

Final Submittal

(Blue Paper)

1. Administrative Questions/JPMs
2. In-plant JPMs
3. Control Room JPMs (simulator JPMs)

**VOGTLE EXAM 2002-301
50-424 AND 50-425**

**NOVEMBER 26, &
DECEMBER 2 - 13, 2002**

Facility: Vogtle
Exam Level (circle one): RO / SRO(I)

Date of Examination: 12/02/02
Operating Test No.: Final

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
a. D/G 1A Parallel Operating with Failure of LubeOil K/A: 064A2.01, 064A2.03,	A, S, N, L	6
b. Manually Initiate Containment Spray K/A: 026A2.03, 069AA2.02	A, S, M	5
c. Start a Reactor Coolant Pump K/A: 002A1.05	A, S, M, L	4P
d. Spurious CIA Response K/A: 004A2.12	S, N	2
e. Initiate RCS Boration using BTRS K/A:004A4.07	D, S	1
f. Bypass Containment Hi-1 Following a Loss of Heat Sink K/A: 012A4.04	CR, L, D	7
g. Reduce Containment pressure following a CVI K/A: 029A1.03	CR, S	8

B.2 Facility Walk-Through

a. Control Pzr Pressure and S/G Level from Shutdown Panel K/A:, 068AA1.03, 068AA1.28	A,N	8
b. TDAFW Local Manual Control w/o DC power K/A: 061A2.03, 061A2.04	D	4S
c. Locally Isolate RCP Seals K/A: 003A4.01	D, R	4P

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

Facility: <u>Vogtle</u>		Date of Examination: <u>12/02/02</u>	
Exam Level (circle one): USRO		Operating Test No.: <u>Final</u>	
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e.			
f.	Bypass Containment Hi-1 Following a Loss of Heat Sink K/A: 012A4.04	CR, L, D	7
g.			
B.2 Facility Walk-Through			
a.	Control Pzr Pressure and S/G Level from Shutdown Panel K/A: 068AA1.03, 068AA1.28	A, N	8
b.			
c.	Locally Isolate RCP Seals K/A: 003A4.01	D, R	4P
* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA			



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-13427

D/G 1A PARALLEL OPERATING WITH
FAILURE OF LUBE OIL

Revision 0

November 14, 2002

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: Following a 11 day D/G 1A outage maintenance and engineering support are standing by for a D/G 1A test run. D/G 1A was started by the last shift and is now operating unloaded with the D/G output breaker open. The outside area SO is stationed at the D/G to support the run.

Assigned Task: The USS has directed you to parallel D/G 1A to the grid and raise load to 7000 kw using SOP-13427-1 Section 4.2.1.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: D/G 1A PARALLEL OPERATING WITH FAILURE OF LUBE OIL

COMPLETION TIME: 10 minutes

APPLICATION: RO/SRO

TASK NUMBER: B.1.a

K/A NUMBER: 064A2.01, 064A2.03

Evaluation Method Performed SimulatedEvaluation 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 19251-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. 17035-1

SIMULATOR SETUP:

1. Reset to IC 14
2. Start D/G 1A allow it to run unloaded until all annunciators are clear
3. Acknowledge alarms and freeze simulation

Setup time: 5 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: Following a 11 day D/G 1A outage maintenance and engineering support are standing by for a D/G 1A test run. D/G 1A was started by the last shift and is now operating unloaded with the D/G output breaker open. The outside area SO is stationed at the D/G to support the run.

Assigned Task: The USS has directed you to parallel D/G 1A to the grid and raise load to 7000 kw using SOP-13427-1 Section 4.2.1.

JPM STEPS

START TIME: _____

STEP 1SAT UNSAT **Paralleling Diesel Generator To 4160V Bus**

- ENSURE the Diesel Generator 1A Sync Mode Selector Switch TS-DG1A is in AUTO
- ENSURE Breaker 1AA02-05 and 1AA02-01 Synchronization Switches are OFF
- PLACE the Breaker 1AA02-19 Synchronization Switch to ON
- ♦ VERIFY Diesel Generator is in the Parallel Mode by observing the blue DSL GEN 1A UNIT MODE/FAST START light is not illuminated.
- SET the Diesel Generator Load Pot 1-SE-4915 to 1.00

STEP 2**CRITICAL (♦)**SAT UNSAT **Adjust D/G 1A voltage and frequency**

- SELECT 1AA02 4160V Bus phase voltage of the highest value
- SELECT the Diesel Generator 1A (1B) voltage of the lowest value
- VERIFY Sync Scope Meter is rotating, Synchronizing Lights are bright at the 6 o'clock position, Synchronizing lights are dark at the 12 o'clock position, and the Red AUTO SYNC PERMISSIVE LIGHT comes on near the 12 o'clock position
- ADJUST generator voltage to approximately 50V above the highest phase of the bus voltage
- ♦ ADJUST the generator speed until the Sync Scope needle is rotating slowly in the clockwise direction (fast)

JPM STEPS

STEP 3

CRITICAL (◆)

SAT UNSAT Closing D/G 1A output breaker

- ◆ When the Sync Scope needle reaches the 11 o'clock position DEPRESS and HOLD the Diesel Generator 1A AUTO SYNC PERMISSIVE PUSHBUTTON PB-DG1A
- ◆ VERIFY that the DG1A (DG1B) OUTPUT BRKR 1AA02-19 CLOSES
- VERIFY that generator loads to approximately 700 kW
- ◆ ADJUST generator voltage to obtain kVAR loading between 200 and 300 kVAR positive (Out).
- PLACE Breaker 1AA02-19 (1BA03-19) Synchronization Switch to OFF

JPM STEPS

STEP 4**CRITICAL (◆)**SAT UNSAT **Respond to decreasing D/G 1A lube oil pressure**

- ◆ Acknowledge DG-1A lube oil alarms and reference procedure 17035-1
- ◆ Note that DG-1A should have tripped when ALB035 B02 Alarmed
- ◆ Trip D/G 1A using either the normal or emergency trip pushbuttons
- ◆ Verify DG-1A output breaker (1AA02-19) opens and engine stops

Simulator operator:

Override ALB035B06 (High lube oil filter D/P) to on

Panel Drawings-EAB3-ALB35-B06-ON

Override ALB035 B01 (Lo pressure), and then B02 (Lo Pressure Trip) to on after student references appropriate ARP

Panel Drawings-EAB3-ALB35-B01-ON

Panel Drawings-EAB3-ALB35-B01-ON

STOP TIME: _____



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-13003

START A REACTOR COOLANT PUMP

Revision 0

November 14,2002

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 plant startup is in progress with the unit in Mode 4. Per UOP 12001, RCPs 1 and 4 have been started. The standby alignment has been verified for RCP 3 and an operator has performed a visual inspection. SGBD has been in service for 3 hours and the temperature is stable. Adequate SD Margin has been verified.

Assigned Task: The USS has directed you to "Start RCP 3 using 13003", and verify proper operation.

INSTRUCTIONS TO EXAMINER

This JPM is based on the latest rev of 13003-1. 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. 13003, Reactor Coolant Pump Operation

SIMULATOR SETUP:

1. Reset to IC3 (BOL Mode 4)
2. Verify open both breakers for RCP 3. (Do not start lift pump)
3. Verify SGBD for all 4 SGs
4. Establish stable plant conditions
5. Set ALB08E04 & F04 on a trigger to turn on
6. Activate trigger 10 seconds after RCP is started
7. Ack/Reset alarms
8. Freeze simulator

Setup time: 4 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 plant startup is in progress with the unit in Mode 4. Per UOP 12001, RCPs 1 and 4 have been started. The standby alignment has been verified for RCP 3 and an operator has performed a visual inspection. SGBD has been in service for 3 hours and the temperature is stable. Adequate SD Margin has been verified.

ASSIGNED TASK: The USS has directed you to "Start RCP 3 using 13003", and verify proper operation.

JPM STEPS

START TIME: _____

STEP 1SAT UNSAT **Verify proper ΔT for pump start**

- Verify secondary water temperature $\leq 10^\circ\text{F}$ above RCS loop Tcold
- Record value in Unit Control Log

CUE The USS will record the ΔT value in the USS Control Log.**STEP 2****CRITICAL (◆)**SAT UNSAT **Start the oil lift pump**

- ◆ RCP 3 oil lift pump running
- Oil permissive light lit

JPM STEPS

STEP 3SAT UNSAT **Establish RCP starting conditions**

- Verify visual inspection
CUE When requested: "Local inspection and hand rotation is complete."
- Seal injection flow 8 to 13 gpm
- Seal leakoff flow determined to be w/in normal operating range
- Seal $\Delta P > 200$ psid
- VCT pressure > 18 psig
- The following annunciators windows dark:
RCP Standpipe Hi & Lo level alarms (ALB08)
RCP Upper & Lower Oil Rsvr Hi/Lo level alarms (ALB11)
ACCW Clr Lo Flow, Clr Outlet Hi Temp, & Therm Barrier Hi Flow alarms (ALB04)
- RCS pressure and temperature within acceptable region of 12001, Fig 1

STEP 4SAT UNSAT **Verify vibration alarms clear**

- The following annunciators dark:
RCP Frame and Shaft Vibration Alert (ALB-08)
RCP Frame and Shaft Hi Vibration (ALB-08)

JPM STEPS

STEP 5**CRITICAL (◆)**SAT UNSAT **Start the RCP**

- SGBD temperatures < 10°F above RCS temperature
- Oil lift pump running > 2 minutes
- Ensure CNMT personnel clear of RCP before starting
- ◆ HS-0497A placed in START
- ◆ HS-0497B placed in START

STEP 6SAT UNSAT **Stop RCP oil lift pump**

- RCP 3 running > 1 minute
- RCP 3 oil lift pump stopped

JPM STEPS

STEP 7

CRITICAL (◆)

SAT UNSAT Verify improper RCP operation and stop RCP

- Adjust charging as necessary to control Pressurizer level.
- The following parameters observed:
 - RCS pressure normal
 - RCS loop flow normal
 - RCP vibration alarms (ALB08E04 & ALB08F04) illuminated**
 - Dispatch Control Building SO to RCP vibration monitor
 - RCP seal injection flows 8 to 13 gpm
 - RCP seal leakoff flows determined to be w/in normal operating range
 - RCP seal $\Delta P > 200$ psid
- ◆ Stop RCP 3 by placing either HS-0497A or HS-0497B placed in STOP

When requested the Control Building SO reports "RCP #3 shaft vibration at 22 mils and increasing"

Simulator Operator: Bring in the Alert alarm for RCP #3 allow time for the operator to locally respond then bring in the HIGH alarm.

STEP 8

SAT UNSAT Report to USS

- RCP #3 was started and had to be stopped due to high vibration

STOP TIME: _____

Field Notes



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-17006-001

Spurious CIA Response

Revision 0

10/24/02

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.

**REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.**

Initial Conditions: A SPURIOUS CIA ACTUATION OCURRED WHILE I&C PERSONNEL WERE TAKING VOLTAGE MEASUREMENTS IN THE SSPS CABINETS WITH THE UNIT AT 100% POWER. ALL MEASURING EQUIPMENT HAS BEEN DISCONNECTED AND SSPS CABINET DOORS CLOSED.

Assigned Task: Complete all actions using ARP 17006-1 "E06" as guidance to return systems to normal operation following a spurious CIA.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: Spurious CIA Response

COMPLETION TIME: 15 minutes

APPLICATION: RO/SRO

TASK NUMBER: B.1.d

K/A NUMBER: 002A2.12

Evaluation Method Performed SimulatedEvaluation 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 17006-1. 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. 17006-1

SIMULATOR SETUP:

1. Reset to IC14 (MOL 100%)
2. Initiate a manual CIA
3. Set charging flow to 85 gpm in manual with \approx 9 gpm seal injection flow
4. Ensure LV-459,460 closed, HV-8149A,B,C, closed and HV-8152,8160, and 15214 closed
5. Ack/Reset alarms
6. Freeze simulator

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.

*REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.*

INITIAL CONDITIONS: A SPURIOUS CIA ACTUATION OCCURRED WHILE I&C PERSONNEL WERE TAKING VOLTAGE MEASUREMENTS IN THE SSPS CABINETS WITH THE UNIT AT 100% POWER. ALL MEASURING EQUIPMENT HAS BEEN DISCONNECTED AND SSPS CABINET DOORS CLOSED.

Assigned Task: Complete all actions using ARP 17006-1 "E06" as guidance to return systems to normal operation following a spurious CIA.

JPM STEPS

START TIME: _____

STEP 1**CRITICAL (♦)**SAT UNSAT **Restore Instrument Air to Containment**

- ♦ RESET Phase A by placing both 1-HS-40120 and 1-HS-40122 to RESET position
- ♦ OPEN Instrument Air to containment 1-HV-9378 using both 1-HS-9378A & 1-HS-9378B

STEP 2**CRITICAL (♦)**SAT UNSAT **Establish normal system alignment**

- Section 4.4.2 of 13006 selected
- Verify orifice isolations HV-8149A, B, & C CLOSED
- Verify letdown isolations LV-459 and LV-460 CLOSED
- Verify Pressurizer Aux Spray Valve HV-8145 CLOSED
- ♦ CVCS HELB isolation HV-15214 OPEN
- ♦ Letdown isolations HV-8160 and HV-8152 OPEN
- Place pressure controller PIC-131 in MAN at 50% to 75% demand
- Place temperature controller TIC-0130 in MAN at 50% demand
- Verify PRZR level > 17%

JPM STEPS

STEP 3

CRITICAL (♦)

SAT UNSAT Establish normal system alignment

- ☒ ♦ 1-HV-8147 ALTERNATE CHARGING TO LOOP 4
CUE Unit 1 is operating on Cycle 11
- ☒ ♦ OPEN 1-HV-8106 and 1-HV-8105 CHARGING TO RCS ISOLATION
- ☒ ♦ Adjust charging flow to 80-90 gpm (Maintain RCP seal injection 8-13 gpm)

STEP 3

CRITICAL (♦)

SAT UNSAT Establish letdown flow

Note: Letdown pressure may be allowed to fluctuate temporarily while establishing letdown flow, but must be stabilized within the required band. Charging flow will have to be adjusted to \geq desired letdown flow in order to stabilize letdown parameters.

- ☒ ♦ Letdown isolations LV-459 and LV-460 OPEN
- ☒ ♦ Orifice isolation HV-8149B or HV-8149C OPEN
CUE Unit 1 is operating on Cycle 11
- ☒ ♦ PIC-131 adjusted to attain 360 to 380 psig on PI-131A
- ☒ ♦ Record the letdown orifice that was placed in service in the Unit Control Log
CUE The USS will ensure the RO makes a log entry about the letdown orifice placed in service."

JPM STEPS

STEP 3SAT UNSAT **Place letdown controllers in automatic**

- PIC-131 in AUTO
- Letdown pressure 360 to 380 psig on PI-131A
- TIC-130 in AUTO
- Letdown temperature \leq 115 °F on TI-130

STEP 4SAT UNSAT **Verify proper system operation**

- Regen heat exchanger outlet (letdown) on TI-127 verified < 380 °F
 - Maintain PRZR level within 1% of program
- CUE** "The RO will monitor and control PRZR level."

JPM STEPS

STEP 5SAT UNSAT **Complete System restorations**

- OPEN RCP Seal Return 1-HV-8100 and 1-HV-8112 using 1-HS-8100 and 1-HS-8112
 - RESET CVI by placing both 1-HS-40121 and 1-HS-40123 to RESET position
 - COMPLETE the applicable portions of 11886-1, "Recovery From ESF Actuations", for CIA and CVI
- CUE** "The common BOP will perform 11886-1"

STEP 6SAT UNSAT **Report to USS**

- Systems Restored to normal operations following CIA

STOP TIME: _____



PLANT VOGTLE

**CONTROL ROOM OPERATOR
/
JOB PERFORMANCE MEASURE**

NRC-JP-13010

INITIATE RCS BORATION USING BTRS

Revision 0

November 14, 2002

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 crew is preparing to reduce power to 75% to remove MFP B from service. BTRS demineralizers 4, 5, 6, and 7 have been equilibrated with the current RCS boron concentration. In addition, the extra RO has placed the BTRS system in standby alignment.

Assigned Task: The USS has directed you to "Initiate boration of RCS using BTRS demineralizers 4, 5, 6, and 7", per Section 4.2.4 of 13010-1.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___/___/___

JPM TITLE: Initiate RCS Boration Using BTRS

REVISION: 0 November 14, 2002

COMPLETION TIME: 20 minutes

APPLICATION: RO/SRO

TASK NUMBER: B.1.e

K/A NUMBER: 004A4.07

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 13010-1. 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 performance of this JPM.

REQUIRED ITEMS: 1. 13010, Boron Thermal Regeneration System

SIMULATOR SETUP:

1. Reset to IC14
2. Perform 13010-1 section 4.1.2
3. Place BTRS Chiller in service per 13010-1 section 4.1.3, RF: CV24
4. Ack/Reset alarms
5. Freeze simulator

Setup time: 10 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: The crew is preparing to reduce power to 75% to remove MFP B from service. BTRS demineralizers 4, 5, 6, and 7 have been equilibrated with the current RCS boron concentration. In addition, the extra RO has placed the BTRS system in standby alignment.

Assigned Task: The USS has directed you to "Initiate boration of RCS using BTRS demineralizers 4, 5, 6, and 7", per Section 4.2.4 of 13010-1.

JPM STEPS

START TIME: _____

STEP 1SAT UNSAT **Establish prestart alignment**

- Verify standby alignment IAW section 4.1.2
CUE "The extra RO has performed section 4.1.2."
- Place the BTRS Chiller in service IAW section 4.1.3
CUE "The ABO has placed the BTRS Chiller in service."
- BTRS Demin outlet isolation valves open
CUE If requested, "The USS desires that demins 4, 5, 6, and 7 be used to borate the RCS."
CUE "The ABO has opened 1-1208-U4-263, 262, 261, and 260."
CUE The SSS will ensure the IV is performed.
CUE The USS will ensure the DEMIN CONTROL LOG is updated."

Notes:**STEP 2****CRITICAL (♦)**SAT UNSAT **Align BTRS System for Boration**

- ♦ BTRS Demin Isolation valve, HS-7010E open
- ♦ BTRS Demin Isolation valve, HS-7010D open
- ♦ BTRS Demin Isolation valve, HS-7010C open
- ♦ BTRS Demin Isolation valve, HS-7010B open
- IV requested
CUE "The extra RO will perform the IV."
- ♦ HIC-387 to 0% Borate position
- Ensure HV-8115 remains open
- Place TIC-381A in manual at 0% demand

Notes:

JPM STEPS

JPM STEPS

STEP 3

CRITICAL (◆)

SAT UNSAT Initiate boration

- ☒ ◆ Place HS-10351 in the BORATE position
 - ☒ • Verify white BORATE light lit (this will occur after auto system alignment is complete)
 - ☒ • Ensure HV-7054 is OPEN
 - ☒ ◆ Close HV-8115 by placing HS-8115 in AUTO
 - ☒ ◆ Adjust TIC-381 to $\approx 140^\circ$ and place controller in AUTO (adjust pot if required)
- Note: this step is considered SAT if temperature is below 140° before continuing on to the next step**
- ☒ • Verify BTRS demin inlet @ 140° on TI-381 and return header @ 115° on TI-386
 - ☒ ◆ HIC-387 output lowered to initiate boration
 - ☒ • Boronometer indication of BTRS outlet concentration rising

Notes:

STEP 4

SAT UNSAT Report to USS

- ☒ • RCS boration initiated using BTRS

Notes:

STOP TIME: _____



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-13509

BYPASS CONTAINMENT HI-1 FOLLOWING A LOSS OF HEAT SINK

Revision 0

November 14, 2002

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.

***REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.***

Initial Conditions: While responding to a Loss of Heat Sink on Unit ____, Containment pressure reached the Hi-1 setpoint. The crew is preparing to establish feedwater flow in accordance with step 6 of 19231-C.

Assigned Task: The USS has directed you to “Bypass Containment Hi-1 pressure channels __ - PB936B and __ - PB935B by initiating 13509-C.”

INSTRUCTIONS TO EXAMINER

This JPM is based on 13509-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. 13509-C, BTI Panel Operation
2. Two (2) BTI panel keys

COMPONENT LOCATION: Main Control Room

Note to Examiner: Permission from the USS must be obtained to open the Protection Cabinet doors. A BTI key may be obtained from the USS.

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.

***REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.***

INITIAL CONDITIONS: While responding to a Loss of Heat Sink on Unit ____, Containment pressure reached the Hi-1 setpoint. The crew is preparing to establish feedwater flow in accordance with step 6 of 19231-C.

ASSIGNED TASK: The USS has directed you to "Bypass Containment Hi-1 pressure channels __ - PB936B and __ - PB935B by initiating 13509-C."

JPM STEPS

START TIME: _____

STEP 1SAT UNSAT **Verify initial conditions****Note: Permission from the appropriate USS will be required to open the Protection Cabinet doors to access the BTI panels.**☒ • Checklist 2 & 3 bistables circled (13509-C)☒ • Obtain BTI Enable keys**CUE The USS has provided the proper BTI keys****STEP 2****CRITICAL (♦)**SAT UNSAT **Bypass NSSS Channel II Hi-1 bistable, 936B**☒ • Verify circuit breaker is ON☒ • Verify red power available LED illuminated**CUE The red power LED is illuminated**☒ ♦ Keylock switch positioned to BYPASS ENABLE & Verify LED illuminates**CUE The LED is illuminated**☒ • Verify ALB05 B02 illuminated**CUE ALB05 B02 is illuminated**☒ ♦ PB936B BTI switch #34 positioned to BYPASS☒ • Verify 936B LED illuminated**CUE 936B LED is illuminated**☒ • Verify TSLB extinguished**CUE The TSLB for 936B is extinguished**

JPM STEPS

STEP 3

CRITICAL (◆)

SAT UNSAT Bypass NSSS Channel III Hi-1 bistable, 935B

- Verify circuit breaker is ON
- Verify red power available LED illuminated
CUE The red power LED is illuminated
- ◆ Keylock switch positioned to BYPASS ENABLE & Verify LED illuminates
CUE The LED is illuminated
- Verify ALB05 C02 illuminated
CUE ALB05 C02 is illuminated
- ◆ PB935B BTI switch #34 positioned to BYPASS
- Verify 935B LED illuminated
CUE 935B LED is illuminated
- Verify TSLB extinguished
CUE The TSLB for 935B is extinguished

STEP 4

SAT UNSAT Report to USS

- Containment Hi-1 Channels 936 and 935 are bypassed

STOP TIME: _____

Field Notes



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-13125

REDUCE CONTAINMENT PRESSURE FOLLOWING CVI

Revision 11

October 4, 2000

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: During a pressure relief operation, a spurious CVI was actuated while I&C was troubleshooting a faulty slave relay. The testing has been terminated and the CVI signal has been reset.

Assigned Task: The USS has verified the existing Gaseous Release Permit is still valid and has directed you to "Initiate containment pressure relief" per Section 4.4.1 of 13125-1 and reduce Containment pressure to 0 psig.

OPERATOR'S NAME: _____

EVALUATION DATE: ___/___/___

JPM TITLE: Reduce Containment Pressure Following CVI

REVISION: 11 October 4, 2000

COMPLETION TIME: 20 minutes

APPLICATION: RO/SRO

TASK NUMBER: B.1.g

K/A NUMBER: 029A1.03

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: _____

This JPM is based on the latest rev of 13125-1. 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. 13125, Containment Purge System

SIMULATOR SETUP:

1. Reset to IC14
2. Place Mini-Purge supply fan in service per 13125
3. Remove Mini-Purge supply fan from service when Containment pressure is \approx 0.5 psig
4. Ack/Reset alarms
5. Freeze simulator

Setup time: 10 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: During a pressure relief operation, a spurious CVI was actuated while I&C was troubleshooting a faulty slave relay. The testing has been terminated and the CVI signal has been reset.

ASSIGNED TASK: The USS has verified the existing Gaseous Release Permit is still valid and has directed you to "Initiate containment pressure relief" per Section 4.4.1 of 13125-1 and reduce Containment pressure to 0 psig.

JPM STEPS

START TIME: _____

STEP 1SAT UNSAT **Procedure and section reference**☒ •13125 section 4.4.1**CUES:**

- (1) If requested, "The USS does not desire to start additional containment coolers."
- (2) When requested, "The USS has obtained an updated gaseous release permit."
- (3) All Radiation monitors are operable

Notes:**STEP 2****CRITICAL (♦)**SAT UNSAT **Initiate containment pressure relief**

☒ • Containment pressure verified between 0.3 and 4.4 psig
CUE Containment pressure is 0.5 psig

☒ ♦ Mini-purge exhaust damper (1/2)HV-12592 CLOSED
CUE Red light OFF; Green Light ON

☒ ♦ Mini-purge ORC isolation (1/2)HV-2629B OPEN
CUE Red light ON; Green Light OFF

☒ ♦ Mini-purge IRC isolation (1/2)HV-2628B OPEN
CUE Red light ON; Green Light OFF
CUE If requested, "The USS has logged the initiation of Containment pressure relief and notified Chemistry."

Notes:

JPM STEPS

STEP 3

CRITICAL (♦)

SAT UNSAT Place containment mini-purge exhaust fan in service

- ☒ ♦ Containment pressure <+0.3 psig
CUE Containment pressure is now 0.2 psig
- ☒ ♦ Mini-purge exhaust damper (1/2)HV-12592 OPEN
CUE Red light ON; Green light OFF
- ☒ ♦ Mini-purge exhaust fan running using (1/2)HS-2631B
CUE Red light ON; Green light OFF
- ☒ • Place (1/2)HV-12592 in AUTO

Notes:

STEP 4

CRITICAL (♦)

SAT UNSAT Stop pressure relief

- ☒ • Containment pressure -0.1 to +0.1 psig
CUE Containment pressure is 0 psig
CUE If requested, "The USS will log the final Containment pressure and stop time on the gaseous release permit."
- ☒ ♦ Mini-purge exhaust fan (1/2)HS-2631B STOPPED
CUE Red light OFF; Green light ON
- ☒ ♦ Mini-purge Containment isolation (1/2)HV-2629B CLOSED
CUE Red light OFF; Green light ON
- ☒ ♦ Mini-purge Containment isolation (1/2)HV-2628B CLOSED
CUE Red light OFF; Green light ON
- ☒ ♦ Mini-purge exhaust damper (1/2)HV-12592 CLOSED
CUE Red light OFF; Green light ON

Notes:

JPM STEPS

STEP 5

SAT UNSAT Document termination of containment pressure relief☒ • Chemistry notified

CUE "The USS will notify Chemistry that the pressure relief is secured."

☒ • The following valves verified CLOSED using Checklist 3

Preaccess purge inlet (1/2)HV-2593

Mini-purge exhaust Containment isolation (1/2)HV-2628B

Mini-purge exhaust Containment isolation (1/2)HV-2629B

Mini-purge supply Containment isolation (1/2)HV-2626B

Mini-purge supply Containment isolation (1/2)HV-2627B

CUE Red light OFF; Green light ON (For All Valves)

☒ • Independent verification requested for Checklist 3

CUE "The EXTRA RO will perform the IV on checklist 3."

Notes:

STEP 6

SAT UNSAT Report to USS☒ • Containment pressure relief completed

Notes:

STOP TIME: _____



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-18038

CONTROL PRZR PRESSURE AND SG LEVEL FROM REMOTE SHUTDOWN PANELS

Revision 0

November 14, 2002

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.

**REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.**

Initial Conditions: Unit____ control room has been evacuated due to fire. You have responded to Shutdown Panel____. PRZR pressure is 2200 psig and lowering. SG WR levels are ≈ 60% and lowering.

Assigned Task: The USS has directed you to "Restore PRZR pressure and SG level using 18038, steps 11 and 12", and control within required procedure limits.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___/___/___

JPM TITLE: Control PRZR Pressure and SG level From Remote Shutdown Panels

REVISION: 16 August 15, 2001

COMPLETION TIME: 10 minutes

APPLICATION: RO/SRO

TASK NUMBER: B.2.a

K/A NUMBER: 068AA1.03, 068AA1.28

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 18038-1. Verify this JPM is in accord with the latest procedural revision prior to use. Cues designated by (#) are to be provided to the examinee during the performance of this JPM.

REQUIRED ITEMS:

1. 18038-1/2, Operation From Remote Shutdown Panels
2. PSDA(B) room key

COMPONENT LOCATION: PSDA(B) Rooms, Control Building, Level A

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.

*REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.*

INITIAL CONDITIONS: Unit____ control room has been evacuated due to fire. You have responded to Shutdown Panel____. PRZR pressure is 2200 psig and lowering. SG WR levels are \approx 60% and lowering.

Assigned Task: The USS has directed you to "Restore PRZR pressure and SG level using 18038, steps 11 and 12", and control within required procedure limits.

JPM STEPS

START TIME: _____

STEP 1**CRITICAL (♦)**SAT UNSAT **Control PRZR pressure**

Note: All controls would have been transferred to Local at step 7. The operator should demonstrate knowledge of pressure control by expressing the need to operate sprays/heaters to stabilize pressure between 2220 and 2260 psig.

- ♦ PORV (1/2)PV-455A(456A) closed
CUE Red light is OFF; Green light is ON
CUE Provide indication that PRZR pressure is 2200 psig and lowering slowly.
- ♦ [PSDA only] Sprays (1/2)PV-455B and (1/2)PV-455C closed
CUE Demand meter indicates 0%; Green down arrow pushbutton is illuminated;
 Red light is OFF; Green light is ON "the stem mounted switches"
- ♦ Backup heater (1/2)HS-10469B(10470B) in ON
CUE Red light is ON; Green light is OFF
CUE Provide indication that PRZR pressure is 2220 psig and rising slowly
- ♦ Heaters and Sprays operated to maintain PRZR pressure between 2220 and 2260 psig

JPM STEPS

STEP 2

CRITICAL (♦)

SAT UNSAT Control Steam Generator level

Note: The operator should demonstrate knowledge of level control by expressing the need to adjust AFW flow to stabilize SG WR levels between 65% and 70%.

- ☒ ♦ MDAFW pump A(B) running
- CUE** Red light is ON; Green light is OFF
- CUE** If referenced discharge pressure is 1700 psig
- CUE** S/G 1/4 levels are 60% and slowly lowering (Train "A" shutdown panel)
- CUE** S/G 2/3 levels are 59% and slowly lowering (Train "B" shutdown panel)

- ☒ ♦ Flow control Train "A" (1/2)FV-5137 and (1/2)FV-5139, Train "B"(1/2)FV-5134 and (1/2)FV-5132 throttled open
- CUE** Red light is ON; Green light is ON

- ☒ • Miniflow (1/2)FV-5155(5154) verified open
- CUE** Red light is ON; Green light is OFF

- ☒ • AFW flow verified
- CUE** AFW flow is 175 gpm S/Gs 1/4 (Train "A" shutdown panel)
- CUE** AFW flow is 190 gpm S/Gs 2/3 (Train "B" shutdown panel)

- ☒ ♦ FCVs operated to maintain SG WR levels between 65% and 75%
- CUE** Provide indication WR S/G levels are slowly rising

STEP 3

SAT UNSAT

Report to USS

- ☒ • PRZR pressure and SG level being maintained

STOP TIME: _____

Field Notes



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PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-18034

Turbine Driven AFW Pump Local Manual Control without DC Power

Revision 0

November 14, 2002

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.

REMEMBER: *All steps required for this task are to be simulated.
Plant equipment is not to be operated.*

Initial Conditions: The plant just experienced a trip due to a lightning strike in the switchyard. This caused a lock out relay to actuate on __AA02 and a fault on __CD1. The MDAFW pump B is tagged out for maintenance.

Assigned Task: The USS, with SS approval, has directed you to "Locally start the Unit __ TDAFW pump using Attachment E of 18034-__."

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: Turbine Driven AFW Pump Local Manual Control without DC Power

REVISION: 0 November 14, 2002

COMPLETION TIME: 15 minutes

APPLICATION: RO/SRO

TASK NUMBER: B.2.b

K/A Number: 061A2.03, 061A2.04

Evaluation Method Performed SimulatedEvaluation 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 18034-1. 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. 18034-1/2 Attachment E, TDAFW Pump Local w/o DC Power

COMPONENT LOCATION: TDAFWP Room

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.

***REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.***

INITIAL CONDITIONS: The plant just experienced a trip due to a lightning strike in the switchyard. This caused a lock out relay to actuate on __AA02 and a fault on __CD1. The MDAFW pump B is tagged out for maintenance.

ASSIGNED TASK: The USS, with SS approval, has directed you to "Locally start the Unit __ TDAFW pump using Attachment E of 18034-__."

JPM STEPS

START TIME: _____

STEP 1SAT UNSAT **Establish Communications with Control Room**

- Establish communications with required control room via telephone, page, headset, or radio.

STEP 2SAT UNSAT **Verify steam supply valve shut**

- Verify that (1/2)-HV-5106 is CLOSED.
CUE If located and verified correctly, state "(1/2)-HV-5106 is in the position you see now."

STEP 3SAT UNSAT **Verify Trip and Throttle Valve open**

- Verify that TDAFW Pump Trip & Throttle Valve is LATCHED.
CUE If located and verified correctly, state "Trip and Throttle Valve latching mechanism is in the position you see now."
- Verify that TDAFW Pump Trip & Throttle Valve is OPEN.
CUE If located and verified correctly, state "Trip and Throttle Valve is in the position you see now."

STEP 4SAT UNSAT **Locate FI-15100 to allow monitoring TDAFW Pump performance**

- Locate (1/2)-FI-15100 in TDAFW Pump room.

JPM STEPS

STEP 5**CRITICAL (◆)**SAT UNSAT **Start TDAFW pump to supply feed flow to Steam Generators**

- ◆ Throttle OPEN TDAFW Pump Steam Supply (1/2)-HV-5106.
CUE If valve throttled open correctly, state "Steam flow can be heard due to opening (1/2)-HV-5106."
- ◆ Observe (1/2)-FI-15100 and Adjust (1/2)-HV-5106 to attain 140gpm miniflow.
CUE Give cues to determine the operators ability to control proper miniflow rate as required. As steam flow is increases, feedback an increase in miniflow flowrate. The operator should take actions to control at approximately 140 gpm.

STEP 6SAT UNSAT ***Report to USS***

- TDAFW pump is operating and in service per Attachment E of 18034-(1/2).

STOP TIME: _____

Field Notes



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CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-19100

LOCALLY ISOLATE RCP SEALS

Revision 0

November 14, 2002

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.

**REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.**

Initial Conditions: The crew is responding to a loss of all AC power on Unit ___ per 19100. Power has been lost for 12 minutes and is not expected to be restored in the near future.

Assigned Task: The USS has directed you to "Locally close the following Unit ___ valves to isolate the RCP seals:

- ACCW supply isolation ORC, ___-HV-1979(AB-A___),
- RCP seal injection isolation valves ORC, ___-HV-8103A/B(AB-A___), & ___-HV-8103C/D(FHB-A___),
- RCP seal return isolation ORC, ___-HV-8100(AB-A___)."

INSTRUCTIONS TO EXAMINER

This JPM is based on the latest rev of 19100-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. RWP and associated dosimetry
2. Hearing Protection

COMPONENT LOCATION: UNIT 1
1979 (AB-A12); 8103A/B (AB-A09); 8103C/D (FHB-A10); and
8100 (AB-A09)

UNIT 2
1979 (AB-A105); 8103A/B (AB-A103); 8103C/D (FHB-A01); and
8100 (AB-A103)

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.

***REMEMBER: All steps required for this task are to be simulated.
Plant equipment is not to be operated.***

INITIAL CONDITIONS: The crew is responding to a loss of all AC power on Unit ___ per 19100. Power has been lost for 12 minutes and is not expected to be restored in the near future.

ASSIGNED TASK: The USS has directed you to "Locally close the following Unit ___ valves to isolate the RCP seals:

- ACCW supply isolation outside, ___-HV-1979(AB-A___),
- RCP seal injection isolation valves, ___-HV-8103A/B(AB-A___),
and ___-HV-8103C/D(FHB-A___),
- RCP seal return isolation outside, ___-HV-8100(AB-A___)."

JPM STEPS

START TIME: _____

STEP 1**CRITICAL (◆)**SAT UNSAT **Isolate ACCW Return from RCPs**

- ◆ ACCW containment isolation (1/2)HV-1979 located.
- ◆ (1/2)HV-1979 CLOSED.

STEP 2**CRITICAL (◆)**SAT UNSAT **Isolate RCP seal injection**

Note: If these valves are inaccessible, the path of ingress should be to the closest point allowed by radiological conditions and using local maps identify valve locations.

- ◆ RCP seal injections (1/2)HV-8103A and B located.
- ◆ (1/2)HV-8103A and B CLOSED.
- ◆ RCP seal injections (1/2)HV-8103C and D located.
- ◆ (1/2)HV-8103C and D CLOSED.

JPM STEPS

STEP 3

CRITICAL (◆)

SAT UNSAT Isolate RCP seal return

Note: If these valves are inaccessible, the path of ingress should be to the closest point allowed by radiological conditions and using local maps identify valve locations.

 ◆ Seal return (1/2)HV-8100 located. ◆ (1/2)HV-8100 CLOSED.

STEP 4

SAT UNSAT Report to USS • RCP seals are locally isolated.

STOP TIME: _____

Field Notes

Facility: <u>Vogtle</u>		Date of Examination: <u>12/02/02</u>
Examination Level (circle one): RO		Operating Test Number: <u>Final</u>
Administrative Topic/Subject Description	Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions	
A.1	CONDUCT OF OPERATIONS	Shift Manning Requirement K/A: G2.1.1, G2.1.4
	CONDUCT OF OPERATIONS	Calculate Boron Addition Following Reactor Trip with 3 stuck Control Rods K/A: G2.1.23
A.2	EQUIPMENT CONTROL	Review Clearance for Containment Spray Pump, Train "A" K/A: G2.2.13
A.3	RADIATION CONTROL	Calculate Worker Dose Using Survey Maps K/A: G2.3.4
A.4	EMERGENCY PLAN	Make Emergency Notifications with Failure of the ENN K/A: G2.4.43

Facility: <u>Vogtle</u>		Date of Examination: <u>12/02/02</u>
Examination Level (circle one): ISRO/ USRO		Operating Test Number: <u>Final</u>
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	CONDUCT OF OPERATIONS	Shift Manning Requirements K/A: G2.1.1, G2.1.4
	CONDUCT OF OPERATIONS	Calculate Boron Addition Following Reactor Trip with 3 Stuck Control Rods K/A: G2.1.23
A.2	EQUIPMENT CONTROL	Review Clearance for Containment Spray Pump "A" K/A: G2.2.13
A.3	RADIATION CONTROL	Question Topic - License Requirements for Conducting a Waste Release with Inoperable Instrumentation and Administrative Controls Ensuring Requirements Met. K/A: G2.3.6
		Question Topic - Selection Process for Individuals Performing Emergency Entries into Radiation Fields Resulting in Exceeding Permissible Exposure Limits. K/A: G2.3.4
A.4	EMERGENCY PLAN	Perform an Emergency Action Level Classification and Recommend Protective Actions K/A: G2.4.41, G2.4.44



PLANT VOGTLE

NRC-JP-10003

**SHIFT MANNING REQUIREMENTS
10003-C**

**October 04,2002
Rev #0**

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.

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 in MODE 6 for refueling outage with fuel movement in progress.
- Unit 2 is defueled

Assigned Task: Part #1 Fill in the Minimum shift composition on the table provided for each unit and common personnel.

Part #2 The total number of personnel required is _____.

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: SHIFT MANNING REQUIREMENTS

COMPLETION TIME: 20 minutes

APPLICATION: RO/SRO

TASK NUMBER: A.1.a, Conduct of Operations

K/A NUMBER: G2.1.1, G2.1.4

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: _____

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 in MODE 6 for refueling outage with fuel movement in progress.
- Unit 2 is defueled

Assigned Task: Part #1 Fill in the Minimum shift composition on the table provided for each unit and common personnel.

Part #2 The total number of personnel required is _____.

JPM STEPS

	Unit 1	Common	Unit 2
SS			
SRO			
RO			
NLO			
STA			

Total personnel required to meet MINIMUM shift composition is _____.

Answer Key:

Start Time: _____

	Unit 1	Common	Unit 2
SS		1	
SRO	1 (a)		
RO	1		1
NLO	1	1	1
STA	None	None	None

(a) SRO required for fuel movement

Total personnel required to meet MINIMUM shift composition is 7 .

Stop Time _____

Field Notes:



PLANT VOGTLE

NRC-JP-19001

**Calculate Boron Addition Following
Reactor Trip With 3 Stuck Control Rods**

**October 04,2002
Rev #0**

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: Given the Following Conditions/Events on Unit 1:

Automatic Reactor Trip due to Main Turbine Trip

- EOL
- RCS Boron Concentration is at 200 ppm
- BAST Boron Concentration is 7100 ppm
- RCS is at 2235 psig and 557 degrees F.

On step 1 of 19000-C the following conditions are observed:

- Reactor Trip Breakers are open
- Power Range NI's indicate 0%
- DRPI indicates that 3 rod failed to fully insert
- The RO actuates both the QMCB Reactor Trip Handswitches and announces the Reactor Tripped
- The Operating Crew has entered 19001-C to stabilize the plant
- On Step 3 on 19001-C the USS checks all "FULLY INSERTED"

Assigned Task: How many gallons of boric acid must be added to the RCS under the stated conditions?

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE Calculate Boron Addition Following
 Reactor Trip With 3 Stuck Control Rods

REVISION: 0 Date: October 04, 2002

COMPLETION TIME: 15 minutes

Application: RO

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 latest revision of 19001-C. If this revision is no longer current, verify this JPM is in accord with the latest procedural revision. Cues preceded by a "©..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable.

REQUIRED ITEMS:

1. Calculator
2. PTDB (Plant Technical Data Book)
3. 19001-C

Direction To Operator:

Initial Conditions: Given the Following Conditions/Events on Unit 1:

Automatic Reactor Trip due to Main Turbine Trip

- EOL
- RCS Boron Concentration is at 200 ppm
- BAST Boron Concentration is 7100 ppm
- RCS is at 2235 psig and 557 degrees F.

On step 1 of 19000-C the following conditions are observed:

- Reactor Trip Breakers are open
- Power Range NI's indicate 0%
- DRPI indicates that 3 rod failed to fully insert
- The RO actuates both the QMCB Reactor Trip Handswitches and announces the Reactor Tripped
- The Operating Crew has entered 19001-C to stabilize the plant
- On Step 3 on 19001-C the USS checks all "FULLY INSERTED"

Assigned Task: How many gallons of boric acid must be added to the RCS under the stated conditions?

START TIME: _____

STEP 1

CRITICAL (◆)

SAT

UNSAT

Boron Addition to the RCS calculated

- ◆ Determine that 154 ppm is required for each stuck rod
- ◆ For three stuck rods boration required is: **(154 ppm) X (3 Rods) = 462 ppm**
- ◆ Calculate the required boration using equation for PTDB tab 2.3
- ◆ 4252 (+ or - 50) gallons of boric acid added to the RCS

STOP TIME: _____

Field Notes

Calculation:

$$(154 \text{ ppm}) \times (3 \text{ Rods}) = 462 \text{ ppm}$$

$$\text{RCS Boron Concentration} = 61346 \times \ln(7100 - 200 / 7100 - 662) = 4252 \text{ gallons of Boric Acid}$$



PLANT VOGTLE

NRC-JP-00304

**Review Clearance for
Containment Spray Pump Train "A"**

**October 04, 2002
Rev #0**

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 at 100% Reactor Power on 10/04/02
- A planned outage for Containment Spray Pump Train "A" to replace the pump seals is to be installed on 10/05/02
- The scope of the work requires that the motor be electrically isolated and the pump drained.
- NSCW cooling water to the pump is NOT required to be tagged as part of the boundary.
- The LCO has been written and will be entered when the clearance is authorized by the USS

Assigned Task: Verify clearance hold points for Containment Spray Pump Train "A" are correct.

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: Review Clearance for Containment Spray Pump Train "A"

REVISION: 0 Date: October 04, 2002

COMPLETION TIME: 30 minutes

Application: RO/SRO

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 revision of 00304-C. If this revision is no longer current, verify this JPM is in accord with the latest procedural revision. Cues preceded by a "©..." are provided to enhance simulation of this JPM and should only be used when the simulator is unavailable.

REQUIRED ITEMS:

1. Current revision of 00304-C

Direction To Operator:

Initial Conditions:

- Unit 1 is at 100% Reactor Power on 10/04/02
- A planned outage for Containment Spray Pump Train "A" to replace the pump seals is to be installed on 10/05/02
- The scope of the work requires that the motor be electrically isolated and the pump drained.
- NSCW cooling water to the pump is NOT required to be tagged as part of the boundary
- The LCO has been written and will be entered when the clearance is authorized by the USS

Assigned Task: Verify clearance hold points for Containment Spray Pump Train "A" are correct.

START TIME: _____

STEP 1

CRITICAL (♦)

SAT UNSAT

Containment Spray Pump Train "A" clearance review

♦ Errors on clearance identified.

1. Step 2 breaker should be 1AA02-14
2. Step 3 Control Room Handswitch should be 1-HV-9003A
3. Step 6 should be 1ABD-30
4. Step 13 should be 1HV-9003A
5. Step 16 should be 1-1206-U4-115

STOP TIME: _____

Field Notes

CLEARANCE SHEET

I. Clearance # 10210011	Equipment Number: 1-1206-P6-001
Equipment Description: CONTAINMENT SPRAY PUMP TRAIN "A"	
Reason For Clearance (include WO No.): Replace pump seals (1-02-111)	
Additional WOs:	
Requested by: Al Sweat	Extension: 3963 Beeper: 111

Requires LCO: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Locked Valves: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fire Protection Impaired: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	IV Required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Prepared by: Al Sweat	Date: 10/04/02	Reviewed by:	Date:
Authorized by:	Date:	Time:	
Installed by:	Date:	Time:	
Verified by:	Date:	Time:	

SUBCLEARANCES					GROUNDING DEVICES VERIFIED REMOVED AND SUBCLEARANCE RELEASED BY:		
NAME Printed in first space Signature in second space	WORK DOC	EXT.	DATE	TIME	SIGNATURE	DATE	TIME
1. _____ _____							
2. _____ _____							
3. _____ _____							
4. _____ _____							
5. _____ _____							

COMMENTS:

NSCW cooling line not required to be tagged out for this work.

Front

Clearance # 10210011				Prepared by: AL SWEAT				
EQUIPMENT TO BE CLEARED AND TAGGED 1-1206-P6-001				TAGS TO BE REMOVED AND EQUIPMENT RETURNED TO SERVICE AS SPECIFIED				
TAG #	EQUIPMENT #	TAGGED POSITION	INIT	IV INIT	RESTORE SEQ	RESTORE POSITION	INIT	IV INIT
01	1HS-10940	PTL						
Containment Spray Train "A" QMCB Control Handswitch								
02	1AA02-15	Disconnect						
Supply Breaker to Containment Spray Train "A" Pump								
03	1HS-9003B	CL/Normal						
Pump Discharge Isolation Motor Operated Valve from Containment Sump								
04	1HS-9001A	CL/AUTO						
Pump Discharge Isolation Motor Operated Valve								
05	1HS-9017A	CL/Normal						
Pump Discharge Isolation Motor Operated Valve from RWST								
06	1BBD-30	OFF						
1HS-9003B feeder breaker								
07	1ABD-48	OFF						
1HS-9001A feeder breaker								
08	1ABD-41	OFF						
1HS-9017A feeder breaker								
09	1BBD30W-K2	OPEN						
Alarm relay								
10	1ABD48W-K2	OPEN						
Alarm Relay								
11	1ABD41W-K2	OPEN						
Alarm Relay								
12	1AYE1-34	OFF						
1-1206-P6-001 Motor Space Heater								
13	1HV-9003B	Closed						
Pump Discharge Isolation Motor Operated Valve from Containment Sump Handwheel								

Clearance # 10210011	Prepared by: AI Sweat
-------------------------	--------------------------

TECH SPEC #	LCO #	SI #	P&ID
3.6.6	1-02-111		MECH
			ELEM
			ELEC
			CONN

ADDITIONAL WOs

REFERENCES:

CLEARANCE REMOVAL:		
Authorized by:	Date:	Time:
Removed by:	Date:	Time:
Verified by:	Date:	Time:

Extended Active Clearance Quarterly Audits:

DATE	INITIAL

DATE	INITIAL

DATE	INITIAL

DATE	INITIAL

Answer Key

CLEARANCE SHEET

I. Clearance # 10210011		Equipment Number: 1-1206-P6-001	
Equipment Description: CONTAINMENT SPRAY PUMP TRAIN "A"			
Reason For Clearance (include WO No.): Replace pump seals			
Additional WOs:			
Requested by: Al Sweat		Extension: 3963	Beeper: 111

Requires LCO: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Locked Valves: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fire Protection Impaired: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	IV Required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Prepared by:	Date:	Reviewed by:	Date:
Authorized by:	Date:	Time:	
Installed by:	Date:	Time:	
Verified by:	Date:	Time:	

SUBCLEARANCES					GROUNDING DEVICES VERIFIED REMOVED AND SUBCLEARANCE RELEASED BY:		
NAME Printed in first space Signature in second space	WORK DOC	EXT.	DATE	TIME	SIGNATURE	DATE	TIME
1.							
2.							
3.							
4.							
5.							

COMMENTS:

NSCW cooling line not required to be tagged out for this work.

Front

Answer Key

Clearance # 10210011		Prepared by: AL SWEAT						
EQUIPMENT TO BE CLEARED AND TAGGED 1-1206-P6-001				TAGS TO BE REMOVED AND EQUIPMENT RETURNED TO SERVICE AS SPECIFIED				
TAG #	EQUIPMENT #	TAGGED POSITION	INIT	IV INIT	RESTORE SEQ	RESTORE POSITION	INIT	IV INIT
01	1HS-10940	PTL						
Containment Spray Train "A" QMCB Control Handswitch								
02	1AA02-14 *****	Disconnect						
Supply Breaker to Containment Spray Train "A" Pump								
03	1HS-9003A *****	CL/Normal						
Pump Discharge Isolation Motor Operated Valve from Containment Sump								
04	1HS-9001A	CL/AUTO						
Pump Discharge Isolation Motor Operated Valve								
05	1HS-9017A	CL/Normal						
Pump Discharge Isolation Motor Operated Valve from RWST								
06	1ABD-30 *****	OFF						
1HS-9003A feeder breaker								
07	1ABD-48	OFF						
1HS-9001A feeder breaker								
08	1ABD-41	OFF						
1HS-9017A feeder breaker								
09	1ABD30W-K2 ***** "Not Required "	OPEN						
Alarm relay								
10	2ABD48W-K2	OPEN						
Alarm relay								
11	1ABD41W-K2	OPEN						
Alarm relay								
12	1AYE1-34	OFF						
1-1206-P6-001 Motor Space Heater								
13	1HV-9003A *****	Closed						
Pump Discharge Isolation Motor Operated Valve from Containment Sump Handwheel								



PLANT VOGTLE

NRC-JP-00920

CALCULATE WORKER DOSE USING SURVEY MAPS

**October 04,2002
Rev #0**

JPM INFORMATION

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.

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 in MODE 5 for refueling outage.
- The Operating Crew has entered 18019-C "Loss of RHR" Section "B"
- The Auxiliary Building System Operator has been dispatched to shut 1-1205-U4-027 "RHR Recirculation to RWST isolation Valve"

Assigned Task: Given that Auxiliary Building System Operator is required to:

- Remain in the area for 15 minutes to shut 1-1205-U4-027
- Will receive 10 mRem TEDE while transiting to the valve

Using the Radiological Information Survey Map provided calculate the "TOTAL" dose the Auxiliary Building System Operator will receive following the task.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: CALCULATE WORKER DOSE USING SURVEY MAPS

COMPLETION TIME: 20 minutes

Application: RO/SRO

Task Number: RO A.3

K/A Number: G2.3.4

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: _____

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 in MODE 5 for refueling outage.
- The Operating Crew has entered 18019-C "Loss of RHR" Section "B"
- The Auxiliary Building System Operator has been dispatched to shut 1-1205-U4-027 "RHR Recirculation to RWST isolation Valve"

Assigned Task: Given that Auxiliary Building System Operator is required to:

- Remain in the area for 15 minutes to shut 1-1205-U4-027
- Will receive 10 mRem TEDE while transiting to the valve

Using the Radiological Information Survey Map provided calculate the "TOTAL" dose the Auxiliary Building System Operator will receive following the task.

JPM STEPS

Start Time: _____

STEP 1

SAT UNSAT

(300 mrem/hr) (1hr/60min) (15 min) = 75 mrem + 20 mrem = 95 mrem +/- 2 mrem

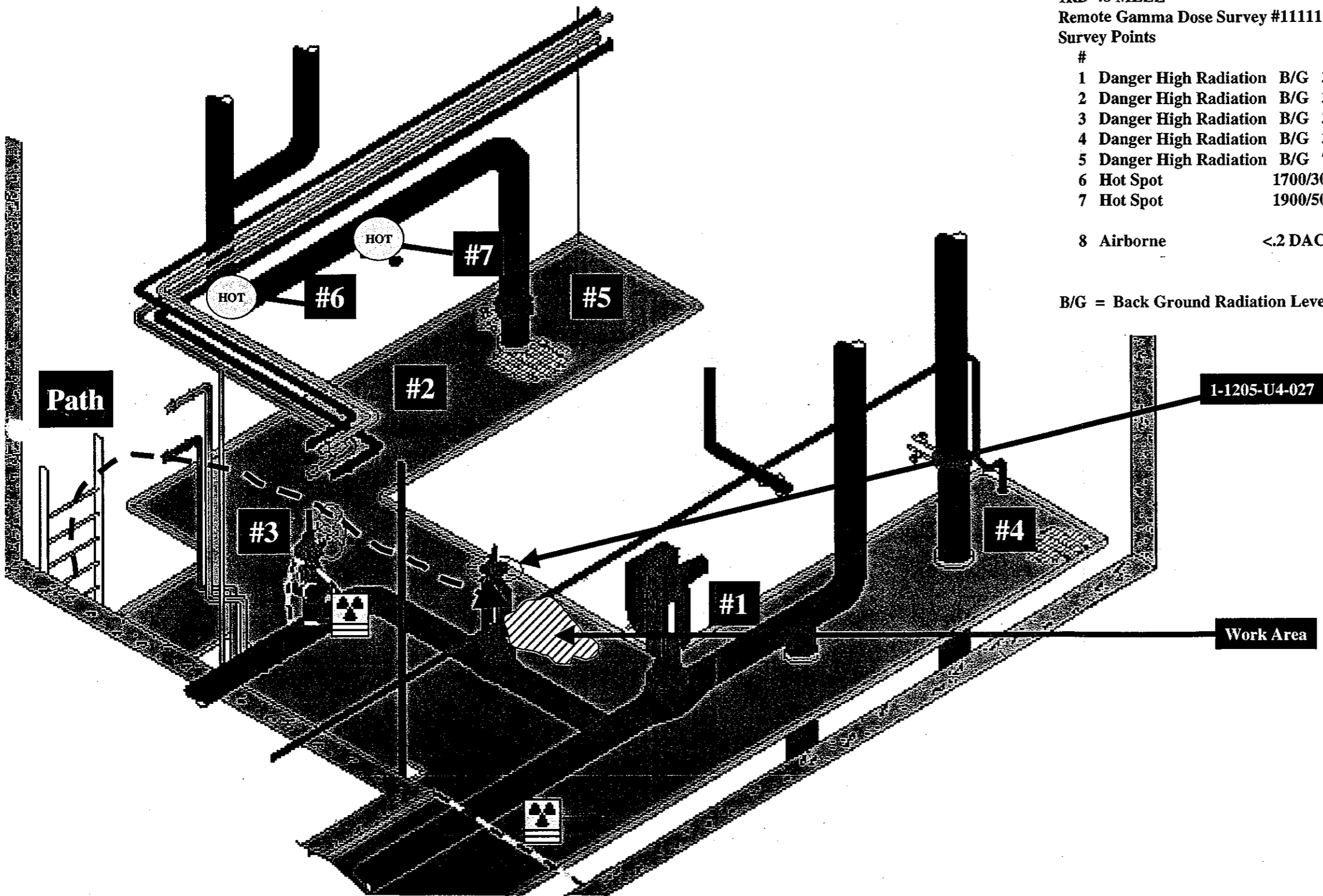
Stop Time _____

Field Notes

RHR Train "A" Mezzanine Room
 1RD-48 MEZZ
 Remote Gamma Dose Survey #11111
 Survey Points

#	Category	Level
1	Danger High Radiation	B/G 300 mrem/hr
2	Danger High Radiation	B/G 300 mrem/hr
3	Danger High Radiation	B/G 300 mrem/hr
4	Danger High Radiation	B/G 300 mrem/hr
5	Danger High Radiation	B/G 700 mrem/hr
6	Hot Spot	1700/300 mrem/hr
7	Hot Spot	1900/500 mrem/hr
8	Airborne	<.2 DAC Total

B/G = Back Ground Radiation Levels





PLANT VOGTLE

NRC-JP-ODCM

**LIQUID RELEASE WITH 1RE-0018
INOPERABLE**

**October 04,2002
Rev #0**

INSTRUCTIONS TO EXAMINER

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.

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 at 100% Reactor Power
- The Auxilliary Building System Operator has just completed processing WMT #9 for release.
- 1RE-0018 was declared INOPERABLE on the last shift.

Assigned Task: Under what conditions can this tank be released?

INSTRUCTIONS TO EXAMINER

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: LIQUID RELEASE WITH 1RE-0018 INOPERABLE

COMPLETION TIME: 20 minutes

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: _____

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 at 100% Reactor Power
- The Auxiliary Building System Operator has just completed processing WMT #9 for release.
- 1RE-0018 was declared INOPERABLE on the last shift.

Assigned Task: Under what conditions can this tank be released?

JPM STEPS

START TIME: _____

STEP 1

SAT ~~✓~~ **UNSAT** ~~✓~~

Per Offsite Dose Calculation Manual (ODCM)

- (1) Two independent samples are analyzed**
- (2) Two technically qualified members of the facility staff independently verify the discharge line valving and the release rate calculations.**

Stop Time _____

Field Notes



Energy to Serve Your World™

PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91301

**EMERGENCY EXPOSURE GUIDELINES
SRO ONLY**

**October 04,2002
Rev 0**

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: Given the following Conditions/Events on Unit 1:

- Major fuel damage occurred from a loose part in the RCS
- SGTR on S/G #1
- A General Emergency has been declared
- 1PV-3000, Loop #1 ARV has failed open

Assigned Task: HP has estimated that in the time it will take for a person to access the area and manually isolate the failed open ARV, they would receive 45 Rem (TEDE).

As the Emergency Director which of the following worker(s) would you select for the task?

1. 21 year old declared pregnant female, who is fully aware of the risks and current annual exposure is 520 mRem.
2. 45 year old male volunteer, who's lifetime exposure is 31 Rem, 27 Rem of which is classified as emergency exposure from a previous event.
3. 23 year old female volunteer, who has been briefed on the task and fully aware of the risks with a current annual exposure of 710 mRem.
4. 50 year old male, non-volunteer, who has been briefed on the task and fully aware of the risks with a current annual exposure of 111 mRem.
5. 40 year old male volunteer, who due to experience could complete the task in the least amount of time and has only received 4 Rem emergency exposure during this event.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: EMERGENCY EXPOSURE GUIDELINES

COMPLETION TIME: 15 minutes

Application: SRO

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: _____

JPM INFORMATION

--

DIRECTIONS TO OPERATOR

Initial Conditions: Given the following Conditions/Events on Unit 1:

- Major fuel damage occurred from a loose part in the RCS
- SGTR on S/G #1
- A General Emergency has been declared
- 1PV-3000, Loop #1 ARV has failed open

Assigned Task: HP has estimated that in the time it will take for a person to access the area and manually isolate the failed open ARV, they would receive 45 Rem (TEDE).

As the Emergency Director which of the following worker(s) would you select for the task?

1. 21 year old declared pregnant female, who is fully aware of the risks and current annual exposure is 520 mRem.
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3. 23 year old female volunteer, who has been briefed on the task and fully aware of the risks with a current annual exposure of 710 mRem.
4. 50 year old male, non-volunteer, who has been briefed on the task and fully aware of the risks with a current annual exposure of 111 mRem.
5. 40 year old male volunteer, who due to experience could complete the task in the least amount of time and has only received 4 Rem emergency exposure during this event.

JPM STEPS

START TIME: _____

STEP 1

CRITICAL (◆)

SAT

UNSAT

Worker selected for task per 91301-C "Emergency Exposure Guidelines"

◆ 23 year old female volunteer, who has been briefed on the task and the risks.

Stop Time _____

Field Notes



Energy to Serve Your World™

PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91002

**MAKE EMERGENCY NOTIFICATIONS
WITH FAILURE OF THE ENN**

Revision 0

November 19, 2002

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: An emergency has been declared and the Shift Superintendent has assumed the duties of the Emergency Director. The emergency recall system activation is not required because it normal working hours.

Assigned Task: The Emergency Director has directed you to establish communications, and transmit the Emergency Notification form to all State and Local authorities.

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: Make Emergency Notifications with Failure of the ENN

REVISION: 0 November 19, 2002

COMPLETION TIME: 15 minutes TIME CRITICAL ☹

Application: RO / SRO

Task Number: 40003

K/A Number: 194001A1.16 RO: 3.1 SRO: 4.4

10CFR55.45 Ref.: 11

Evaluation Method Performed SimulatedEvaluation Location Simulator Control Room

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 91002-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. Procedure 91002-C, Emergency Notifications, Checklist 2
 2. VEGP Emergency Response Telephone Directory

SIMULATOR SETUP: Simulator not required for JPM performance

- Notes to Examiner:*
- (1) *Checklist 2, Sheet 2, Emergency Notification, should be completed with the exception of Steps 3, 4, and 6 prior to the start of this JPM. Step 1.A, THIS IS A DRILL, should always be recorded.*
 - (2) *Step 3 of the Emergency Notification form must be completed within 15 minutes of the time documented in Step 6.A. The start time of this JPM should be the time recorded in Step 6.A.*
 - (3) *Ensure the ENN telephone jack in the rear of the ENN telephone has the "Simulator" cord installed.*

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.

This is a TIME CRITICAL JPM

INITIAL CONDITIONS: An emergency has been declared and the Shift Superintendent has assumed the duties of the Emergency Director. The emergency recall system activation is not required because it normal working hours.

ASSIGNED TASK: The Emergency Director has directed you to establish communications, and transmit the Emergency Notification form to all State and Local authorities.

JPM STEPS

START TIME: _____ TIME CRITICAL ☉

STEP 1

CRITICAL (◆)

SAT UNSAT Initiate roll call

Note: The Emergency Response Telephone Directory, or the dial code card, should be consulted as needed for required ENN dial codes. The dial code, **, should be used initially to ring ALL required agencies.

 ◆ Burke County notified**CUE** Burke County is on the line ◆ GEMA notified**CUE** GEMA is on the line ◆ Aiken County notified**CUE** Aiken County is on the line ◆ SRS notified**CUE** SRS is on the line ◆ Allendale County notified**CUE** Allendale County is on the line ◆ State of South Carolina notified**CUE** South Carolina is on the line ◆ Barnwell County**CUE** Do not respond when Barnwell County is hailed

JPM STEPS

STEP 2

CRITICAL (♦)

SAT UNSAT Notify Barnwell County ♦ Commercial telephone line (803) 541-1161

NRC CUE When proper number identified, provide the cue that "Barnwell County has been reached and will responded to ENN."

Note: For initial notifications the 24 hour warning point commercial telephone line should be notified.

 • Barnwell County directed to respond to ENN

STEP 3

SAT UNSAT Transmit facsimile

Note: On the Fax machine in the Simulator, the pushbutton labeled "NOTIFY(Training)" should be depressed to simulate "NOTIFY", if necessary a cue to the examinee should be provided that for simulation purposes, the "NOTIFY (Training)" pushbutton should be used to transmit the fax.

 • Place message face down in transmit tray • "NOTIFY(Training)" pushbutton depressed

JPM STEPS

STEP 4

CRITICAL (♦)

SAT UNSAT Communicate notification via ENN

- Lines 1 & 2 transmitted
- ♦ Examinee's name provided in Line 2, "Reported By"
- ♦ Line 3, Transmittal time & date completed
- CUE** ♦ Simulator operator **CUE** After completion of Emergency Notification form line 3, provide the following cue, "The State of South Carolina request that you authenticate number 39."
- Control Room confirmation phone number transmitted

STOP TIME: _____ TIME CRITICAL time stops ☺

STEP 5

CRITICAL (♦)

SAT UNSAT Message authentication

- ♦ Authentication codeword correctly provided.
- NOTE** For NRC Examiner "39 is mine-sweeper"

JPM STEPS

STEP 6

CRITICAL (◆)

SAT UNSAT Transmit classification data

- ◆ Emergency Classification
- ◆ Emergency declaration time and date
- Emergency description

STEP 7

CRITICAL (◆)

SAT UNSAT Transmit current plant radiological conditions

- Plant condition
- ◆ Emergency rad release status
- ◆ Current meteorological data
- Recommended protective actions
- ED approval, time, & date

STEP 8

SAT UNSAT Notify ED

- Initial Emergency Notification completed

Field Notes:



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91001

CLASSIFY AN EMERGENCY EVENT – ALERT

Revision 0

October 04, 2002

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: The following is the sequence of events as they occurred on Unit 1:

1. Unit 1 is at 100% power
2. Unit 2 is in MODE 5 to replace RCP #1 seal package
3. At 1100 a fire in the Unit 2 protection cabinet channel 1 results in both Control Rooms being evacuated.
4. At 1111 Control is established at the Unit 1 shutdown panels with conditions stable in MODE 3
5. At 1113 Control is established at the Unit 2 shutdown panels with RCS temperature stable at 110 degrees 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".

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: Classify an Emergency Event – ALERT

REVISION: 0

COMPLETION TIME: 15 minutes **THIS IS A TIME CRITICAL JPM**

Application: SRO ONLY

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. 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

SIMULATOR SETUP: None

🕒 **THIS IS A TIME CRITICAL JPM** 🕒

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 following is the sequence of events as they occurred on Unit 1:

1. Unit 1 is at 100% power
2. Unit 2 is in MODE 5 to replace RCP #1 seal package
3. At 1100 a fire in the Unit 2 protection cabinet channel 1 results in both control being evacuated.
4. At 1111 Control is established at the Unit 1 shutdown panels with conditions stable in mode 3
5. At 1113 Control is established at the Unit 2 shutdown panels with RCS temperature stable at 110 degrees 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".

JPM STEPS

START TIME: _____

STEP 1

CRITICAL (♦)

SAT UNSAT Classify the event

- Plant conditions evaluated
- ♦ Emergency event classified as a ALERT EMERGENCY

Per 91001-C

figure 1 the fuel cladding barrier is intact

figure 2 the RCS barrier is intact

figure 3 the Containment barrier is intact

figure 4 an ALERT EMERGENCY is declared due to (HAZARDS Column):

Control Room evacuation has been initiated OR

Fire in vital area with damage to safety related equipment

STOP TIME: _____

Field Notes



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91001

CLASSIFY AN EMERGENCY EVENT – SCENARIO #1

Revision 0

October 04, 2002

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: Classify the Scenario.

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".

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___/___/___

JPM TITLE: CLASSIFY AN EMERGENCY EVENT – SCENARIO #1

REVISION: 0

COMPLETION TIME: 15 minutes This is a TIME CRITICAL JPM

Application: SRO ONLY

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. 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

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.

This is a TIME CRITICAL JPM

Initial Conditions: Classify the Scenario.

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".

JPM STEPS

START TIME: _____

STEP 1

CRITICAL (♦)

SAT UNSAT Classify the event

- Plant conditions evaluated
- ♦ Emergency event classified as a SITE AREA EMERGENCY

Per 91001-C

figure 1 the fuel cladding barrier potential loss
 figure 2 the RCS barrier potential loss
 figure 3 the Containment barrier is intact
 figure 4 an SITE AREA EMERGENCY is declared due to (Barrier Column):
 Potential loss of both the fuel clad and RCS barriers

Also

SITE AREA EMERGENCY is declared due to (Plant Systems Column)
 Mode 1 & 2 Automatic reactor trip setpoint exceeded and reactor
 could not be tripped from the control room.

STOP TIME: _____

Field Notes



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91001

CLASSIFY AN EMERGENCY EVENT – SCENARIO #2

Revision 0

October 04, 2002

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: Classify the Scenario.

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".

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: CLASSIFY AN EMERGENCY EVENT – SCENARIO #2

REVISION: 0

COMPLETION TIME: 15 minutes This is a TIME CRITICAL JPM

Application: SRO ONLY

Evaluation Method Performed SimulatedEvaluation 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. 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

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.

This is a TIME CRITICAL JPM

Initial Conditions: Classify the Scenario.

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".

JPM STEPS

START TIME: _____

STEP 1**CRITICAL (♦)**SAT UNSAT **Classify the event**

- Plant conditions evaluated
- ♦ Emergency event classified as a **ALERT EMERGENCY**

Per 91001-C

figure 1 the fuel cladding barrier is intact
 figure 2 the RCS barrier potential OR loss of the RCS barrier*
 figure 3 the Containment barrier is intact
 figure 4 an **ALERT EMERGENCY** is declared due to (Barriers Column):
 Loss OR potential loss of the RCS barrier

*RCS leak >Capacity of charging pump OR
 *RCS leak in progress and subcooling <24 F.

STOP TIME: _____

Field Notes



PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91001

CLASSIFY AN EMERGENCY EVENT – SCENARIO #3

Revision 0

October 04, 2002

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: Classify the Scenario.

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".

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___/___/___

JPM TITLE: CLASSIFY AN EMERGENCY EVENT – SCENARIO #3

REVISION: 0

COMPLETION TIME: 15 minutes This is a TIME CRITICAL JPM

Application: SRO ONLY

Evaluation Method Performed SimulatedEvaluation 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. 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

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.

This is a TIME CRITICAL JPM

Initial Conditions: Classify the Scenario.

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".

JPM STEPS

START TIME: _____

STEP 1

CRITICAL (♦)

SAT UNSAT Classify the event

- Plant conditions evaluated
- ♦ Emergency event classified as a ALERT EMERGENCY

Per 91001-C

figure 1 the fuel cladding barrier is intact
 figure 2 the RCS barrier potential OR loss of the RCS barrier*
 figure 3 the Containment barrier is intact
 figure 4 an ALERT EMERGENCY is declared due to (Barriers Column):
 Loss OR potential loss of the RCS barrier

- *RCS leak >Capacity of charging pump OR
 *RCS leak in progress and subcooling <24 F.

STOP TIME: _____

Field Notes



Energy to Serve Your World™

PLANT VOGTLE

CONTROL ROOM OPERATOR

JOB PERFORMANCE MEASURE

NRC-JP-91001

CLASSIFY AN EMERGENCY EVENT – SCENARIO #4

Revision 0

October 04, 2002

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: Classify the Scenario.

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".

JPM INFORMATION

OPERATOR'S NAME: _____

EVALUATION DATE: ___ / ___ / ___

JPM TITLE: CLASSIFY AN EMERGENCY EVENT – SCENARIO #4

REVISION: 0

COMPLETION TIME: 15 minutes This is a TIME CRITICAL JPM

Application: SRO ONLY

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. 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

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.

This is a TIME CRITICAL JPM

Initial Conditions: Classify the Scenario.

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".

JPM STEPS

START TIME: _____

STEP 1

CRITICAL (♦)

SAT ~~/~~ **UNSAT** ~~/~~

Classify the event

- Plant conditions evaluated
- ♦ Emergency event classified as a NOUE EMERGENCY

Per 91001-C

figure 1 the fuel cladding barrier is intact
figure 2 the RCS barrier is intact
figure 3 the Containment barrier is intact
figure 4 an NOUE EMERGENCY is declared due to (Other Column):
Uncontrolled depressurization of one or more Steam Generators

STOP TIME: _____

Field Notes