Final Submittal

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

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

Administrative JPMs

SOUTHERN COMPANY

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 requirments

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:

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.

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

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 Peneratation Area Filtration & Exhaust Fan Train "A' being out of service

STOP TIME: _____

Field Notes

SOUTHERN COMPANY

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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: 3¶
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¶
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¶
Approved By :
Deleted: Leon Ray
Deleted: XXXXXXXXXX
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.

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.

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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.¶
¶

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___/___/___

JPM TITLE: Determine mode change requirments

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: _____

Deleted: RQ-JP-
Deleted: 37021-001-02A
Deleted: 19200-001
Deleted: Monitor / Evaluate CSFSTs - Core Cooling
Deleted: REVISION:
Deleted: 2
Deleted: 3
Deleted: February 10, 1998
Deleted: April 30, 2001¶
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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.

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Deleted: 37021-001-02A
Deleted: 19200-001
Deleted: This JPM is based on 19200-C.
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Deleted: SIMULATOR SETUP: . 1. . Reset to IC14 (MOL 100%)¶
. 2. Insert malfunction RC03A (DBA LOCA)¶
. 3. Stop all RCPs
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. 4. . Throttle AFW to = 200 gpm/SG.¶
. 5. . Set RF: ED02(TC > Sat) = 0.2
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. 6. . Set RF: ED01(O/R ... [1]
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Deleted: (TC > Sat) = (725 ... [2]
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Deleted: 10 minutes¶
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Deleted: Appropriate FRP ... [6]

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START TIME: _____

STEP 1
CRITICAL (♦)
SAT ☐ UNSAT ☐

Determine LCO's impacted

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Deleted: ☐ ♦ Core Cooling ORANGE Path
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☐ • 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

Deleted: RQ-JP-
Deleted: 37021-001-02A
Deleted: 19200-001
Deleted: Determine appropriate FRP
Deleted: ____
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6. Set RF: ED01(O/R CETCs) = OVERRIDE
7. Set RF: ED02

Page 4: [2] Deleted Administrator 03/31/2005 9:49:00 AM

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

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

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Page 4: [6] Deleted Administrator 03/31/2005 10:19:00 AM

Appropriate FRP identified for existing CSF challenges.

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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 recuser 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: _____

INSTRUCTIONS TO EXAMINER

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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 recuser 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

START TIME: _____

STEP 1
CRITICAL (♦)
SAT ☐ **UNSAT** ☐

Calculate projected dose

☐ ♦ Dose projection = 152 Rem/hr x $(1/2)^2$ x 60 min x (1 hr / 60 min) = 38 Rem (>25 Rem & < 50 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 occurance for > 25 Rem lifesaving

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

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
John Doe	123-45-6789	signature	12345

* _____ _____ _____
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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CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

LIFE SAVING IN EMERGENCY CONDITIONS

Deleted: RQ-JP-19000-0061¶ ¶ 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 recuser 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."

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Task Standard: ECCS termination criteria monitored and evaluated.¶

¶

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: _____

Deleted: Evaluate ECCS Termination Criteria - Injection Flow Required

Deleted: REVISION: 1 May 1, 2001¶
¶

Deleted: 5

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Deleted: RQ-JP-19000-006

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.

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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 recuser 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

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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.

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

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

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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 Rem/hr x $(1/2)^2$ x 60 min x (1 hr / 60 min) = 38 Rem (>25 Rem & < 50 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 occurance for > 25 Rem lifesaving

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Deleted: Determine subcooling
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Deleted: .
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
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.

NAME	SSN	SIGNATURE	TLD NUMBER
John Doe	123-45-6789	signature	12345

* _____

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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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.

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 3rd 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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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: .
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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

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

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¶

¶

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.¶

¶

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: _____

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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

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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

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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.

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JPM STEPS

START TIME: _____

STEP 1
CRITICAL (♦)
SAT ☐ UNSAT ☐

Classify the event

Deleted: ___

☐ • Plant conditions evaluated
☐ ♦ Emergency event classified as a General Emergency
(failure of 2 barriers and potential failure of the 3rd barrier)
Fuel Cladding –Failed
Reactor Coolant System – Failed
Containment – Potential Failure

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STEP 2
CRITICAL (♦)
SAT ☐ UNSAT ☐

Recommend Protective Actions

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☐ ♦ 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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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: _____

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.

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 Paramter Data

Parameter	*Channel /Loop 1*	*Channel /Loop 2*	*Channel / Loop 3*	*Channel / Loop 4*
PR NI	0%	0%	0%	0%
IR SUR	+0.1 DPM	+0.13 DPM		
IR NI	$3.0x10^{-4\%}$	$3.2x10^{-4\%}$		
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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CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

MONITOR / EVALUATE CSFSTs - SUBCRITICALITY

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Deleted: 37021-001-02A
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Deleted: April 30, 2001¶
Deleted: Written By :
Deleted: George Gunn
Deleted: M. C. Henry Date:
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Approved By :
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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.

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.¶

¶

JPM INFORMATION

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Deleted: 19200-001

OPERATOR'S NAME: _____

EVALUATION DATE: __/___/___

JPM TITLE: Monitor / Evaluate CSFSTs - Subcriticality

Deleted: Core Cooling

COMPLETION TIME: 12 minutes

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Deleted: February 10, 1998
Deleted: April 30, 2001¶
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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: _____

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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. 2. . Insert malfunction RC03A (DBA LOCA)¶

. 3. . Stop all RCPs

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. 4. . Throttle AFW to ≈ 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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Deleted: (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)**¶

¶

... [1]

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JPM STEPS

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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

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Plant Paramter Data

Parameter	Channel / Loop 1	Channel / Loop 2	Channel / Loop 3	Channel / Loop 4
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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(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

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

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

STEP 3
CRITICAL (♦)
SAT ☐ **UNSAT** ☐

Determine Shutdown Margin

☐ ♦ E.13 Shutdown Margin of 1.545% calculated

STEP 4
SAT ☐ UNSAT ☐

Report to USS

☐ • Shutdown margin calculation complete

STOP TIME: _____

Field Notes

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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CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

Deleted: RQ-JP-14005-002

CALCULATE SHUTDOWN MARGIN

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	16000 MWD/MTU
Boron Concentration	750 ppm
Tavg	400 °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%

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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.

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Deleted: shutdown to Mode 3 has been performed

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

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

STEP 3
CRITICAL (♦)
SAT ☐ **UNSAT** ☐

Determine Shutdown Margin

☐ ♦ E.13 Shutdown Margin of 1.545% calculated

Deleted: ♦ Data Sheet 5 selected¶ ☐
Deleted: ≈ 93.7
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Deleted: 1959
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)
Deleted: ≈ 3.266

STEP 4
SAT ☐ UNSAT ☐

Report to USS

☐ • Shutdown margin calculation complete

STOP TIME: _____

Field Notes

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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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: _____

INSTRUCTIONS TO EXAMINER

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 , DO3B
   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 postions listed. Also for SRO's correct tagging sequence is listed.

START TIME: _____

STEP 1
CRITICAL (♦)
SAT ☐ **UNSAT** ☐

Determine Required Compnents & 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.

☐	♦ 2HS1635A, NSCW PUMP 4 HANDSWITCH, PULL-TO-LOCK	*{Sequence (1)}*
☐	♦ 2HS1635C, NSCW PUMP 4 REMOTE S/D PANEL TRANSFER SWITCH, CONTROL ROOM	*{Sequence (1)}*
☐	♦ 2BA03-11, NSCW PUMP 4 MOTOR SWITCHGEAR BREAKER, DISCONNECTED	*{Sequence (2)}*
☐	♦ 2BBB-36, NSCW PUMP 4 DISCHARGE MOV BREAKER, OFF	*{Sequence (2)}*
☐	♦ 2HV11613, NSCW PUMP 4 DISCHARGE MOV HANDWHEEL, CLOSED	*{Sequence (3)}*
☐	♦ 2-1202-U4-A18, NSCW PUMP 4 DISCHARGE MOV BYPASS VALVE, UNLOCKED/SHUT	*{Sequence (3)}*
☐	• 2-1202-X4-847, NSCW PUMP 4 MOTOR COOLER VENT ISOLATION, UNCAPPED/OPEN	*{Sequence (4)}*

STOP TIME: _____

Field Notes

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PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

DETERMINE TAGGING REQUIREMENTS

Deleted: RQ-JP-19000-006¶ ¶ 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: 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.

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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

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: _____

Deleted: Evaluate ECCS Termination Criteria - Injection Flow Required

Deleted: REVISION: 1 May 1, 2001¶
¶

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INSTRUCTIONS TO EXAMINER

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 , DO3B
   - 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 postions listed. Also for SRO's correct tagging sequence is listed.

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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¶

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.

START TIME: _____

STEP 1
CRITICAL (♦)
SAT ☐ UNSAT ☐

Determine Required Compnents & 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.

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

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

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

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

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

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

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

STOP TIME: _____

Field Notes

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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%¶
¶
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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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: Deterrmine 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: _____

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

JPM STEPS

START TIME: _____

STEP 1
CRITICAL (♦)
SAT ☐ **UNSAT** ☐

Calculate dose rate at entry point into room

☐ ♦ Dose rate at room entry = 545 Rem/hr x $(0.5/36)^2$ = 105 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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CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

DETERMINE RADIATION POSTING REQUIREMENTS

Deleted: RQ-JP-19000-006¶
¶
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.

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Task Standard: ECCS termination criteria monitored and evaluated.¶

¶

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

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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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¶

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: 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 Rem/hr x $(0.5/36)^2$ = 105 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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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

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CRITICAL (♦)¶
SAT ☐ UNSAT ☐¶
¶
Report to USS¶
_____
_____
_____¶
☐ ♦ ECCS should not be reduced¶
¶