heat Removal
- RHR B in standby for Decay Heat Removal
- SG's NR level at 65%

**Equipment OOS:**

- CCP-1A
- NSCT Train A fan #2
- MDAFWP 1A
- SG ARV loop 2
- Both SI pumps in PTL
- PZR level channel 461 failed low - B/S tripped
- RE-2562A, CNMT process particulate radiation monitor
- Piping Penetration Area Filtration & Exhaust Fan Train A

**ASSIGNED TASK:** Determine if Tech Spec requirements for mode 4 entry satisfied. If not, correctly identify all restraints for mode 4 entry.

**TASK STANDARD:** Appropriate mode 4 restraints, if any, identified.

- Deleted: RC-JP-
- Deleted: 37021-001-02A
- Deleted: 19200-001
- Deleted: This JPM is based on 19200-C.
- Deleted: 19200-C, Critical Safety Function Status Trees
- Formatted: Font: Not Bold
- Deleted: SIMULATOR
- SETUP: 1. Reset to IC14 (MOL 100%)
- 2. Insert malfunction RC03A (DBA LOCA)
- 3. Stop all RCPs
- Deleted:
- Deleted: ¶
- 4. Throttle AFW to = 200 gpm/SG.
- 5. Set RF: ED02(TC > Sat) = 0.2
- Deleted:
- Deleted: ¶
- 6. Set RF: ED01(O/R) ... [1]
- Deleted:
- Deleted: (TC > Sat) = (25 ... [2]
- Deleted: 8
- Deleted: 10 minutes
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- Formatted: Tabs: Not at 3.5"
- Deleted: INITIAL ... [3]
- Deleted: The USS has dire ... [4]
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- Formatted: ... [5]
- Formatted: Font: 10 pt
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- Deleted: Appropriate FRP ... [6]

JPM STEPS

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Deleted: 37021-001-02A  
Deleted: 19200-001

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
SAT  UNSAT

**Determine LCO's impacted**

• CCP-1A  
LCO 3.5.3 ECCS – Shutdown, applies but is still met (INFO LCO)

♦ NSCT Train A fan #2  
LCO 3.7.9 Ultimate Heat Sink (UHS), applies and condition B applicable

• MDAFW Pump 1A  
LCO 3.7.5 Auxiliary Feedwater (AFW) System, does not apply until mode 3

• SG ARV loop 2  
LCO 3.7.4 Atmospheric Relief Valves (ARVs), does not apply until mode 3

• Both SI pumps in PTL  
LCO 3.4.12 Cold Overpressure Protection Systems (COPS), applicable and met

• PZR level transmitter 461 failed low – B/S tripped  
LCO 3.3.1 Reactor Trip System (RTS) Instrumentation, Functional Unit 9,  
does not apply until mode 1 > P-7

• 1RE-2562A, CNMT process particulate radiation monitor  
LCO 3.4.15 RCS Leakage Detection Instrumentation, applies but is still met (INFO LCO)

♦ Piping Penetration Area Filtration Unit & Exhaust Fan Train A  
LCO 3.7.13 PPAFES, applies and condition A applicable

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Deleted:  ♦ Core Cooling  
ORANGE Path  
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JPM STEPS

Deleted: RQ-JP-  
Deleted: 37021-001-02A  
Deleted: 19200-001

STEP 2  
CRITICAL (♦)  
SAT  UNSAT

Determine that Mode 4 entry is restrained.

♦ LCO 3.7.9 condition B applies to mode 4 and LCO 3.0.4 is applicable. This condition would NOT allow continued operation of the unit for an unlimited period of time.

♦ LCO 3.7.13 condition A applies to mode 4 and LCO 3.0.4 is applicable. This condition would NOT allow continued operation of the unit for an unlimited period of time.

Deleted: Determine appropriate FRF  
Deleted: \_\_\_\_\_

Deleted: 19222-C selected

STEP 3  
SAT  UNSAT

Report to SS

♦ Mode 4 entry reviewed and is restrained by NSCT Train 'A' fan #2 and Piping Penetration Area Filtration & Exhaust Fan Train "A" being out of service

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Deleted: Transition to 19222 is required based on the CSFSTs.

STOP TIME: \_\_\_\_\_

Field Notes

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6. Set RF: ED01(O/R CETCs) = OVERRIDE
7. Set RF: ED02

(TC > Sat) = {725 - current CETC}

8. Set RF: ED04(Target RVLIS) = {current RVLIS FR value}
9. Set RF: ED03(O/R RVLIS) = OVERRIDE
10. Set RF: ED04(Target RVLIS) = 57
11. Ack/Reset Alarms
12. Freeze simulator
13. **Turn off all IPC monitors (Ensure IPC in computer room is also turned off)**

*Note: The simulator should remain in FREEZE for this JPM*

Setup time:

**INITIAL CONDITIONS:** Following a transition from 19000-C, the crew determined that Critical Safety Function monitoring should be implemented.

The USS has directed you to "Evaluate the CSFSTs and identify any required transition".

box1, Border: Top: (No border), Bottom: (No border), Left: (No border), Right: (No border)

Appropriate FRP identified for existing CSF challenges.



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**LIFE SAVING IN EMERGENCY CONDITIONS**

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** A radiological emergency is in progress on Unit 2. A missing person has been located. He was working on valve from an elevated platform and is unconscious, hanging from his safety harness. This person must be moved from this position in order to survive. The rescuer will have to stand 2 feet from a point source. The estimated time for the rescuer to remove this injured person is 60 minutes. The point source reads 152 Rem/Hr at 1 foot.

**Data:** Emergency exposure # 1  
Preparer & HP Supervisor: J. Smith  
Rescuer name: John Doe  
SSN: 123-45-6789  
TLD # 12345  
Exposure history: No previous emergency exposures

**Assigned Task:**

1. Calculate the projected dose to the rescuer.
2. Determine who must approve this emergency exposure
3. Determine the requirements the rescuer must satisfy for this planned emergency exposure
4. Given 91301-C, complete Data Sheet 1 for this exposure

**JPM INFORMATION**

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_/\_\_\_/\_\_\_

JPM TITLE:           Life Saving in Emergency Conditions

COMPLETION TIME:   25 minutes

Application:           SRO  
Task Number:         40005  
K/A Number:         G2.3.4           RO:   2.5     SRO: 3.1  
10CFR55.45 Ref.:    10

Evaluation Method     Performed            Simulated  
Evaluation Location    Simulator            Control Room    Unit 1    Unit 2  
Performance Time:    \_\_\_\_\_minutes

**OVERALL JPM EVALUATION**        **SATISFACTORY**        **UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

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## INSTRUCTIONS TO EXAMINER

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This JPM is based on the latest rev of 91301-C. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

**REQUIRED ITEMS:**

1. 91301-C, Emergency Exposure Guidelines
2. Calculator

**SIMULATOR SETUP:** None

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** A radiological emergency is in progress on Unit 2. A missing person has been located. He was working on valve from an elevated platform and is unconscious, hanging from his safety harness. This person must be moved from this position in order to survive. The rescuer will have to stand 2 feet from a point source. The estimated time for the rescuer to remove this injured person is 60 minutes. The point source reads 152 Rem/Hr at 1 foot.

**DATA:**

EMERGENCY EXPOSURE # 1  
PREPARER & HP SUPERVISOR: J. SMITH  
RESCUER NAME: JOHN DOE  
SSN: 123-45-6789  
TLD # 12345  
Exposure history: No previous emergency exposures

**ASSIGNED TASK:**

1. Calculate the projected dose to the rescuer.
2. Determine who must approve this emergency exposure
3. Determine the requirements the rescuer must satisfy for this planned emergency exposure
4. Given 91301-C complete Data Sheet 1 for this exposure

**TASK STANDARD:** Data Sheet 1 of 91301-C properly completed

JPM STEPS

START TIME: \_\_\_\_\_

STEP 1

CRITICAL (◆)

SAT  UNSAT

Calculate projected dose

- ◆ Dose projection =  $152 \text{ Rem/hr} \times (1/2)^2 \times 60 \text{ min} \times (1 \text{ hr} / 60 \text{ min}) = 38 \text{ Rem} (>25 \text{ Rem} \ \& \ < 50 \text{ Rem})$

STEP 2

CRITICAL (◆)

SAT  UNSAT

Approval Requirements Determined

- ◆ Emergency Director must approve this exposure since it exceeds 10CFR20 limits

STEP 3

CRITICAL (◆)

SAT  UNSAT

Determine requirements for rescuer

- ◆ Per 91301-C rescuer must be a volunteer
- ◆ Familiar with the risks
- ◆ Briefed on the emergency situation
- ◆ Not a declared pregnant female
- ◆ Limited to a one time occurrence for > 25 Rem lifesaving

JPM STEPS

STEP 4

CRITICAL (◆)

SAT  UNSAT

91301-C data sheet 1 properly completed

- Exposure number #1 entered
- Prepared by/date/time blocks completed
- ◆ Lifesaving block circled
- Task description filled in
- Dose limit: >25 Rem
- ◆ Projected dose: Calculated value from step 1 of JPM
- ◆ Rescuer name/SSN/signature **(1)**/TLD number entered on form

**(1) CUE:** After student identifies that the rescuer must sign the form state “ the rescuer, John Doe, has signed the form”.

- Health Physics Supervisor signature
- ◆ ED approval signature or initials of person receiving verbal authorization for authorization to exceed 10CFR20 exposure limits.

STOP TIME: \_\_\_\_\_

**Field Notes**

91301-C data sheet 1 example

DATA SHEET 1

PERMIT FOR EMERGENCY RADIATION EXPOSURE # 1

Prepared by: J. Smith Date: \_\_\_\_\_ Time: \_\_\_\_\_

Task Type: (circle one) Protecting Valuable Property  
Lifesaving or protection of large population

Task Description: Move injured person outside of room with high radiation field

DOSE LIMITS: > 25 REM TEDE

ACKNOWLEDGMENT

For doses greater than 25 REM TEDE

1. I am a volunteer to receive a dose of greater than 25 REM TEDE.
2. I am fully aware of the risks involved in receiving the estimated dose of 38 REM TEDE.

NAME	SSN	SIGNATURE	TLD NUMBER
<u>John Doe</u>	<u>123-45-6789</u>	<u>signature</u>	<u>12345</u>
_____	_____	_____	_____
_____	_____	_____	_____

\* \_\_\_\_\_  
Health Physics Supervisor \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Authorization to exceed 10CFR20 exposure limits is granted.

\* Signature or verbal authorization  
Emergency Director \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

\* Verbal authorization shall be noted by initials of person receiving verbal authorization from IIP Supervisor or Emergency Director. Emergency Director signature to be obtained when time permits.



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**LIFE SAVING IN EMERGENCY CONDITIONS**

Deleted: RQ-JP-19000-006

1  
EVALUATE ECCS TERMINATION  
CRITERIA - INJECTION FLOW  
REQUIRED

Deleted: Revision 1

Deleted: May 1, 2001

Deleted: Written By : M. C.  
Henry Date: 5/01/2001

Deleted: Approved By : R. D.  
Brigdon Date: 5/16/2001

This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

**Initial Conditions:** A radiological emergency is in progress on Unit 2. A missing person has been located. He was working on valve from an elevated platform and is unconscious, hanging from his safety harness. This person must be moved from this position in order to survive. The rescuer will have to stand 2 feet from a point source. The estimated time for the rescuer to remove this injured person is 60 minutes. The point source reads 152 Rem/Hr at 1 foot.

**Data:** Emergency exposure # 1  
Preparer & HP Supervisor: J. Smith  
Rescuer name: John Doe  
SSN: 123-45-6789  
TLD # 12345  
Exposure history: No previous emergency exposures

- Assigned Task:**
1. Calculate the projected dose to the rescuer.
  2. Determine who must approve this emergency exposure
  3. Determine the requirements the rescuer must satisfy for this planned emergency exposure
  4. Given 91301-C, complete Data Sheet 1 for this exposure.

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**Deleted:** A steam dump header line break resulted in a low steamline pressure SI and main steamline isolation. The crew has completed 19000 through step 28.

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**Deleted:** The USS has directed you to "Check if ECCS flow should be reduced using step 29 of 19000."

**Deleted:** ¶

**Task Standard:** ECCS termination criteria monitored and evaluated.¶

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JPM INFORMATION

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

JPM TITLE: Life Saving in Emergency Conditions

COMPLETION TIME: 25 minutes

Application: SRQ

Task Number: 40005

K/A Number: G2.3.4

10CFR55.45 Ref.: 1Q

RO: 2.5 SRO: 3.1

Deleted: Evaluate ECCS Termination Criteria - Injection Flow Required

Deleted: REVISION: 1 May 1, 2001

Deleted: 5

Deleted: /SRO

Deleted: 37005

Deleted: 000040EA205

Deleted: 4.1

Deleted: 4.5

Deleted: 7, 12

Evaluation Method  Performed  Simulated

Evaluation Location  Simulator  Control Room  Unit 1  Unit 2

Performance Time: \_\_\_\_\_minutes

OVERALL JPM EVALUATION  SATISFACTORY  UNSATISFACTORY

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

INSTRUCTIONS TO EXAMINER

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- REQUIRED ITEMS:
1. 91301-C, Emergency Exposure Guidelines
  2. Calculator

SIMULATOR SETUP: None

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- Deleted: 1. Reset to IC14 (MOL 100%)  
 2. Initiate manual SI  
 3. Initiate manual MSLI  
 4. Throttle total AFW flow to stabilize RCS temperature  
 5. Insert malfunction PR01A at 10% severity and increase severity if required to ensure RCS pressure is slowly lowering  
 6. Ack/Reset alarms  
 7. Freeze simulator

Deleted: Setup time: 7 minutes

DIRECTIONS TO OPERATOR

You will be given information describing the initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

INITIAL CONDITIONS: A radiological emergency is in progress on Unit 2. A missing person has been located. He was working on valve from an elevated platform and is unconscious, hanging from his safety harness. This person must be moved from this position in order to survive. The rescuer will have to stand 2 feet from a point source. The estimated time for the rescuer to remove this injured person is 60 minutes. The point source reads 152 Rem/Hr at 1 foot.

DATA: EMERGENCY EXPOSURE # 1  
PREPARER & HP SUPERVISOR: J. SMITH  
RESCUER NAME: JOHN DOE  
SSN: 123-45-6789  
TLD # 12345  
Exposure history: No previous emergency exposures

- ASSIGNED TASK:
1. Calculate the projected dose to the rescuer.
  2. Determine who must approve this emergency exposure
  3. Determine the requirements the rescuer must satisfy for this planned emergency exposure
  4. Given 91301-C complete Data Sheet 1 for this exposure.

TASK STANDARD: Data Sheet 1 of 91301-C properly completed.

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Deleted: A steam dump header line break resulted in a low steamline pressure SI and main steamline isolation. The crew has completed 19000 through step 28.

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Deleted: The USS has directed you to "Check if ECCS flow should be reduced using step 29 of 19000."

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Deleted: ECCS termination criteria monitored and evaluated

JPM STEPS

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
 SAT  UNSAT

---

Calculate projected dose.

---

♦ Dose projection =  $152 \text{ Rem/hr} \times (1/2)^2 \times 60 \text{ min} \times (1 \text{ hr} / 60 \text{ min}) = 38 \text{ Rem} (>25 \text{ Rem} \ \& \ < 50 \text{ Rem})$

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Deleted: Determine subcooling

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Deleted: Subcooling determined to be > 24°F

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Deleted: Verify adequate heat sink

Deleted: • Either of the following observed:†

- AFW flow > 570 gpm†

or†

- NR level in at least one SG > 10%

Deleted: Determine RCS pressure response

**STEP 2**  
**CRITICAL (♦)**  
 SAT  UNSAT

---

Approval Requirements Determined

---

♦ Emergency Director must approve this exposure since it exceeds 10CFR20 limits

**STEP 3**  
**CRITICAL (♦)**  
 SAT  UNSAT

---

Determine requirements for rescuer.

---

♦ Per 91301-C rescuer must be a volunteer

• Familiar with the risks

• Briefed on the emergency situation

• Not a declared pregnant female

• Limited to a one time occurrence for > 25 Rem lifesaving

Deleted: RCS pressure observed to be lowering

JPM STEPS

STEP 4

CRITICAL (♦)

SAT  UNSAT

91301-C data sheet 1 properly completed.

Deleted: Report to USS

- Exposure number #1 entered
- Prepared by/date/time blocks completed
- ♦ Lifesaving block circled
- Task description filled in
- Dose limit: >25 Rem
- ♦ Projected dose: Calculated value from step 1 of JPM
- ♦ Rescuer name/SSN/signature (1)/TLD number entered on form

(1) CUE: After student identifies that the rescuer must sign the form state " the rescuer, John Doe, has signed the form".

- Health Physics Supervisor signature
- ♦ ED approval signature or initials of person receiving verbal authorization for authorization to exceed 10CFR20 exposure limits.

Deleted: ECCS should not be reduced

STOP TIME: .....

Field Notes

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**DATA SHEET 1**

**PERMIT FOR EMERGENCY RADIATION EXPOSURE # 1**

Prepared by: J. Smith Date: \_\_\_\_\_ Time: \_\_\_\_\_

Task Type: (circle one) Protecting Valuable Property  
Lifesaving or protection of large population

Task Description: Move injured person outside of room with high radiation field

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DOSE LIMITS: > 25 REM TEDE

**ACKNOWLEDGMENT**

**For doses greater than 25 REM TEDE**

1. I am a volunteer to receive a dose of greater than 25 REM TEDE.
2. I am fully aware of the risks involved in receiving the estimated dose of 38 REM TEDE.

<u>NAME</u>	<u>SSN</u>	<u>SIGNATURE</u>	<u>TLD NUMBER</u>
<u>John Doe</u>	<u>123-45-6789</u>	<u>signature</u>	<u>12345</u>
_____	_____	_____	_____
_____	_____	_____	_____

\* \_\_\_\_\_  
Health Physics Supervisor Date \_\_\_\_\_ Time \_\_\_\_\_

**Authorization to exceed 10CFR20 exposure limits is granted.**

\* Signature or verbal authorization  
Emergency Director Date \_\_\_\_\_ Time \_\_\_\_\_

\* Verbal authorization shall be noted by initials of person receiving verbal authorization from HP Supervisor or Emergency Director. Emergency Director signature to be obtained when time permits.

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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**CLASSIFY AN EMERGENCY EVENT - GENERAL EMERGENCY**

This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

**🕒 THIS IS A TIME CRITICAL JPM 🕒**

**Initial Conditions:** Unit 1 Reactor trip and Safety Injection has been initiated due to LOCA  
No CCPs or SIPs are running  
Core exit T/C's reading 2400 degrees F  
FRP 19221-C, Response to Inadequate Core Cooling, is in progress  
Crew is depressuring all SGs to 200 psig at the maximum rate possible  
CNMT radiation monitors RE-005 & RE-006 are reading 3.2 E+9 mR/hr  
SG NR levels are at 45%  
CNMT pressure rose to 18.9 psig and has started slowly lowering  
Wind 280 degrees at 10 mph, Stability Class D  
No offsite release occurring

**Assigned Task:** Evaluate plant conditions and determine appropriate emergency classification and complete the emergency notification form.

**JPM INFORMATION**

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_/\_\_\_/\_\_\_

JPM TITLE: Classify an Emergency Event - General Emergency with protective actions

COMPLETION TIME: **15 minutes for classification and 15 minutes for notification form**  
**TIME CRITICAL** ☹

Application: **SRO ONLY**

Task Number: 40002 & 40005

K/A Number: G2.4.29

RO: 2.6

SRO: 4.0

10CFR55.45 Ref.: 11

Evaluation Method  Performed

Simulated

Evaluation Location  Simulator

Control Room

Unit 1

Unit 2

Performance Time: \_\_\_\_\_minutes

**OVERALL JPM EVALUATION**

**SATISFACTORY**

**UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

## INSTRUCTIONS TO EXAMINER

This JPM is based on the latest rev of 91001-C and 91305-C. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

**REQUIRED ITEMS:**

1. 91001-C, Emergency Classification and Implementing Instructions
2. 91002-C, Emergency Notifications
3. ENN Notification Form (ED Packet)
4. 91305-C, Protective Action Guidelines

**SIMULATOR SETUP:** None

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:**

- Unit 1 Reactor trip and Safety Injection has been initiated due to LOCA
- No CCPs or SIPs are running
- Core exit T/C's reading 2400 degrees F
- FRP 19221-C, Response to Inadequate Core Cooling, is in progress
- Crew is depressuring all SGs to 200 psig at the maximum rate possible
- CNMT radiation monitors RE-005 & RE-006 are reading 3.2 E+9 mR/hr
- SG NR levels are at 45%
- CNMT pressure rose to 18.9 psig and has started slowly lowering
- Wind 280 degrees at 10 mph, Stability Class D
- No offsite release in progress

**ASSIGNED TASK:** Evaluate plant conditions and determine appropriate emergency classification and complete the emergency notification form.

**TASK STANDARD:** Emergency event classified and protective action recommended.

**JPM STEPS**

START TIME: \_\_\_\_\_

**STEP 1**

**CRITICAL (◆)**

SAT  UNSAT

**Classify the event**

- Plant conditions evaluated
- ◆ Emergency event classified as a General Emergency  
(failure of 2 barriers and potential failure of the 3<sup>rd</sup> barrier)  
Fuel Cladding – Failed  
Reactor Coolant System – Failed  
Containment – Potential Failure

**STEP 2**

**CRITICAL (◆)**

SAT  UNSAT

**Recommend Protective Actions**

- ◆ Determines that PAR 2 is applicable
- ◆ Evacuate Zones: A, B-5, C-5, D-5, E-5, F-5, B-10, H-10, SRS to 10 miles.
- ◆ Shelter: Remainder of 10 mile EPZ

STOP TIME: \_\_\_\_\_

**Field Notes**



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

CLASSIFY AN EMERGENCY EVENT - GENERAL EMERGENCY

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Deleted: December 12, 2000
Deleted: Written By :
Deleted: George Gunn
Deleted: M. C. Henry , Date: .
Deleted: 01
Deleted: 12/
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Deleted: 96
Deleted: 2000
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Deleted: Leon Ray
Deleted: xxxxxxxx
Deleted: R. D. Brigdon . Date: .
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This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

**THIS IS A TIME CRITICAL JPM**

**Initial Conditions:** Unit 1 Reactor trip and Safety Injection has been initiated due to LOCA  
No CCPs or SIPs are running  
Core exit T/C's reading 2400 degrees F  
FRP 19221-C, Response to Inadequate Core Cooling, is in progress  
Crew is depressuring all SGs to 200 psig at the maximum rate possible  
CNMT radiation monitors RE-005 & RE-006 are reading 3.2 E+9 mR/hr  
SG NR levels are at 45%  
CNMT pressure rose to 18.9 psig and has started slowly lowering.  
Wind 280 degrees at 10 mph, Stability Class D  
No offsite release occurring

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**Deleted:** With DG 1A tagged out, a fault in the low voltage switchyard resulted in the loss of both RATS and an overcurrent fault on 1BA03. During performance of the EOP a LOCA occurred that resulted in core exit thermocouples exceeding 1200 °F.

¶

¶

**Assigned Task:** You have been directed to "Determine the HIGHEST emergency classification level based on events which are in progress, considering past events, and their impact on the current plant conditions".

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**Task Standard:** Emergency event classified.

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## INSTRUCTIONS TO EXAMINER

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**REQUIRED ITEMS:**

1. 91001-C, Emergency Classification and Implementing Instructions
2. 91002-C, Emergency Notifications
3. ENN Notification Form (ED Packet)
4. 91305-C, Protective Action Guidelines

**SIMULATOR SETUP:** None

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## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:**

- Unit 1 Reactor trip and Safety Injection has been initiated due to LOCA
- No CCPs or SIPs are running
- Core exit T/C's reading 2400 degrees F
- FRP 19221-C, Response to Inadequate Core Cooling, is in progress
- Crew is depressuring all SGs to 200 psig at the maximum rate possible
- CNMT radiation monitors RE-005 & RE-006 are reading 3.2 E+9 mR/hr
- SG NR levels are at 45%
- CNMT pressure rose to 18.9 psig and has started slowly lowering
- Wind 280 degrees at 10 mph, Stability Class D
- No offsite release in progress

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**ASSIGNED TASK:** Evaluate plant conditions and determine appropriate emergency classification and complete the emergency notification form.

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**TASK STANDARD:** Emergency event classified and protective action recommended.

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JPM STEPS

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Classify the event**

---

♦ Plant conditions evaluated  
 ♦ Emergency event classified as a General Emergency  
 (failure of 2 barriers and potential failure of the 3<sup>rd</sup> barrier)

Fuel Cladding – Failed  
Reactor Coolant System – Failed  
Containment – Potential Failure

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**STEP 2**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Recommend Protective Actions**

---

♦ Determines that PAR 2 is applicable  
 ♦ Evacuate Zones: A, B-5, C-5, D-5, E-5, F-5, B-10, H-10, SRS to 10 miles.  
 ♦ Shelter: Remainder of 10 mile EPZ

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STOP TIME: \_\_\_\_\_

*Field Notes*



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**MONITOR / EVALUATE CSFSTs - SUBCRITICALITY**

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** The Reactor tripped 30 minutes ago. Following a transition from 19000-C, the crew determined that Critical Safety Function monitoring should be implemented.

**Assigned Task:** The SS has directed you to "Evaluate the CSFSTs, identify the challenges to all CSFSTs, and identify any required transition".

**JPM INFORMATION**

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_ / \_\_\_ / \_\_\_

JPM TITLE:            Monitor / Evaluate CSFSTs - Subcriticality

COMPLETION TIME: 12 minutes

Application:            RO/SRO

Task Number:          37004

K/A Number:          000011EG12      RO: 4.0      SRO: 4.1

10CFR55.45 Ref.:      12

Evaluation Method     Performed             Simulated

Evaluation Location    Simulator             Control Room     Unit 1     Unit 2

Performance Time:    \_\_\_\_\_minutes

**OVERALL JPM EVALUATION**             **SATISFACTORY**             **UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

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## INSTRUCTIONS TO EXAMINER

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This JPM is based on 19200-C. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:**
1. 19200-C, Critical Safety Function Status Trees
  2. Plant Parameter datasheet from examiner
  3. Steam Tables

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** The Reactor tripped 30 minutes ago. Following a transition from 19000-C, the crew determined that Critical Safety Function monitoring should be implemented.

**ASSIGNED TASK:** The SS has directed you to "Evaluate the CSFSTs, identify the challenges to all CSFSTs, and identify any required transition".

**TASK STANDARD:** Appropriate FRP identified for existing CSF challenges.

**JPM STEPS**

START TIME: \_\_\_\_\_

**STEP 1**

**CRITICAL (♦)**

SAT  UNSAT

**Determine highest CSF challenge**

- ♦ Subcriticality - Orange
- ♦ Core Cooling - Green
- ♦ Heat Sink - Yellow
- ♦ Integrity - Orange
- ♦ Containment - Green
- ♦ Inventory – Yellow

**STEP 2**

**CRITICAL (♦)**

SAT  UNSAT

**Determine appropriate FRP**

- ♦ 19211-C selected

**STEP 3**

SAT  UNSAT

**Report to USS**

- Transition to 19211 is required based on the CSFSTs.

STOP TIME: \_\_\_\_\_

**Field Notes**

**Plant Parameter Data**

<b>Parameter</b>	<b>Channel / Loop 1</b>	<b>Channel / Loop 2</b>	<b>Channel / Loop 3</b>	<b>Channel / Loop 4</b>
PR NI	0%	0%	0%	0%
IR SUR	+0.1 DPM	+0.13 DPM		
IR NI	$3.0 \times 10^{-4}\%$	$3.2 \times 10^{-4}\%$		
SR SUR	0 DPM	0 DPM		
Core Exit T/C's	329 F			
RCP status	Off	Off	Off	Off
RVLIS Full Range	100%	100%	100%	100%
RVLIS Upper Head	100%	100%	100%	100%
SG NR Level	0%	0%	0%	0%
AFW flow	205 GPM	0 GPM	210 GPM	200 GPM
SG Pressure	950 psig	26 psig	973 psig	987 psig
RCS WR Cold Leg Temperature	540 F	261 F	538 F	541 F
RCS WR Pressure	1980 psig	2000 psig	1990 psig	2010 psig
CNMT Pressure	0 psig	0 psig	0 psig	0 psig
CNMT Emergency Sump Levels	0 inches	0 inches		
CNMT Radiation	24 mR / Hr	31 mR / Hr		
PRZR level	100%	100%	100%	



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PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

MONITOR / EVALUATE CSFSTs - SUBCRITICALITY

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- Deleted: 37021-001-02A
- Deleted: 19200-001
- Deleted: CORE COOLING
- Deleted: Revision
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- Deleted: 31
- Deleted: February 10, 1998
- Deleted: April 30, 2001
- Deleted: Written By :
- Deleted: George Gunn
- Deleted: M. C. Henry Date: .
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- Deleted: 98
- Deleted: 2001
- Approved By :
- Deleted: Leon Ray
- Deleted: XXXXXXXXXX
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- Deleted: 2001

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** The Reactor tripped 30 minutes ago. Following a transition from 19000-C, the crew determined that Critical Safety Function monitoring should be implemented.

**Assigned Task:** The SS has directed you to "Evaluate the CSFSTs, identify the challenges to all CSFSTs, and identify any required transition".

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**Task Standard:** . Appropriate FRP identified for existing CSF challenges. ¶

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**JPM INFORMATION**

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Deleted: 19200-001

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

JPM TITLE: Monitor / Evaluate CSFSTs - Subcriticality

COMPLETION TIME: 12 minutes

Application: RO/SRO  
Task Number: 37004  
K/A Number: 000011EG12 RO: 4.0 SRO: 4.1  
10CFR55.45 Ref.: 12

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Evaluation Method  Performed  Simulated

Evaluation Location  Simulator  Control Room  Unit 1  Unit 2

Performance Time: \_\_\_\_\_ minutes

**OVERALL JPM EVALUATION**  **SATISFACTORY**  **UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

## INSTRUCTIONS TO EXAMINER

This JPM is based on 19200-C. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@"... are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:**
1. 19200-C, Critical Safety Function Status Trees
  2. Plant Parameter datasheet from examiner
  3. Steam Tables

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** The Reactor tripped 30 minutes ago. Following a transition from 19000-C, the crew determined that Critical Safety Function monitoring should be implemented.

**ASSIGNED TASK:** The SS has directed you to "Evaluate the CSFSTs, identify the challenges to all CSFSTs, and identify any required transition".

**TASK STANDARD:** Appropriate FRP identified for existing CSF challenges.

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SETUP: 1. Reset to IC14 (MCL 100%)

2. Insert malfunction RC03A (DBA LOCA)

3. Stop all RCPs

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4. Throttle AFW to  $\approx 200$  gpm/SG

5. Set RF: ED02(TC > Sat) = 0.2

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6. Set RF: ED01(O/R CETCs) = OVERRIDE

7. Set RF: ED02

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8. Set RF: ED04(Target RVLIS) = (current RVLIS FR value)

9. Set RF: ED03(OVR RVLIS) = OVERRIDE

10. Set RF: ED04(Target RVLIS) = 57

11. Ack/Reset Alarms

12. Freeze simulator

13. Turn off all IPC monitors (Ensure IPC in computer room is also turned off)

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JPM STEPS

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Deleted: 19200-001

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Determine highest CSF challenge**

---

♦ Subcriticality - Orange

♦ Core Cooling - Green

♦ Heat Sink - Yellow

♦ Integrity - Orange

♦ Containment - Green

♦ Inventory - Yellow

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**STEP 2**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Determine appropriate FRP**

---

♦ 19211-C selected

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**STEP 3**  
 SAT  UNSAT

**Report to USS**

---

• Transition to 19211 is required based on the CSFSTs.

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STOP TIME: \_\_\_\_\_

*Field Notes*

**Plant Parameter Data**

<u>Parameter</u>	<u>Channel/Loop 1</u>	<u>Channel/Loop 2</u>	<u>Channel/Loop 3</u>	<u>Channel/Loop 4</u>
<u>PR NI</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>
<u>IR SUR</u>	<u>+0.1 DPM</u>	<u>+0.13 DPM</u>		
<u>IR NI</u>	<u>3.0x10<sup>-4%</sup></u>	<u>3.2x10<sup>-4%</sup></u>		
<u>SR SUR</u>	<u>0 DPM</u>	<u>0 DPM</u>		
<u>Core Exit T/C's</u>	<u>329 F</u>			
<u>RCP status</u>	<u>Off</u>	<u>Off</u>	<u>Off</u>	<u>Off</u>
<u>RVLIS Full Range</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>RVLIS Upper Head</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>SG NR Level</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>
<u>AFW flow</u>	<u>205 GPM</u>	<u>0 GPM</u>	<u>210 GPM</u>	<u>200 GPM</u>
<u>SG Pressure</u>	<u>950 psig</u>	<u>26 psig</u>	<u>973 psig</u>	<u>987 psig</u>
<u>RCS WR Cold Leg Temperature</u>	<u>540 F</u>	<u>261 F</u>	<u>538 F</u>	<u>541 F</u>
<u>RCS WR Pressure</u>	<u>1980 psig</u>	<u>2000 psig</u>	<u>1990 psig</u>	<u>2010 psig</u>
<u>CNMT Pressure</u>	<u>0 psig</u>	<u>0 psig</u>	<u>0 psig</u>	<u>0 psig</u>
<u>CNMT Emergency Sump Levels</u>	<u>0 inches</u>	<u>0 inches</u>		
<u>CNMT Radiation</u>	<u>24 mR / Hr</u>	<u>31 mR / Hr</u>		
<u>PRZR level</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	

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 Deleted: 19200-001  
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(TC > Sat) = {725 - current CETC}

8. Set RF: ED04(Target RVLIS) = {current RVLIS FR value}
9. Set RF: ED03(O/R RVLIS) = OVERRIDE
10. Set RF: ED04(Target RVLIS) = 57
11. Ack/Reset Alarms
12. Freeze simulator
13. **Turn off all IPC monitors (Ensure IPC in computer room is also turned off)**

**Note: The simulator should remain in FREEZE for this JPM**

Setup time:



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**CALCULATE SHUTDOWN MARGIN**

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** The reactor tripped from 100% power 28 hours ago.

**Assigned Task:** The SS has directed you to "Calculate Shutdown Margin taking credit for Xenon and Samarium using 14005" for current conditions.

---

**Plant Data**

---

Power History	100% for 200 days
Cycle Burnup	16000 MWD/MTU
Boron Concentration	750 ppm
Tavg	400 °F
Current Rod Height	All Rods at Bottom
Axial Offset Correction	0 pcm

The plant tripped from 100% power 28 hours ago. All 4 RCPs are in service.

JPM INFORMATION

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_ / \_\_\_ / \_\_\_\_

JPM TITLE: Calculate Shutdown Margin

REVISION:

COMPLETION TIME: 55 minutes

Application: RO/SRO

Task Number: 27003

K/A Number: 192002K1.13 RO: 3.5 SRO: 3.7

10CFR55.45 Ref.: 12

Evaluation Method  Performed  Simulated

Evaluation Location  Simulator  Control Room  Unit 1  Unit 2

Performance Time: \_\_\_\_\_ minutes

**OVERALL JPM EVALUATION**  **SATISFACTORY**  **UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

---

## INSTRUCTIONS TO EXAMINER

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This JPM is based on the latest rev of 14005-1. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

**REQUIRED ITEMS:**

1. 14005, Shutdown Margin and Keff Calculations
2. Plant Technical Data Book (Unit 1)
3. Plant shutdown data (provided by examiner)
4. COLR 2.2.1

**SIMULATOR SETUP:** Performance of this JPM does not require the simulator.

***This JPM is based on Unit 1 Cycle 12 data.***

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** The reactor tripped from 100% power 28 hours ago.

**ASSIGNED TASK:** The USS has directed you to "Calculate Shutdown Margin taking credit for Xenon and Samarium using 14005" for current conditions.

**TASK STANDARD:** Shutdown margin calculated.(Current)

JPM STEPS

START TIME: \_\_\_\_\_

**STEP 1**

**CRITICAL (♦)**

SAT  UNSAT

Select appropriate Data Sheets

- ♦ Data Sheet 2 section E selected
- Current conditions recorded (1)
- C.4 Xenon power of 100%

CUES:

(1) If asked, "Xenon worth should be considered in the calculation".

**STEP 2**

**CRITICAL (♦)**

SAT  UNSAT

Determine reactivity values using PTDB

		<u>Allowable Range of Values</u>
<input checked="" type="checkbox"/>	♦ E.1 8534 pcm	8530 – 8540 pcm
<input checked="" type="checkbox"/>	♦ E.2 887 ppm	N/A
<input checked="" type="checkbox"/>	♦ E.3 9995 pcm	9990 – 10,000 pcm
<input checked="" type="checkbox"/>	♦ E.4 0.87476	0.87470 - 0.87483
<input checked="" type="checkbox"/>	♦ E.5 2399 pcm	2350 – 2450 pcm
<input checked="" type="checkbox"/>	♦ E.6 1037 pcm	1030 – 1050 pcm
<input checked="" type="checkbox"/>	♦ E.7 3436 pcm	3380 – 3500 pcm
<input checked="" type="checkbox"/>	♦ E.8 3006 pcm	2957 – 3061 pcm
<input checked="" type="checkbox"/>	♦ E.9 1035 pcm	N/A
<input checked="" type="checkbox"/>	• E.10 0 pcm	N/A
<input checked="" type="checkbox"/>	• E.11 0 pcm	N/A
<input checked="" type="checkbox"/>	♦ E.12 1545 pcm	1487 – 1611 pcm
<input checked="" type="checkbox"/>	♦ E.13 1.545%	1.487 – 1.611 %
<input checked="" type="checkbox"/>	♦ E.14 0.98479	0.98414 – 0.98535

**STEP 3**

**CRITICAL (♦)**

SAT  UNSAT

Determine Shutdown Margin

- ♦ E.13 Shutdown Margin of 1.545%\_calculated

---

**JPM STEPS**

---

STEP 4

SAT  UNSAT

**Report to USS**

• Shutdown margin calculation complete

STOP TIME: \_\_\_\_\_

*Field Notes*

---

**Plant Data**

---

Power History	100% for 200 days
Cycle Burnup	16000 MWD/MTU
Boron Concentration	750 ppm
Tavg	400 °F
Current Rod Height	All Rods at Bottom
Axial Offset Correction	0 pcm

The plant tripped from 100% power 28 hours ago. All 4 RCPs are in service.



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**CALCULATE SHUTDOWN MARGIN**

Deleted: RQ-JP-14005-002

Deleted: - SCENARIO 2

Deleted: Revision 9

Deleted: June 2, 2004

Deleted: Written By : S. N.  
Dyer . Date: 6/2/2004  
Approved By : Richard  
Brigdon . Date: 6/2/2004

This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

**Initial Conditions:** The reactor tripped from 100% power 28 hours ago.

**Assigned Task:** The SS has directed you to "Calculate Shutdown Margin taking credit for Xenon and Samarium using 14005" for current conditions.

- Deleted: A
- Deleted:
- Deleted: shutdown to Mode 3 has been performed

**Plant Data**

Power History	100% for 200 days
Cycle Burnup	<u>16000</u> MWD/MTU
Boron Concentration	750 ppm
Tavg	<u>400</u> °F
Current Rod Height	All Rods at Bottom
Axial Offset Correction	0 pcm

Deleted: 9950

Deleted: 557

The plant tripped from 100% power 28 hours ago. All 4 RCPs are in service.

- Deleted: A
- Deleted: shutdown to Mode 3 was initiated
- Deleted: 4
- Deleted: The reactor was declared shutdown 1 hour ago.
- Deleted: The power history is as follows:
- Time Average Power
- 1 - 2 hours ago . . . 33%
- 2 - 3 hours ago . . . 66%
- 3 - 4 hours ago . . . 100%
- > 4 hours ago . . . 100%
- Formatted: Indent: Left: 0.5"

JPM INFORMATION

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_/\_\_\_/\_\_\_

JPM TITLE: Calculate Shutdown Margin

REVISION: \_\_\_\_\_

COMPLETION TIME: 55 minutes

Application: RO/SRO

Task Number: 27003

K/A Number: 192002K1.13 RO: 3.5 SRO: 3.7

10CFR55.45 Ref.: 12

Deleted: - Scenario 2

Deleted: 9 June 2, 2004

Evaluation Method  Performed  Simulated

Evaluation Location  Simulator  Control Room  Unit 1  Unit 2

Performance Time: \_\_\_\_\_ minutes

OVERALL JPM EVALUATION  SATISFACTORY  UNSATISFACTORY

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

**INSTRUCTIONS TO EXAMINER**

This JPM is based on the latest rev of 14005-1. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "©..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:**
1. 14005, Shutdown Margin and Keff Calculations
  2. Plant Technical Data Book (Unit 1)
  3. Plant shutdown data (provided by examiner)
  4. COLR 2.2.1

**SIMULATOR SETUP:** Performance of this JPM does not require the simulator.

***This JPM is based on Unit 1 Cycle 12 data.***

**DIRECTIONS TO OPERATOR**

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** The reactor tripped from 100% power 28 hours ago.

**ASSIGNED TASK:** The USS has directed you to "Calculate Shutdown Margin taking credit for Xenon and Samarium using 14005" for current conditions.

**TASK STANDARD:** Shutdown margin calculated.(Current)

**Deleted: A**

**Deleted: shutdown to Mode 3 has been performed**

**JPM STEPS**

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Select appropriate Data Sheets**

---

♦ Data Sheet 2 section E selected  
 • Current conditions recorded (1)  
 • C.4 Xenon power of 100%

CUES:  
 (1) If asked, "Xenon worth should be considered in the calculation".

- Deleted:** ♦ Data Sheet 5 selected
- Deleted:** > 93.7
- Deleted:** calculated

**STEP 2**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Determine reactivity values using PTDB**

---

	<u>Allowable Range of Values</u>
<input checked="" type="checkbox"/> ♦ E.1 8534 pcm	8530 – 8540 pcm
<input checked="" type="checkbox"/> ♦ E.2 887 pcm	N/A
<input checked="" type="checkbox"/> ♦ E.3 9995 pcm	9990 – 10,000 pcm
<input checked="" type="checkbox"/> ♦ E.4 0.87476	0.87470 - 0.87483
<input checked="" type="checkbox"/> ♦ E.5 2399 pcm	2350 – 2450 pcm
<input checked="" type="checkbox"/> ♦ E.6 1037,pcm	1030 – 1050 pcm
<input checked="" type="checkbox"/> ♦ E.7 3436,pcm	3380 – 3500 pcm
<input checked="" type="checkbox"/> ♦ E.8 3006,pcm	2957 – 3061 pcm
<input checked="" type="checkbox"/> ♦ E.9 1035,pcm	N/A
<input checked="" type="checkbox"/> • E.10 0 pcm	N/A
<input checked="" type="checkbox"/> • E.11 0 pcm	N/A
<input checked="" type="checkbox"/> ♦ E.12 1545,pcm	1487 – 1611 pcm
<input checked="" type="checkbox"/> ♦ E.13 1.545%	1.487 – 1.611 %
<input checked="" type="checkbox"/> ♦ E.14 0.98479	0.98414 – 0.98535

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- Deleted:** 320
- Deleted:** c
- Deleted:** 3104
- Deleted:** 96111
- Deleted:** 3552
- Deleted:** 1037
- Deleted:** 4589
- Deleted:** 4411
- Deleted:** 1087
- Deleted:** 3266
- Deleted:** 4
- Deleted:** 0.968 3271 Keff (not required)

**STEP 3**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Determine Shutdown Margin**

---

♦ E.13 Shutdown Margin of 1.545% calculated

- Deleted:** ≈ 3.266

**JPM STEPS**

STEP 4

SAT  UNSAT

**Report to USS**

• Shutdown margin calculation complete

STOP TIME: \_\_\_\_\_

*Field Notes*

Plant Data

Power History 100% for 200 days

Cycle Burnup 16000 MWD/MTU

Deleted: 9950

Boron Concentration 750 ppm

Tavg 400 °F

Deleted: 557

Current Rod Height All Rods at Bottom

Axial Offset Correction 0 pcm

The plant tripped from 100% power 28 hours ago, All 4 RCPs are in service,

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Deleted: 4

Deleted: The reactor was declared shutdown 1 hour ago.

Deleted: The power history is as follows:

Time	Average Power
1 - 2 hours ago	33%
2 - 3 hours ago	66%
3 - 4 hours ago	100%
> 4 hours ago	100%



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**DETERMINE TAGGING REQUIREMENTS**

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** NSCW pump #4 on Unit 2 needs to be tagged to perform pump bearing repairs.

**Assigned Task:** Determine the appropriate hold points and required positions of components to safely isolate NSCW pump 2-1202-P4-004. Identification of K-2 links to clear control room alarms is not necessary. For SRO's also identify correct tagging sequence.

**JPM INFORMATION**

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_/\_\_\_/\_\_\_

JPM TITLE: Determine Tagging Requirements

COMPLETION TIME: 30 minutes

Application: RO/SRO

Task Number: 63004

K/A Number: G2.2.13

RO: 3.6      SRO: 3.8

10CFR55.45 Ref.: 13

Evaluation Method     Performed             Simulated

Evaluation Location     Simulator             Control Room     Unit 1     Unit 2

Performance Time: \_\_\_\_\_minutes

**OVERALL JPM EVALUATION**             **SATISFACTORY**             **UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

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## INSTRUCTIONS TO EXAMINER

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This JPM is based on the latest rev of NMP-AD-003. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "©..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:**
1. Plant Drawings:
    - 2X4DB133-1, 133-2, 134, 135-1, 135-2
    - 2X3D-AA-D03A , D03B
    - 2X3D-BA-A01F
    - 2X3D-BD-K04D, K04Y
    - 2X3D-AA-F17A
  2. NMP-AD-003, Equipment Clearance and Tagging
- SIMULATOR SETUP:** None

### DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** NSCW pump #4 on Unit 2 needs to be tagged to perform pump bearing repairs.

**ASSIGNED TASK:** Determine the appropriate hold points and required positions of components to safely isolate NSCW pump 2-1202-P4-004. Identification of K-2 links to clear control room alarms is not necessary. For SROs also identify correct tagging sequence.

**TASK STANDARD:** Tagout hold points and required positions listed. Also for SRO's correct tagging sequence is listed.

---

**JPM STEPS**

---

START TIME: \_\_\_\_\_

**STEP 1**

**CRITICAL (⬇)**

SAT  UNSAT

**Determine Required Components & positions to safely tagout NSCW pump #4 on unit 2**

NOTE: SRO's must also determine the proper sequence for this step to be considered satisfactory.

Components in the same sequence number may be tagged in any order.

- 
- |                          |  |                       |
|--------------------------|--|-----------------------|
| <input type="checkbox"/> | ◆ 2HS1635A, NSCW PUMP 4 HANDSWITCH,<br>PULL-TO-LOCK                        | <i>{Sequence (1)}</i> |
| <input type="checkbox"/> | ◆ 2HS1635C, NSCW PUMP 4 REMOTE S/D PANEL TRANSFER SWITCH,<br>CONTROL ROOM  | <i>{Sequence (1)}</i> |
| <input type="checkbox"/> | ◆ 2BA03-11, NSCW PUMP 4 MOTOR SWITCHGEAR BREAKER,<br>DISCONNECTED          | <i>{Sequence (2)}</i> |
| <input type="checkbox"/> | ◆ 2BBB-36, NSCW PUMP 4 DISCHARGE MOV BREAKER,<br>OFF                       | <i>{Sequence (2)}</i> |
| <input type="checkbox"/> | ◆ 2HV11613, NSCW PUMP 4 DISCHARGE MOV HANDWHEEL,<br>CLOSED                 | <i>{Sequence (3)}</i> |
| <input type="checkbox"/> | ◆ 2-1202-U4-A18, NSCW PUMP 4 DISCHARGE MOV BYPASS VALVE,<br>UNLOCKED/SHUT  | <i>{Sequence (3)}</i> |
| <input type="checkbox"/> | ◆ 2-1202-X4-847, NSCW PUMP 4 MOTOR COOLER VENT ISOLATION,<br>UNCAPPED/OPEN | <i>{Sequence (4)}</i> |

STOP TIME: \_\_\_\_\_

*Field Notes*



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**DETERMINE TAGGING REQUIREMENTS**

**Deleted:** RQ-JP-19000-006?  
1  
EVALUATE ECCS TERMINATION  
CRITERIA - INJECTION FLOW  
REQUIRED

**Deleted:** Revision 1

**Deleted:** May 1, 2001

**Deleted:** Written By : M. C.  
Henry Date: 5/01/2001

**Deleted:** Approved By : R. D.  
Brigdon Date: 5/16/2001

This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

<b>Initial Conditions:</b>	<u>NSCW pump #4 on Unit 2 needs to be tagged to perform pump bearing repairs.</u>
<b>Assigned Task:</b>	<u>Determine the appropriate hold points and required positions of components to safely isolate NSCW pump 2-1202-P4-004. Identification of K-2 links to clear control room alarms is not necessary. For SRO's also identify correct tagging sequence.</u>

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**Deleted:** A steam dump header line break resulted in a low steamline pressure SI and main steamline isolation. The crew has completed 19000 through step 28.

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**Deleted:** The USS has directed you to "Check if ECCS flow should be reduced using step 29 of 19000."

**Deleted:** ¶

**Task Standard:** ECCS termination criteria monitored and evaluated.¶

¶

JPM INFORMATION

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

JPM TITLE: Determine Tagging Requirements

COMPLETION TIME: 30 minutes

Application: RO/SRO

Task Number: 63004

K/A Number: G2.2.13 RO: 3.6 SRO: 3.8

10CFR55.45 Ref.: 13

- Deleted: Evaluate ECCS Termination Criteria - Injection Flow Required
- Deleted: REVISION: 1 May 1, 2001
- Deleted: 5
- Deleted:
- Deleted: /SRO
- Deleted: 37005
- Deleted: 000040EA205
- Deleted: 4.1
- Deleted: 4.5
- Deleted: 7, 12

Evaluation Method  Performed  Simulated

Evaluation Location  Simulator  Control Room  Unit 1  Unit 2

Performance Time: \_\_\_\_\_ minutes

---

OVERALL JPM EVALUATION  SATISFACTORY  UNSATISFACTORY

Examiner Comments:

  
  
  
  
  
  
  
  
  
  

Examiner's Signature: \_\_\_\_\_



INSTRUCTIONS TO EXAMINER

Deleted: RQ-JP-19000-006

This JPM is based on the latest rev of NMP-AD-003. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@"... are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

- REQUIRED ITEMS:
- Plant Drawings:
    - 2X4DB133-1, 133-2, 134, 135-1, 135-2
    - 2X3D-AA-D03A, D03B
    - 2X3D-BA-A01F
    - 2X3D-BD-K04D, K04Y
    - 2X3D-AA-F17A
  - NMP-AD-003, Equipment Clearance and Tagging

SIMULATOR SETUP: None

Deleted: 19000-C

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Deleted: 19000, Reactor Trip or Safety Injection

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DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

INITIAL CONDITIONS: NSCW pump #4 on Unit 2 needs to be tagged to perform pump bearing repairs.

ASSIGNED TASK: Determine the appropriate hold points and required positions of components to safely isolate NSCW pump 2-1202-P4-004. Identification of K-2 links to clear control room alarms is not necessary. For SROs also identify correct tagging sequence.

TASK STANDARD: Tagout hold points and required positions listed. Also for SRO's correct tagging sequence is listed.

- Deleted: 1. Reset to IC14 (MOL 100%)  
 2. Initiate manual SI  
 3. Initiate manual MSL  
 4. Throttle total AFW flow to stabilize RCS temperature  
 5. Insert malfunction FR01A at 10% severity and increase severity if required to ensure RCS pressure is slowly lowering  
 6. Ack/Reset alarms  
 7. Freeze simulator

Deleted: Setup time: 7 minutes

Deleted: A steam dump header line break resulted in a low steamline pressure SI and main steamline isolation. The crew has completed 19000 through step 28.

Deleted: The USS has directed you to "Check if ECCS flow should be reduced using step 29 of 19000."

Deleted: ECCS termination criteria monitored and evaluated.

JPM STEPS

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
SAT  UNSAT

**Determine Required Components & positions to safely tagout NSCW pump #4 on unit 2**

NOTE: SRQ's must also determine the proper sequence for this step to be considered satisfactory.  
Components in the same sequence number may be tagged in any order.

---

♦ 2HS1635A, NSCW PUMP 4 HANDSWITCH, *{Sequence (1)}*  
PULL-TO-LOCK

---

♦ 2HS1635C, NSCW PUMP 4 REMOTE S/D PANEL TRANSFER SWITCH, *{Sequence (1)}*  
CONTROL ROOM

---

♦ 2BA03-11, NSCW PUMP 4 MOTOR SWITCHGEAR BREAKER, *{Sequence (2)}*  
DISCONNECTED

---

♦ 2BBB-36, NSCW PUMP 4 DISCHARGE MOV BREAKER, *{Sequence (2)}*  
OFF

---

♦ 2HV11613, NSCW PUMP 4 DISCHARGE MOV HANDWHEEL, *{Sequence (3)}*  
CLOSED

---

♦ 2-1202-U4-A18, NSCW PUMP 4 DISCHARGE MOV BYPASS VALVE, *{Sequence (3)}*  
UNLOCKED/SHUT

---

♦ 2-1202-X4-847, NSCW PUMP 4 MOTOR COOLER VENT ISOLATION, *{Sequence (4)}*  
UNCAPPED/OPEN

STOP TIME: \_\_\_\_\_

Field Notes

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Deleted: Determine subcooling

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Deleted:  • Subcooling determined to be > 24°F

Deleted: STEP 2

SAT  UNSAT

Verify adequate heat sink

---

• Either of the following observed:

- AFW flow > 570 gpm
- NR level in at least one SG > 10%

STEP 3

CRITICAL (♦)

SAT  UNSAT

Determine RCS pressure response

---

♦ RCS pressure observed to be lowering

STEP 4

CRITICAL (♦)

SAT  UNSAT

Report to USS

---

♦ ECCS should not be reduced



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**DETERMINE RADIATION POSTING REQUIREMENTS**

*This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.*

**Initial Conditions:** A point source reads as shown on the survey map provided. The entry point to the room is 3 feet from the radiation source

**Assigned Task:** Using the room survey map provided, calculate the dose rate at the door and determine the appropriate minimum posting required at the entry door to the room indicated on the survey map.

**JPM INFORMATION**

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_ / \_\_\_ / \_\_\_

JPM TITLE:            Determine Radiation Posting Requirements

COMPLETION TIME:    25 minutes

Application:            RO  
Task Number:          38002  
K/A Number:          G2.3.4                    RO:    2.5        SRO:  3.1  
10CFR55.45 Ref.:      10

Evaluation Method     Performed             Simulated  
Evaluation Location    Simulator             Control Room     Unit 1         Unit 2  
Performance Time:    \_\_\_\_\_minutes

**OVERALL JPM EVALUATION             SATISFACTORY             UNSATISFACTORY**

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

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## INSTRUCTIONS TO EXAMINER

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This JPM is based on the latest rev of 19000-C. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

**REQUIRED ITEMS:**

1. Survey Map
2. Calculator
3. 00930-C, Radiation and Contamination Control

**SIMULATOR SETUP:** None

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** A point source reads as shown on the survey map provided. The entry point to the room is 3 feet from the radiation source.

**ASSIGNED TASK:** Using the room survey map provided, calculate the dose rate at the door and determine the appropriate minimum posting required at the entry door to the room indicated on the survey map.

**TASK STANDARD:** Proper minimum HP posting determined

---

**JPM STEPS**

---

START TIME: \_\_\_\_\_

**STEP 1**

**CRITICAL (◆)**

SAT  UNSAT

**Calculate dose rate at entry point into room**

◆ Dose rate at room entry =  $545 \text{ Rem/hr} \times (0.5/36)^2 = 105 \text{ mRem/hr}$

**STEP 2**

**CRITICAL (◆)**

SAT  UNSAT

**Determine Room entry posting requirements**

◆ Dose rate > 100 mrem/hr and < 1000 mrem/hr entrance to room should be posted as a high radiation area as a minimum.

STOP TIME: \_\_\_\_\_

**Field Notes**



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**PLANT VOGTLE**

**CONTROL ROOM OPERATOR**

**JOB PERFORMANCE MEASURE**

**DETERMINE RADIATION POSTING REQUIREMENTS**

**Deleted:** RQ-JP-19000-0061  
1  
EVALUATE ECCS TERMINATION  
CRITERIA - INJECTION FLOW  
REQUIRED

**Deleted:** Revision 1

**Deleted:** May 1, 2001

**Deleted:** Written By : M. C.  
Henry . Date: 5/01/2001

**Deleted:** Approved By : R. D.  
Brigdon . Date: 5/16/2001

This information describes the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the task before beginning. You will be allowed access to any item normally used to perform this task.

**Initial Conditions:** A point source reads as shown on the survey map provided. The entry point to the room is 3 feet from the radiation source.

**Assigned Task:** Using the room survey map provided, calculate the dose rate at the door and determine the appropriate minimum posting required at the entry door to the room indicated on the survey map.

**Formatted:** Border: Bottom: (Shadowed Double solid lines, Auto, 1.5 pt Line width)

**Deleted:** A steam dump header line break resulted in a low steamline pressure SI and main steamline isolation. The crew has completed 19000 through step 28.

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**Deleted:** The USS has directed you to "Check if ECCS flow should be reduced using step 29 of 19000."

**Deleted:** ¶

**Task Standard:** . ECCS termination criteria monitored and evaluated.¶

¶

JPM INFORMATION

Deleted: RQ-IP-19000-006

OPERATOR'S NAME: \_\_\_\_\_

EVALUATION DATE: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

JPM TITLE: Determine Radiation Posting Requirements

COMPLETION TIME: 25 minutes

Application: RQ  
Task Number: 38002  
K/A Number: G2.3.4  
10CFR55.45 Ref.: 10

RO: 2.5 SRO: 3.1

Deleted: Evaluate ECCS Termination Criteria - Injection Flow Required

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Evaluation Method  Performed  Simulated  
Evaluation Location  Simulator  Control Room  Unit 1  Unit 2  
Performance Time: \_\_\_\_\_ minutes

OVERALL JPM EVALUATION  SATISFACTORY  UNSATISFACTORY

Examiner Comments:

Examiner's Signature: \_\_\_\_\_

## INSTRUCTIONS TO EXAMINER

This JPM is based on the latest rev of 19000-C. Verify this JPM is in accord with the latest procedural revision prior to use. Cues preceded by a "@..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

**REQUIRED ITEMS:**

1. Survey Map
2. Calculator
3. 00930-C, Radiation and Contamination Control

**SIMULATOR SETUP:** None

## DIRECTIONS TO OPERATOR

You will be given information describing the Initial Conditions, Assigned Task, and the Task Standard. Please ensure you understand the assigned task before beginning. You will be allowed access to any item normally used to perform this task.

**INITIAL CONDITIONS:** A point source reads as shown on the survey map provided. The entry point to the room is 3 feet from the radiation source.

**ASSIGNED TASK:** Using the room survey map provided, calculate the dose rate at the door and determine the appropriate minimum posting required at the entry door to the room indicated on the survey map.

**TASK STANDARD:** Proper minimum HP posting determined.

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**Deleted:** 1. Reset to IC14 (MOL 100%)  
 2. Initiate manual SI  
 3. Initiate manual MSLI  
 4. Throttle total AFW flow to stabilize RCS temperature  
 5. Insert malfunction PR31A at 10% severity and increase severity if required to ensure RCS pressure is slowly lowering  
 6. Ack/Reset alarms  
 7. Freeze simulator

**Deleted:** Setup time: 7 minutes

**Deleted:** A steam dump header line break resulted in a low steamline pressure SI and main steamline isolation. The crew has completed 19000 through step 28.

**Deleted:** The USS has directed you to "Check if ECCS flow should be reduced using step 29 of 19000."

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**Deleted:** ECCS termination criteria monitored and evaluated.

JPM STEPS

START TIME: \_\_\_\_\_

**STEP 1**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Calculate dose rate at entry point into room.**

♦ Dose rate at room entry =  $545 \text{ Rem/hr} \times (0.5/36)^2 = 105 \text{ mRem/hr}$

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**STEP 2**  
**CRITICAL (♦)**  
 SAT  UNSAT

**Determine Room entry posting requirements.**

♦ Dose rate > 100 mrem/hr and < 1000 mrem/hr entrance to room should be posted as a high radiation area as a minimum.

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SAT  UNSAT

Verify adequate heat sink

• Either of the following observed:

- AFW flow > 570 gpm
- or
- NR level in at least one SG > 10%

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Deleted: Determine RCS pressure response

Deleted: RCS pressure observed to be lowering

Deleted: STEP 4

**CRITICAL (♦)**

SAT  UNSAT

Report to USS

♦ ECCS should not be reduced

STOP TIME: \_\_\_\_\_

Field Notes