

Facility: **GRAND GULF NUCLEAR STATION** Scenario No.: **1** Op-Test No.: **Day 1**

Examiners: _____ Operators: _____

Objectives: To evaluate the candidates' ability to operate the facility in response to the following evolutions:

1. Operate Standby Service Water 'B' for chemical addition through all loads.
2. Respond to a failure of APRM 'C' upscale.
3. Take actions in response to a Low Pressure Feedwater Heater 3B Tube leak. Complete actions of the Loss of Feedwater Heating ONEP.
4. Analyze the affects of a reduction of Main Condenser Vacuum on plant operations and take required actions.
5. Take actions per the EOPs in response to an ATWS and mitigate the consequences of the ATWS with no Main Steam Bypass Valves.
6. Respond to a failure of Division I ECCS to manually initiate via the Manual Initiation pushbutton.
7. Take actions for a failure of Standby Liquid Control to inject to the Reactor during an ATWS.

Initial Conditions: Reactor Power is at 100 %.

INOPERABLE Equipment

APRM 'H' is INOP due to a failed power supply card

RHR 'C' Pump is tagged out of service for motor oil replacement

TBCW Pump 'C' is tagged out of service for pump seal replacement

Appropriate clearances and LCOs are written.

Turnover: The plant is operating at 100% power. Chemistry has requested SSW 'B' be operated through all loads for a chemical addition. There are scattered thundershowers reported in the Tensas Parish area.

Scenario 1 Day 1 (Continued)

Event No.	10CFR 55.45(a)	K/A	Event Type*	Event Description
1	4, 5, 6	2.1.30	N (BOP)	Start SSW 'B' and operate through all loads (SOI 04-1-01-P41-1 section 4.3)
2	3, 5	215005 A2.02 2.1.12; 2.1.33	I (RO)	Respond to APRM 'C' failure upscale. Complete Technical Specification determinations.
3	2, 3, 4, 5, 6	2.4.49 295014 AA1.07; AA2.03	R/C (RO, BOP)	Respond to a tube failure in LP FW Heater 3B. Perform actions per ONEP 05-1-02-V-5. Lower Reactor power with Recirc flow.
4	3, 4, 5, 6	2.4.49 295002 AA1.02; AA1.05; AA2.01	C(RO, BOP)	Recognize and respond to a loss of Main Condenser vacuum. Take actions per ONEP 05-1-02-V-8.
	2, 3, 4, 7	2.4.4; 2.4.49 295006 AA1.01; AA1.05; AA1.07		When required initiate a manual Reactor Scram.
5	6, 8, 12, 13	295037 EA1.0; EA2.0 203000 A3.08 241000 A4.06	M (ALL)	Upon Reactor Scram recognize the failure of all control rods to fully insert and take actions per EOPs for ATWS.
	3, 5	209001 A4.05; A3.01; A3.02 203000 A4.05; A3.01; A3.02;; A2.14A3.08	I (BOP)	Upon orders to initiate and override Low Pressure ECCS, recognize the failure of Division I to initiate via Manual Initiation pushbutton. Take actions upon automatic initiation to override Division I Low Pressure ECCS.
	3, 4, 8	295037 EA1.04; EA1.10 211000 A1.0; A2.04; A3.0	C (BOP)	Recognize the failure of Standby Liquid Control to meet the parameters to inject into the Reactor when initiated and actions taken for Alternate Boron Injection.

All evolutions test 55.45(a)12 & 13.

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Critical Tasks

- Inject Standby Liquid Control prior to Suppression Pool Temperature reaching 110 °F.
- Identify the need for Alternate Standby Liquid Control injection.
- Terminate and prevent injection from Feedwater and ECCS when conditions require entry into Level/Power Control.
- Commence injection into the reactor using Feedwater or RHR 'A' or 'B' through Shutdown Cooling when reactor level reaches -192".
- Insert Control Rods in response to ATWS conditions.

Facility: **GRAND GULF NUCLEAR STATION** Scenario No.: **2** Op-Test No.: **Day 2**

Examiners: _____ Operators: _____

Objectives: To evaluate the candidates' ability to operate the facility in response to the following evolutions:

1. Secure Diesel Generator 12 from diesel run.
2. Raise Reactor Power by withdrawing control rods.
3. Perform operator actions for a stuck control rod per ONEP.
4. Analyze a failure of Recirculation Pump 'B' Seal # 2.
5. Respond to a loss of Bus 12HE and trip of Recirculation Pump 'B' per ONEPs.
6. Respond to a failure of Feedwater Line in the Drywell, initiate a reactor scram based on rising Drywell Pressure per EOPs.
7. Respond to a failure of Division 1 ECCS failure to initiate.
8. With a failure of Feedwater Line in the Drywell and reduced injection systems maintain reactor level per the EOPs.

Initial Conditions: Reactor Power is at 44 % bringing the plant up following an outage; Reactor Recirculation pumps are in Fast Speed at 60 % core flow; a single Reactor Feed Pump in single element Master Level Control. Diesel Generator 12 operating at 2000KW load.

INOPERABLE Equipment

APRM 'H' is INOP due to a failed power supply card
RHR 'C' is tagged out of service for motor oil replacement
TBCW Pump 'C' is tagged out of service for pump seal replacement
Appropriate clearances and LCOs are written.

Turnover: Secure Diesel Generator 12 from service. Leave Standby Service Water 'B' in operation for chemistry. Then continue to bring the plant to full power per IOI-2. There are scattered thundershowers reported in the Tensas Parish area.

Scenario 2 Day 2 (Continued)

Event No.	10CFR 55.45(a)	K/A	Event Type*	Event Description
1	3, 4, 5	264000 A4.0;	N (BOP)	Secure Diesel Generator 12 from operation (SOI 04-1-01-P75-1)
2	1, 2, 4, 5	201005 A3.01; A3.02; A3.03; A4.01 2.2.2	R(RO)	Withdraw control rods to raise power. (Control Rod Pull Sheet & IOI 03-1-01-2)
3	1, 2, 3, 5, 6, 8	201001 A4.04 2.4.4; 2.4.11; 2.4.48	C (RO, BOP)	Control Rod 24-49 is stuck, un-stick control rod per ONEP. (ONEP 05-1-02-IV-1)
4	3, 4, 7	202001 A2.10; A4.10; A4.11	C (RO)	Respond to a failure Seal # 2 of Recirculation Pump 'B'. (Tech Specs)
5	3, 4, 5, 6	202001 A2.03	C (RO, BOP)	Respond to Overcurrent lockout on bus 12HE and trip of Recirculation Pump 'B'. (SOI 04-1-01-R21-12 & 05-1-02-III-3)
6	3, 4, 5, 6, 7, 13	295031 EA1.0 203000 A3.08 241000 A4.06	M (ALL)	Feedwater Line 'B' ruptures in the Drywell with leakage from the reactor.
	3, 4, 7	2.4.4 295024 EA1.0	I (BOP)	Failure of Division 1 ECCS to automatically initiate on High Drywell Pressure
	3, 4, 5, 6	209002 A2.03; A3.01; A4.03	C (BOP)	HPCS injection valve failure to open on initiation

All evolutions test 55.45(a) 12 & 13.

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Critical Tasks

- Recognize failure of Division 1 to initiate and manually initiate Division 1
- Isolate Feedwater line 'B' and reestablish feed through Feedwater line 'A' or lower reactor pressure to allow injection from low pressure systems

Facility: **GRAND GULF NUCLEAR STATION** Scenario No.: **3** Op-Test No.: **BACKUP**

Examiners: _____ Operators: _____

Objectives: To evaluate the candidates' ability to operate the facility in response to the following evolutions:

1. Raise Reactor Power using Recirculation Flow.
2. Start 3rd Condensate and Condensate Booster Pumps.
3. Respond to a trip of RPS Motor Generator 'B'.
4. Determine the source and respond to a leak on the suction valve of RHR Pump 'B', EOP entry.
5. Respond to a steam leak in the Auxiliary Building Steam Tunnel and a failure of Group 1 to isolate.
6. Take actions per the EOPs in response to two stuck control rods following a Reactor Scram.
7. Take actions per EOPs to control RPV parameters with a failure of the MSIVs to isolate the steam leak.

Initial Conditions: Reactor Power is at 83 % continuing power ascension to rated conditions.

INOPERABLE Equipment

APRM 'H' is INOP due to a failed power supply card
RHR Pump 'C' is tagged out of service for motor oil replacement
TBCW Pump 'C' is tagged out of service for pump seal replacement
Appropriate clearances and LCOs are written.

Turnover: Continue power ascension. Radwaste is prepared for full Condensate and Feedwater operation. There are scattered thundershowers reported in the Tensas Parish area.

Scenario 3 **BACKUP** (Continued)

Event No.	10CFR 55.45(a)	K/A	Event Type*	Event Description
1	1, 2, 4, 5, 6, 8	202001 A4.04 202002 A4.08 2.2.2	R (RO)	Raise Total Core Flow to >12.5 Mlbm/hr Feedwater Flow. (IOI 03-1-01-2)
2	2, 4, 5, 6	256000 A3.02; A4.01	N (BOP)	Start 3 rd Condensate and Condensate Booster Pump. (SOI 04-1-01-N19-1)
3	3, 5, 6	212000 A1.11; A2.01; A4.07	C (RO, BOP)	Respond to trip of RPS Motor Generator 'B'. (ONEP 05-1-02-III-2)
4	3, 4, 5, 6	295036 EA1.02	C (BOP)	Determine the source and respond to a packing leak on E12-F004B RHR 'B' Suction Valve, with the valve failure determine unisolable and take actions per EOP – 3 & 4.
5	3, 4, 6, 13	2.4.46; 2.4.47; 2.4.48; 2.4.49	M (ALL)	Recognize and respond to a steam leak in the Auxiliary Building Steam Tunnel.
	3, 4, 6, 13	2.4.46; 2.4.47; 2.4.48; 2.4.49 290001 A2.06; A4.04	I (BOP)	Recognize the failure of Group 1 to automatically isolate and take actions to isolate the Main Steam Lines (ONEP 05-1-01-III-5)
	3, 4, 6, 13	2.4.46; 2.4.47; 2.4.48; 2.4.49 290001 A2.06; A4.04		Recognize the failure of a single Main Steam line to isolate and take actions for mitigation of the leak.
	4, 6, 12, 13	295037 EA1.0; EA2.0 212000 A4.17	C (RO)	Recognize the failure of two control rods to fully insert on the Reactor Scram and take actions as necessary per procedures to insert the control rods.

All evolutions test 55.45(a) 12 & 13.

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Critical Tasks

- Manually scram the reactor.
- Isolate the main steam lines.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-OP-ADM21

Revision: 00

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Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**DETERMINE THE FUSE(S) TO BE REMOVED TO
DE-ENERGIZE A COMPONENT (Z51-F002)**

REASON FOR REVISION: BANK JPM

THIS DOCUMENT REPLACES N/A

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

Facility Representative

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DETERMINE THE FUSE(S) TO BE REMOVED TO DE-ENERGIZE
A COMPONENT (Z51-F002)

JPM No. GJPM-OP-ADM21 Rev. 00 Page 2 of 9

TASK LIST: CRO-ADMIN-005

K/A Reference and Importance Factors (RO/SRO):

K/A Generics 2.1.24 - 2.8/3.1; 2.1.25 - 2.8/3.1

Time Required for Completion: 20 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

Administrative JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate _____ Actual X

Setting: Classroom X Plant X Simulator X

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DETERMINE THE FUSE(S) TO BE REMOVED TO DE-ENERGIZE
A COMPONENT (Z51-F002)

JPM No. GJPM-OP-ADM21 Rev. 00 Page 3 of 9

DISCUSSION

Performance of this JPM will demonstrate the ability of an Operator to determine the fuse(s) to be removed to de-energize a component and the effect on the system. Performance can be performed in the simulator, plant or in a classroom setting provided candidate has access to a set of P&IDs and electrical prints.

Normal access to Fuse List E-0300 is by individual sheets posted inside panels. Performance in plant is the best method.

Required Material(s):

- 01 P&ID M-0049
- 02 Electrical Drawing E-0131
- 03 H13-P872 Fuse List E-0300

General Reference(s):

- 01 P&ID M-0049
- 02 Electrical Drawing E-0131-00, 09, 021
- 03 H-13-P872 Fuse List

Safety Consideration(s):

- 01 None

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DETERMINE THE FUSE(S) TO BE REMOVED TO DE-ENERGIZE
A COMPONENT (Z51-F002)

JPM No. GJPM-OP-ADM21 Rev. 00 Page 5 of 9

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless
denoted in the **Comments**.

Item 1 (*) Candidate determines the fuse(s) to be removed.

Standard: Candidate states that Z51-F16 (3 amp fuse).

Comments: Drawing E-0131-09 identifies fuse F16 it can also
be found on E-0131-021

SAT UNSAT

Item 2 (*) Candidate determines the panel in which the fuse
is located.

Standard: Candidate states that Z51-F16 is located in H13-
P872.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DETERMINE THE FUSE(S) TO BE REMOVED TO DE-ENERGIZE
A COMPONENT (Z51-F002)

JPM No. GJPM-OP-ADM21 Rev. 00 Page 6 of 9

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless
denoted in the **Comments**.

Item 3 (*) Candidate determines the fuse location inside the
panel.

Standard: Candidate states that Z51-F16 (3 amp fuse) is in
panel H13-P872 Bay D on Terminal Board F fuse 14.

Comments: Panel fuse locator located on inside of door to
1H13-P872 Bay D.

SAT _____ UNSAT

Item 4 (*) Candidate determines the valve action when power
is removed.

Standard: Candidate states that QSZ51-F002 WILL FAIL CLOSED.

Comments: This is determined using P&ID M-0049 section
F-7/8.

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DETERMINE THE FUSE(S) TO BE REMOVED TO DE-ENERGIZE
A COMPONENT (Z51-F002)

JPM No. GJPM-OP-ADM21 Rev. 00 Page 7 of 9

TERMINATING CUE(s) :

Z51-F002, Control Room HVAC Purge Exhaust Butterfly Valve is operated using Fuse Z51-F16 (3 amp fuse) located in H13-P872 and is identified as fuse 14 on Terminal Board F in Bay D. Z51-F002 will fail closed when power is removed.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DETERMINE THE FUSE(S) TO BE REMOVED TO DE-ENERGIZE
A COMPONENT (Z51-F002)

JPM No. GJPM-OP-ADM21 Rev. 00 Page 8 of 9

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is operating at 100 % power. Maintenance has repair work to perform on QSZ51-F002, Control Room HVAC Purge Exhaust Butterfly Valve.

Initiating Cue(s):

Identify the fuse(s) to be removed to remove power to QSZ51-F002, Control Room HVAC Purge Exhaust Butterfly Valve, where the fuse is located and what the fuse number is for the fuse in the panel, also how will the valve react (fail) when the fuse is removed.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-OP-ADM25

Revision: 00

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Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**PERFORM NOTIFICATION OF OFFSITE AGENCIES
USING OPERATIONAL HOTLINE (OHL)**

REASON FOR REVISION: BANK JPM.

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 2 of 10

Task List No: AON-EP-001

K/A Reference and Importance Factors (RO/SRO):

K/A Generics 2.4.43 - 2.8/3.5; 2.4.39 - 3.3/3.1; 2.4.30 -
2.2/3.6

10CFR55.45a(11)

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

Administrative JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate X Actual X*

Setting: Classroom _____ Plant X Simulator X*

X* SHOULD BE PERFORMED IN THE SIMULATOR

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 3 of 10

DISCUSSION

Performance of this JPM will demonstrate the ability of an Operator to perform the duties of a Control Room Communicator during an emergency and contact the Offsite Agencies using the Operational Hotline (OHL). Performance can be performed in the simulator. If JPM is administered in the plant the communications are to be SIMULATED. **DO NOT ALLOW CANDIDATE TO LIFT THE RECIEVER ON THE CONTROL ROOM OPERATIONAL HOTLINE (OHL).**

A Simulator Operator or the Evaluator may be used to act as the Offsite Agencies.

Required Material(s):

- 01 EPP 10-S-01-6, Notification of Offsite Agencies and Plant On-Call Personnel
- 02 EPP 06-01, NOTIFICATION FORM (Last Page of JPM)

General Reference(s):

- 01 EPP 10-S-01-1, Activation of the Emergency Plan
- 02 EPP 10-S-01-6, Notification of Offsite Agencies and Plant On-Call Personnel
- 03 EPP 06-01, NOTIFICATION FORM

Safety Consideration(s):

- 01 **DO NOT ALLOW CANDIDATE TO LIFT THE RECIEVER ON THE CONTROL ROOM OPERATIONAL HOTLINE (OHL).**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 5 of 10

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 (*) Locate the OHL and lift the receiver to begin ring down of agencies.

Standard: Candidate locates the OHL and lifts the receiver. As agencies answer, the candidate will say "This is Grand Gulf Nuclear Station, Please standby for an Emergency Notification."

Comments: **Simulator Operator pickup on the OHL and respond down the list of state agencies, DO NOT answer for either the Louisiana Office of Emergency Preparedness or Louisiana Department of Environmental Quality.**

SAT _____ UNSAT

Item 2 (*) After 30 seconds, perform ROLL CALL of agencies.

Standard: Candidate performs a ROLL CALL of agencies and marks off agencies as they answer in on the roll call.

Comments: **Simulator Operator will answer the roll call for the agencies marked on the EVALUATOR COPY of the Emergency Notification Form**

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 6 of 10

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 3 (*) Slowly read the Notification form to ensure the information is received to the agencies.

Standard: Candidate slowly reads the information on the Notification form and at the end of reading the material asks if any parts need to be repeated.

Comments: **Simulator Operator once the candidate has read the form, INFORM the candidate no agencies have questions.**

SAT _____ UNSAT

Item 4 (*) Perform the Final ROLL CALL of the Offsite agencies.

Standard: Candidate performs the Final ROLL CALL of agencies and marks off agencies as they answer in on the roll call and notes the failure of LOEP and LRPD to respond.

Comments: **Simulator Operator will answer the roll call for the agencies marked on the EVALUATOR COPY of the Emergency Notification Form. DO NOT answer for either the Louisiana Office of Emergency Preparedness or Louisiana Department of Environmental Quality.**

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 7 of 10

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 5 (*) Complete the Notification informing the agencies THE NEXT MESSAGE IS EXPECTED TO BE ISSUED 60 MINUTES FROM THE START OF THIS MESSAGE OR WHEN THE EVENT IS TERMINATED whichever is first. THIS IS GRAND GULF OUT.

Standard: Candidate informs the agencies THE NEXT MESSAGE IS EXPECTED TO BE ISSUED 60 MINUTES FROM THE START OF THIS MESSAGE OR WHEN THE EVENT IS TERMINATED whichever is first. THIS IS GRAND GULF OUT.

Comments: Simulator Operator may hang up the phone.

NOTE: The candidate should inform the evaluator that either LOEP or LRPD would require a manual telephone call. CUE the candidate the call will be made by someone else.

If asked, CUE the candidate another communicator will Notify NRC personnel.

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 8 of 10

TERMINATING CUE(s) :

Notification of the Offsite Agencies has been performed per 10-S-01-6 and the absence of the Louisiana Office of Emergency Preparedness (LOEP) and Louisiana Department of Environmental Quality (LDEQ) noted. (See Attached EVALUATOR COPY).

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM NOTIFICATION OF OFFSITE AGENCIES USING
OPERATIONAL HOTLINE (OHL)

JPM No. GJPM-OP-ADM25 Rev. 00 Page 9 of 10

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is operating at 100% power. The Emergency Plan is being implemented due to a fire in the Division 1 Diesel Generator. The Fire is out. The Division 1 Bus 15AA was unaffected. The Shift Manager as Emergency Director has declared an UNUSUAL EVENT. All Non-Licensed Operators are occupied.

Initiating Cue(s):

The Emergency Director directs you to make the initial notification of the Offsite Agencies using the Operational Hotline. The next notification will be to terminate the event. Here is the Initial Notification Form.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-OP-ADM34

Revision: 00

Page: 1 of 13

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**ADMINISTRATIVE JPM
ENTRY AND EGRESS FROM THE CONTROLLED ACCESS
AREA (CAA) WITH ENTRY REQUIREMENTS FOR
ACCESSING A CONTAMINATION AREA**

REASON FOR REVISION: NEW JPM .

THIS DOCUMENT REPLACES N/A .

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____
APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 3 of 13

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 4 of 13

DISCUSSION

This JPM will evaluate the candidate's ability to enter the GGNS Controlled Access Area (CAA) observing all applicable radiation practices for operators entering the Power Block and the procedures for exiting the CAA. Prior to entry into the CAA, the candidate will be informed to enter an area designated as a Contamination Area. The proper method of evaluation is by the candidate performing entry into the Controlled Access Area of GGNS and exiting the area.

**This JPM will be performed in conjunction with other
JPMs performed inside the CAA.**

Required Material(s):

- 01 Key Card
- 02 TLD
- 03 Merlin Guerlin alarming dosimeter
- 04 Hard Hat
- 05 Safety Glasses
- 06 Ear Plugs

General Reference(s):

- 01 Administrative Procedure 01-S-08-34
Radiological Work Planning, Performance, and Reviews
- 02 Administrative Procedure 01-S-08-2, Exposure &
Contamination Control.

Safety Consideration(s):

- 01 Normal plant access safety materials.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 5 of 13

**GIVE CANDIDATE THE INSTRUCTIONS FOR THIS
JPM PRIOR TO ENTRY INTO SECURITY ISLAND.**

**DISCUSSION IS ON THE NEXT PAGE UNDER
INITIATING CUE.**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA) with entry requirements for accessing a Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 6 of 13

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

Enters and exits GGNS Controlled Access Area per Radiation Work Permit requirements and obtains required briefings and dosimetry for entry into a Contamination Area.

Initial Condition(s): (The location for the initial conditions to be given is Security Island.)

N/A

Initiating Cue(s) :

NOTE to Evaluator: Explain to the Candidate that you will be observing and grading the radiological practices performed by the candidate during the entry, activities inside the CAA, and exit of the CAA. INFORM THE CANDIDATE PART OF THE ENTRY WILL REQUIRE ENTRY INTO THE AREA AROUND THE HYDROGEN RECOMBINERS.

This JPM will be performed in conjunction with other JPMs performed inside the CAA.

Start Time:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 7 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 1 **(*)** Obtain Key Card and TLD from Security Island.

Standard: Candidate should obtain Key Card and TLD from rack
in Security Island.

Comments:

SAT **UNSAT**

Item 2 **(*)** Wears Hard Hat and Safety Glasses inside the CAA
as required.

Standard: Candidate has a hard hat and safety glasses for
entry into the CAA. Candidate may obtain ear
plugs and safety glasses in the Health Physics Lab
on 93 foot elevation of the Control Building.

Comments:

SAT **UNSAT**

EVALUATOR:

**CUE THE CANDIDATE THAT DURING THE FACILITY WALK THROUGH
YOU WILL NEED TO GO TO HYDROGEN RECOMBINERS. (This area
should be a Contamination Area.)**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 8 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 3 **(*)** Informs the Health Physics Technician/Supervisor
at the 93 ft HP desk that part of the Job will
involve entry into the area around the fuel pool
heat exchangers OR reviews the survey map and
determines the area is a contamination area. Per
the RWP 2002-1002 entry into contamination areas
requires single PCs and NO Pre-Job Brief.

Standard: Candidate may review the survey map and determine
only single PCs are required OR may discuss with
93 ft HP Desk. Either is acceptable. There is NO
pre-Job brief required to enter a Contamination
Area.

Comments: **The Evaluator may be required to discuss the entry
in private with the Health Physics personnel this
is only a test and the operator will NOT be
entering the Hydrogen Recombiner Area.**

SAT UNSAT

**Do NOT allow candidate to enter the Hydrogen Recombiner
Area.**

This is based on ALARA considerations.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 9 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 4 **(*)** Obtain Electronic Alarming Dosimeter (Merlin
Guerlin) from the Health Physics Lab and activate
at the access turnstile using appropriate
Radiation Work Permit (RWP) number and enters CAA
when access is granted.

Standard: Candidate will obtain a Merlin Guerlin and insert
the Merlin Guerlin into the activation slot and
SCAN the bar code on his TLD and follow
instructions on the screen. Entering RWP number
and answering the questions on the computer fields
of the access terminal. Once all fields have been
entered appropriately access is granted.

Comments: **The RWP Number will be either 2002-1002 or 2002-
1005 either RWP number is acceptable dependent on
the candidate's authorization.**

NOTE: **USE OF PAPER SUITS IS HIGHLY RECOMMENDED DUE TO RADON
PROBLEMS IN THE PLANT!!**

SAT UNSAT

**Do NOT allow candidate to enter the Hydrogen Recombiner
Area.**

This is based on ALARA considerations.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA) with entry requirements for accessing a Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 10 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 5 **(*)** While in CAA the candidate observes and adheres to ALL applicable Postings and entry requirements.

Standard: While in CAA the candidate observes and adheres to ALL applicable Postings and entry requirements.

Comments: **EVALUATOR SHOULD DISCUSS ACTIONS FOR ENTRY INTO A CONTAMINATION AREA.**

NOTE: None of the areas for the JPMS should access any High Radiation Areas, Contamination Areas, or High Contamination Areas.

SAT UNSAT

Do NOT allow candidate to enter the Hydrogen Recombiner Area.

This is based on ALARA considerations.

Item 6 **(*)** Exiting of the CAA the candidate enters the control point area and enters a PCM-1 Monitor.

Standard: Candidate clears PCM-1 Monitor and exits.

Comments: **If candidate shows radon contamination portions of apparel may be left with Health Physics for decay. This is NORMAL. If paper suits are used and found to have radon, they may be left in HP.**

SEQUENCE for ITEMS 6 and 7 are **NOT CRITICAL.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 11 of 13

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA) with entry requirements for accessing a Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 12 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 7 **(*)** If hand carried materials were carried into the CAA they will be cleared through the Tool Contamination Monitor (TCM).

Standard: Candidate will place hand carried items in the TCM for counting.

Comments: **If candidate has no hand carried items this item is N/A.**

SEQUENCE for ITEMS 6 and 7 are **NOT CRITICAL.**

SAT **UNSAT**

Item 8 **(*)** After clearing the PCM-1 the candidate exits through the Portal Monitor.

Standard: Candidate clears Portal Monitor and exits.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 13 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 9 **(*)** Deactivates Merlin Guerlin at terminal at final
exit of session.

Standard: Candidate will deactivate his Merlin Guerlin and
return it to Health Physics rack.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 14 of 13

TERMINATING CUE(s) :

Entry and exit of Controlled Access Area is completed.

STOP TIME:

OVERALL COMMENTS :

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
with entry requirements for accessing a
Contamination Area.

JPM No. GJPM-OP-ADM34 Rev. 00 Page 15 of 13

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-OP-ADM42

Revision: 00

Page: 1 of 9

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

INITIATE A CONDITION REPORT

REASON FOR REVISION: BANK JPM

THIS DOCUMENT REPLACES N/A

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: INITIATE A CONDITION REPORT

JPM No. GJPM-OP-ADM42 Rev. 00 Page 2 of 9

TASK LIST: CRO-ADMIN-001

K/A Reference and Importance Factors (RO/SRO):

K/A Generics 2.1.2 - 3.0/4.0

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

Administrative JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate _____ Actual X

Setting: Classroom X Plant X Simulator X

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: INITIATE A CONDITION REPORT

JPM No. GJPM-OP-ADM42 Rev. 00 Page 3 of 9

DISCUSSION

Performance of this JPM will demonstrate the ability of an Operator to initiate a condition report to document adverse conditions at the plant.

Required Material(s):

- 01 Nuclear Management Manual Procedure LI-102, Corrective Action Process
- 02 Blank LI-102 Attachment 9.3

General Reference(s):

- 01 Nuclear Management Manual Procedure LI-102, Corrective Action Process

Safety Consideration(s):

- 01 None

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: INITIATE A CONDITION REPORT

JPM No. GJPM-OP-ADM42 Rev. 00 Page 5 of 9

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 (*) Completes Attachment 9.3 of LI-102.

Standard: Candidate completes LI-102 Attachment 9.3 Form 1.

Comments: **Refer to attached LI-102 Attachment 9.3 for the completed sections and critical data.**

SAT UNSAT

GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET

Task Title: INITIATE A CONDITION REPORT

JPM No. GJPM-OP-ADM42 Rev. 00 Page 6 of 9

TERMINATING CUE(s) :

LI-102 Attachment 9.3 Form 1 has been completed for the condition with appropriate data.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: INITIATE A CONDITION REPORT

JPM No. GJPM-OP-ADM42 Rev. 00 Page 7 of 9

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition:

The plant is shutdown following an ATWS.

Initiating Cue(s):

A reactor scram occurred due to a fault in the switchyard at 1000 this morning. Upon the scram Control Rods 32-33 and 32-09 failed to fully insert. Actions were taken per the Reactor Scram ONEP 05-1-02-I-1 and 04-1-01-C11-2 which inserted the Control rods to position 00. Emergency Procedures were entered and exited based on the plant conditions. The Control Room Supervisor given you LI-102 and directed you to initiate a Condition Report for the failure of the Control Rods to insert. PCRS computer program is out of service.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-ADM41

Revision: 00

Page: 1 of 8

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**PERFORM AN INDEPENDENT VERIFICATION ON A
PROTECTIVE TAGOUT FOR A COMPONENT**

REASON FOR REVISION: NEW JPM.

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM AN INDEPENDENT VERIFICATION ON A PROTECTIVE
TAGOUT FOR A COMPONENT

JPM No. GJPM-RO-ADM41 Rev. 00 Page 2 of 8

Task List No: NOB-ADMIN-001

K/A Reference and Importance Factors (RO/SRO):

K/A Generics 2.1.2 - 3.0/4.0; 2.2.13 - 3.6/3.8

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

ADMINISTRATIVE JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate _____ Actual X

Setting: Classroom _____ Plant _____ Simulator X

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM AN INDEPENDENT VERIFICATION ON A PROTECTIVE
TAGOUT FOR A COMPONENT

JPM No. GJPM-RO-ADM41 Rev. 00 Page 3 of 8

DISCUSSION

Performance of this JPM will demonstrate the ability of an Operator to perform an independent verification on a protective tagout for a piece of plant equipment.

Reset the Simulator to IC-17.

Remote Function page E21 **e21643** RACK OUT LPCS pump breaker.
Place the HPCS OOSVC handswitch to OOSVC.

Install handswitch tags on components on H13-P601 Section 21C.

Place the handswitch tag for LPCS Jockey Pump on the LPCS Pump and vice versa.

Required Material(s):

- 01 Equipment Clearance Installation Sheet Tags for Power supplies for valves should not be hung.
- 02 Red tags installed on LPCS system handswitches WITH appropriate information completed on tags.

General Reference(s):

- 01 01-S-06-29, Independent Verification
- 02 01-S-06-1, Protective Tagging System

Safety Consideration(s):

- 01 NONE

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM AN INDEPENDENT VERIFICATION ON A PROTECTIVE
TAGOUT FOR A COMPONENT

JPM No. GJPM-RO-ADM41 Rev. 00 Page 4 of 8

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

Perform independent verification on Equipment Clearance installation sheet for the LPCS system. Determines LPCS Pump and LPCS Jockey Pump hand switch tags are backwards and corrects and initials as installer NOT verifier.

Initial Condition(s) :

The plant is operating at 100% power. The LPCS system has been declared INOP and tagged out due to pipe wall thinning issues. NPE is performing evaluations and testing on the system.

Initiating Cue(s) :

The Control Room Supervisor has requested you perform the independent verification on the Equipment Clearance Installation Sheet for the LPCS system Control Room Components. Tags for the Local Valves and Valve power supplies will be completed hung and verified by other operators. The Tagging Computer is out of service.

NOTE: Hand candidate copy of Equipment Clearance Installation sheet.

Start Time:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM AN INDEPENDENT VERIFICATION ON A PROTECTIVE
TAGOUT FOR A COMPONENT

JPM No. GJPM-RO-ADM41 Rev. 00 Page 5 of 8

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 1 (*) Candidate verifies tags for components on H13-P601
section 21C concerning LPCS.

Standard: Candidate verifies tagged components are in the
proper position per the tag out. Candidate finds
handswitch tags for LPCS Pump and LPCS Jockey Pump
are backwards. Should note this to the Control
Room Supervisor.

Comments: **Cue the candidate to remove the tags and return
them to the Control Room Supervisor for re-issue.
If the candidate checks the LPCS and LPCS Jockey
Pump first (Most Likely), CUE the candidate to
finish the rest of the tags prior to returning the
tags to the CRS.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM AN INDEPENDENT VERIFICATION ON A PROTECTIVE
TAGOUT FOR A COMPONENT

JPM No. GJPM-RO-ADM41 Rev. 00 Page 6 of 8

TERMINATING CUE(s) :

Independent Verification performed the Control Room tags and
LPCS and LPCS Jockey Pump Handswitch tags removed and
returned to the Control Room Supervisor for disposition.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PERFORM AN INDEPENDENT VERIFICATION ON A PROTECTIVE
TAGOUT FOR A COMPONENT

JPM No. GJPM-RO-ADM41 Rev. 00 Page 7 of 8

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Conditions:

The plant is operating at 100% power. The LPCS system has been declared INOP and tagged out due to pipe wall thinning issues. NPE is performing evaluations and testing on the system.

Initiating Cue(s):

The Control Room Supervisor has requested you perform the independent verification on the Equipment Clearance Installation Sheet for the LPCS system Control Room Components. Tags for the Local Valves and Valve power supplies will be completed hung and verified by other operators. The Tagging Computer is out of service

CLEARANCE GG-02-XXXX1		TAG INSTALLATION SECTION		CLEARANCE GG-02-XXXX1		
SEQ	TAG #	DEVICE AND COMPONENT NAME	LOCATION	TAGGED POSITION	HUNG BY / DATE	VERIFIED BY / DATE
5	7	1E21M600 IBISSW LPCS PMP SUCT FM SUPP POOL 1E21F001 HANDSWITCH	CON 25A-166 1H13P601	CLOSE		
6	8	52-151108 CKTBRK LPCS JOCKEY PUMP 1E21C002 CKTBRK	AUX 09-119	OFF		
6	9	52-151134 CKTBRK LPCS MIN FLOW TO SUPP POOL 1E21F011 CKTBRK	AUX 09-119	OFF		
6	10	52-151113 CKTBRK LPCS TEST RTN TO SUPP POOL 1E21F012 CKTBRK	AUX 09-119	OFF		
6	11	52-151114 CKTBRK LPCS INJ SHUTOFF VLV 1E21F005 CKTBRK	AUX 09-119	OFF		
6	12	52-151109 CKTBRK LPCS PMP SUCT FM SUPP POOL 1E21F001 CKTBRK	AUX 09-119	OFF		
6	13	52-1P51108 CKTBRK MOTOR SPACE HEATER FOR LPCS PUMP 1E21C001 CKTBRK	AUX 09-119	OFF		
6	14	52-1P51130 CKTBRK MOV HEATERS VERTICAL SECTION C (FOR 1E21F011) CKTBRK	AUX 09-119	OFF		
6	15	52-1P51132 CKTBRK MOV HEATERS VERTICAL SECTION B (FOR 1E21F001, F005, & F012) CKTBRK	AUX 09-119	OFF		
7	16	1E21-F011 VALVE LPCS MIN FLOW TO SUPP POOL VALVE	AUX 09-093	CLOSED		
7	17	1E21-F012 VALVE LPCS TEST RTN TO SUPP POOL VALVE	AUX 09-093	CLOSED		

CLEARANCE GG-02-XXXX1		TAG INSTALLATION SECTION		CLEARANCE GG-02-XXXX1		
SEQ	TAG #	DEVICE AND COMPONENT NAME	LOCATION	TAGGED POSITION	HUNG BY / DATE	VERIFIED BY / DATE
7	18	1E21-F005 VALVE	AUX 09-119	CLOSED		
		LPCS INJ SHUTOFF VALVE				
7	19	1E21-F0036 VALVE	AUX 09-093	CLOSED		
		FUEL POOL SUCTION ISOLATION VALVE				
7	20	1E21-F008 VALVE	AUX 09-093	CLOSED		
		SUCTION LINE FLUSH TO RHR VALVE				
7	21	1E21-F025 VALVE	AUX 09-093	CLOSED		
		LPCS FLUSH WATER SUPPLY VALVE				
8	22	1E21-F211 VALVE	AUX 09-093	OPEN		
		SUCTION HDR DRAIN VALVE				
8	23	1E21-F212 VALVE	AUX 09-093	OPEN		
		SUCTION HDR DRAIN VALVE				
8	24	1E21-F213 VALVE	AUX 09-093	OPEN		
		LPCS PUMP DISCH DRAIN TO DRW VALVE				
8	25	1E21-F214 VALVE	AUX 09-093	OPEN		
		LPCS PUMP DISCH DRAIN TO DRW VALVE				
9	26	1E21-F028 VALVE	AUX 09-093	OPEN		
		LPCS PUMP SUCTION VENT VALVE				
9	27	1E21-F209 VALVE	AUX 09-093	OPEN		
		LPCS PUMP SUCTION VENT VALVE				



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-SRO-A&E40
Revision: 00
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Rtype:
QA Record
Number of pages _____
Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

EAL CLASSIFICATION: SCENARIO 1

REASON FOR REVISION: NEW JPM.

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: EAL Classification: SCENARIO 1

JPM No. GJPM-SRO-A&E40 Rev. 00 Page 2 of 8

Task List No: SRO-A&E-015; SRO-A&E-041

K/A Reference and Importance Factors (RO/SRO):

K/A 2.4.41 - 4.1; 2.4.40 - 4.0; 2.4.30 - 3.6

SAFETY FUNCTION: N/A
10CFR55.45a(11)

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

ADMINISTRATIVE JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate _____ Actual X

Setting: Classroom X Plant X Simulator X

**SHOULD BE PERFORMED FOLLOWING SCENARIO 1 WITH
SRO CANDIDATE**

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: EAL Classification: SCENARIO 1

JPM No. GJPM-SRO-A&E40 Rev. 00 Page 3 of 8

DISCUSSION

Performance of this JPM will demonstrate the ability of a Senior Reactor Operator to properly classify emergency events per Emergency Plan Procedure 10-S-01-1 and complete the required Emergency Notification Form. Performance can be performed in the simulator, plant or in a classroom setting provided candidate has access to Emergency Plan Procedures.

Required Material(s):

- 01 EPP 10-S-01-1, Activation of the Emergency Plan
- 02 EPP 06-01, EMERGENCY NOTIFICATION FORM

General Reference(s):

- 01 EPP 10-S-01-1, Activation of the Emergency Plan
- 02 EPP 10-S-01-6, Notification of Offsite Agencies and Plant On-Call Personnel

Safety Consideration(s):

- 01 None

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: EAL Classification: SCENARIO 1

JPM No. GJPM-SRO-A&E40 Rev. 00 Page 5 of 8

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 (*) Consult EPP 10-S-01-1 "Activation of the Emergency Plan" and classifies a SITE AREA EMERGENCY.

Standard: Candidate consults EPP 10-S-01-1 "Activation of the Emergency Plan" EAL 11.4 and classifies a SITE AREA EMERGENCY based on Transient requiring operation of shutdown systems with failure to scram and continued power generation.

Comments:

SAT **UNSAT**

Item 2 (*) Complete the Emergency Notification form EPP 06-01 for a SITE AREA EMERGENCY.

Standard: Candidate completes Emergency Notification form EPP 06-01 with data marked with an * (See Attached).

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: EAL Classification: SCENARIO 1

JPM No. GJPM-SRO-A&E40 Rev. 00 Page 6 of 8

TERMINATING CUE(s) :

Emergency Plan is applied to classify the event as a SITE AREA EMERGENCY per EAL 11.4 and the Emergency Notification form is completed (See Attached).

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: EAL Classification: SCENARIO 1

JPM No. GJPM-SRO-A&E40 Rev. 00 Page 7 of 8

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s) :

The plant was operating at 100% power. Thunder showers are reported in Tensas Parish. The RHR Pump C and TBCW Pump C were red tagged for repairs. The event just observed has occurred. Chemistry and Health Physics report there is NO EVIDENCE of fuel damage or radioactive release.

Initiating Cue(s) :

Determine the Emergency Action Level Classification, if any, and if required complete the required Emergency Notification Form. Communicators are available if required.

ASSUME YOU ARE THE SHIFT MANAGER
AND
THE EVENT IS STILL IN PROGRESS.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-SRO-ADM44
Revision: 00
Page: 1 of 13
Rtype:
QA Record
Number of pages _____
Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**ADMINISTRATIVE JPM
ENTRY AND EGRESS FROM THE CONTROLLED ACCESS
AREA (CAA) ; DETERMINE REQUIREMENTS TO ENTER
HIGH RADIATION AREA IN EMERGENCY**

REASON FOR REVISION: NEW JPM .

THIS DOCUMENT REPLACES N/A .

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____
APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 3 of 13

DISCUSSION

This JPM will evaluate the candidate's ability to enter the GGNS Controlled Access Area (CAA) observing all applicable radiation practices for operators entering the Power Block and the procedures for exiting the CAA. Prior to entry into the CAA, the candidate will be informed to determine authorizations and limits for an emergency situation. The proper method of evaluation is by the candidate performing entry into the Controlled Access Area of GGNS and exiting the area.

**This JPM will be performed in conjunction with other
JPMs performed inside the CAA.**

Required Material(s) :

- 01 Key Card
- 02 TLD
- 03 Merlin Guerlin alarming dosimeter
- 04 Hard Hat
- 05 Safety Glasses
- 06 Ear Plugs
- 07 Emergency Plan Procedure 10-S-01-17; Emergency
Personnel Exposure Control

General Reference(s) :

- 01 Administrative Procedure 01-S-08-34
Radiological Work Planning, Performance, and Reviews
- 02 Administrative Procedure 01-S-08-2, Exposure &
Contamination Control.
- 03 Emergency Plan Procedure 10-S-01-17; Emergency
Personnel Exposure Control

Safety Consideration(s) :

- 01 Normal plant access safety materials.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 4 of 13

**GIVE CANDIDATE THE INSTRUCTIONS FOR THIS
JPM PRIOR TO ENTRY INTO SECURITY ISLAND.**

**DISCUSSION IS ON THE NEXT PAGE UNDER
INITIATING CUE.**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 5 of 13

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

Enters and exits GGNS Controlled Access Area per Radiation Work Permit requirements and determines requirements for emergency personnel exposure.

Initial Condition(s): (The location for the initial conditions to be given is Security Island.)

N/A

Initiating Cue(s) :

NOTE to Evaluator: Explain to the Candidate that you will be observing and grading the radiological practices performed by the candidate during the entry, activities inside the CAA, and exit of the CAA.

SITUATION FOR CANDIDATE IS ON PAGE 6.

**This JPM will be performed in conjunction with other
JPMs performed inside the CAA.**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 6 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 1 **(*)** Obtain Key Card and TLD from Security Island.

Standard: Candidate should obtain Key Card and TLD from rack
in Security Island.

Comments:

SAT UNSAT

Item 2 **(*)** Wears Hard Hat and Safety Glasses inside the CAA
as required.

Standard: Candidate has a hard hat and safety glasses for
entry into the CAA. Candidate may obtain ear
plugs and safety glasses in the Health Physics Lab
on 93 foot elevation of the Control Building.

Comments:

SAT UNSAT

EVALUATOR: Pose the situation below to the candidate.

We are entering the plant to complete actions for a declared emergency. The Control Room has been abandoned and the Remote Shutdown Panel is manned. Off Normal Event Procedures require us to enter the Auxiliary Building. General Area Radiation Levels on all elevations of the Auxiliary Building are 1.0 R/Hour. The Emergency Response Organization has NOT been manned yet. There are NO lives in jeopardy or release of radioactive material anticipated outside Secondary Containment.

Who authorizes emergency exposure of personnel and what would be the limits for aligning Alternate Shutdown Panels?

Procedures may be consulted.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 7 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 3 **(*)** The Shift Manager (Emergency Director) authorizes
the extensions for the exposure limits and in this
situation should be limited to maximum 10 Rem.

Standard: Candidate identifies the **Shift Manager (Emergency
Director, either is acceptable)**.

The limits may be **Administrative Limit 2 Rem;
Federal Limit 5 Rem; or 10 Rem based on Emergency
Exposure** any of these are acceptable.

The candidate may go with lower limits based on
ALARA and he may not consider aligning Alternate
Shutdown Panels as protecting valuable property
until a situation requires there use based on
Control Room equipment situation.

Comments: **The evaluator may wish to ask the candidate his
basis for the limits.**

Answer is found in 10-S-01-17 section 6.1.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 8 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 4 **(*)** Obtain Electronic Alarming Dosimeter (Merlin
Guerlin) from the Health Physics Lab and activate
at the access turnstile using appropriate
Radiation Work Permit (RWP) number and enters CAA
when access is granted.

Standard: Candidate will obtain a Merlin Guerlin and insert
the Merlin Guerlin into the activation slot and
SCAN the bar code on his TLD and follow
instructions on the screen. Entering RWP number
and answering the questions on the computer fields
of the access terminal. Once all fields have been
entered appropriately access is granted.

Comments: **The RWP Number will be either 2002-1002 or 2002-
1005 either RWP number is acceptable dependent on
the candidate's authorization.**

NOTE: **USE OF PAPER SUITS IS HIGHLY RECOMMENDED DUE TO RADON
PROBLEMS IN THE PLANT!!**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 9 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 5 **(*)** While in CAA the candidate observes and adheres to
ALL applicable Postings and entry requirements.

Standard: While in CAA the candidate observes and adheres to
ALL applicable Postings and entry requirements.

Comments:

NOTE: None of the areas for the JPMs should access any High
Radiation Areas, Contamination Areas, or High Contamination Areas.

SAT UNSAT

Item 6 **(*)** Exiting of the CAA the candidate enters the
control point area and enters a PCM-1 Monitor.

Standard: Candidate clears PCM-1 Monitor and exits.

Comments: If candidate shows radon contamination portions of
apparel may be left with Health Physics for decay.
This is NORMAL. If paper suits are used and found
to have radon, they may be left in HP.

SEQUENCE for ITEMS 6 and 7 are **NOT CRITICAL.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 10 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 7 **(*)** If hand carried materials were carried into the
CAA they will be cleared through the Tool
Contamination Monitor (TCM).

Standard: Candidate will place hand carried items in the TCM
for counting.

Comments: **If candidate has no hand carried items this item
is N/A.**

SEQUENCE for ITEMS 6 and 7 are **NOT CRITICAL.**

SAT UNSAT

Item 8 **(*)** After clearing the PCM-1 the candidate exits
through the Portal Monitor.

Standard: Candidate clears Portal Monitor and exits.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 11 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed
unless denoted in the **Comments**.

Item 9 **(*)** Deactivates Merlin Guerlin at terminal at final
exit of session.

Standard: Candidate will deactivate his Merlin Guerlin and
return it to Health Physics rack.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 12 of 13

TERMINATING CUE(s) :

Entry and exit of Controlled Access Area is completed.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Entry and Egress from the Controlled Access Area (CAA)
Determine requirements to enter High Radiation Area
in Emergency

JPM No. GJPM-SRO-ADM44 Rev. 00 Page 13 of 13

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question K/A Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Determine Plant Safety Index (EOOS) Factor

JPM No. GJPM-SRO-ADM46 Rev. 00 Page 3 of 9

DISCUSSION

This JPM will evaluate the candidate's ability to determine the Plant Safety Index Factor (EOOS) using a computer with an EOOS Program.

Required Material(s):

- 01 Computer with EOOS Program
- 02 EDP-045 GGNS EOOS Risk Monitor Users' Guide

General Reference(s):

- 01 EDP-045 GGNS EOOS Risk Monitor Users' Guide

Safety Consideration(s):

- 01 None

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Determine Plant Safety Index (EOOS) Factor

JPM No. GJPM-SRO-ADM46 Rev. 00 Page 4 of 9

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

Determines the Plant Safety Index (EOOS) with Low Pressure Core Spray and Turbine Building Cooling Water Pump 'C' out of service as 9.6 GREEN.

Initial Condition(s) :

The plant is operating at 100% power. Low Pressure Core Spray is out of service to repair components due to pipe wall thinning. Turbine Building Cooling Water Pump 'C' is to be tagged out for outer pump seal replacement. NO other equipment is out of service.

Initiating Cue(s) :

The Plant Manager has requested you determine the Plant Safety Index (EOOS) factor and color for these two pieces of equipment out of service. You may use the STA computer in the simulator to perform this determination.

Start Time:

Evaluator may give candidate a copy of Engineering Desk Guide EDP-045.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Determine Plant Safety Index (EOOS) Factor

JPM No. GJPM-SRO-ADM46 Rev. 00 Page 5 of 9

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 **()** Log onto the EOOS computer.

Standard: Candidate logs onto the EOOS Computer program.

Comments:

SAT **UNSAT**

Item 2 **(*)** Select Low Pressure Core Spray as Out of Service.

Standard: Candidate selects Low Pressure Core Spray as out of service from the LPCS button or the *Take a Component Out/Return to Service* button.

Comments: Candidate may select to calculate now or wait.

Items 2 and 3 are NOT sequence critical.

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Determine Plant Safety Index (EOOS) Factor

JPM No. GJPM-SRO-ADM46 Rev. 00 Page 6 of 9

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 3 **(*)** Select Turbine Building Cooling Water Pump 'C' as Out of Service.

Standard: Candidate selects Turbine Building Cooling Water Pump 'C' as out of service from the *Take a Component Out/Return to Service* button.

Comments: Candidate may select to calculate now or wait.

Items 2 and 3 are NOT sequence critical.

SAT UNSAT

Item 4 **(*)** Select *Recalculate Plant Risk Measure* button.

Standard: Candidate selects *Recalculate Plant Risk Measure* button. **Computer determines Plant Safety Index at 9.6 GREEN.**

Comments:

Items 2 and 3 are NOT sequence critical.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Determine Plant Safety Index (EOOS) Factor

JPM No. GJPM-SRO-ADM46 Rev. 00 Page 7 of 9

TERMINATING CUE(s) :

Plant Safety Index calculated to be **9.6 GREEN.**

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Determine Plant Safety Index (EOOS) Factor

JPM No. GJPM-SRO-ADM46 Rev. 00 Page 8 of 9

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question K/A Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is operating at 100% power. Low Pressure Core Spray is out of service to repair components due to pipe wall thinning. Turbine Building Cooling Water Pump 'C' is to be tagged out for outer pump seal replacement. NO other equipment is out of service.

Initiating Cue(s):

The Plant Manager has requested you determine the Plant Safety Index (EOOS) factor and color for these two pieces of equipment out of service. You may use the STA computer in the simulator to perform this determination.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: WRITE LCO FOR INOP REACTOR CORE ISOLATION COOLING (RCIC)
SYSTEM

JPM No. GJPM-SRO-ADM43 Rev. 00 Page 2 of 9

Task List No: SRO-ADMIN-038

K/A Reference and Importance Factors (RO/SRO):

K/A GENERIC 2.1.12 - 4.0

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

ADMINISTRATIVE JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate X Actual

Setting: Classroom X Plant X Simulator X

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: WRITE LCO FOR INOP REACTOR CORE ISOLATION COOLING (RCIC)
SYSTEM

JPM No. GJPM-SRO-ADM43 Rev. 00 Page 3 of 9

DISCUSSION

Performance of this JPM will demonstrate the ability of a Senior Reactor Operator to properly fill out an LCO form per Operations Department Section Procedure 02-S-01-17. Performance can be simulated in the simulator, plant or in a classroom setting provided candidate has access to 02-S-01-17 and a set of Tech. Specs.

Required Material(s):

- 01 02-S-01-17, Control of Limiting Conditions for Operation
- 02 Technical Specifications
- 03 LCO Form

General Reference(s):

- 01 02-S-01-17, Control of Limiting Conditions for Operation
- 02 Technical Specifications

Safety Consideration(s):

- 01 None

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: WRITE LCO FOR INOP REACTOR CORE ISOLATION COOLING (RCIC)
SYSTEM

JPM No. GJPM-SRO-ADM43 Rev. 00 Page 5 of 9

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of 02-S-01-17, "Control of Limiting Conditions for Operation"

Standard: Candidate obtains a controlled copy of 02-S-01-17.

Comments: This is an Information Use procedure and is NOT required to be obtained.

SAT _____ UNSAT

Item 2 (*) Fills in the blanks on the LCO form.

Standard: Candidate fills in all applicable blanks on the LCO form. See the attached LCO form for correct answer. Blanks marked with ** are critical.

Comments: **IF ASKED, CUE THE CANDIDATE PRESENT TIME IS WHEN IT WAS DECLARED INOP.**

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: WRITE LCO FOR INOP REACTOR CORE ISOLATION COOLING (RCIC)
SYSTEM

JPM No. GJPM-SRO-ADM43 Rev. 00 Page 6 of 9

TERMINATING CUE(s) :

LCO form filled out properly for Tech. Spec. 3.5.3 action
Condition A. required action A1 & A2.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: WRITE LCO FOR INOP REACTOR CORE ISOLATION COOLING (RCIC)
SYSTEM

JPM No. GJPM-SRO-ADM43 Rev. 00 Page 7 of 9

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY
THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant was operating at 100 % power. The Reactor Core Isolation Cooling System is tagged out for repairs due to pipe wall thinning. No other plant equipment is inoperable.

The MAI number is 2002-XXXXX1

Clearance number is 2002-1701

Initiating Cue(s):

You are the Shift Supervisor. Complete the required LCO/Tech Spec documentation for this tagout.

02-S-01-17	Revision: 102
Attachment I	Page 1 of 3

LCO REPORT

LCO NO. 2002-XXXX1

¹ DATE 8/26/2002	² TIME PRESENT TIME	³ %PWR 100	⁴ MODE 1
⁵ SYSTEM OR COMPONENT REACTOR CORE ISOLATION COOLING SYSTEM**			
⁶ T.S. / TRM NO. 3.5.3**	⁷ MAI NO. 2002XXXX1	⁸ OTHER DOCUMENT & NO. CLEARANCE 2002-1701	
⁹ INITIATING CONDITION REPAIR PIPE WALL THINNING ON RCIC**			
¹⁰ CONDITION	¹¹ REQUIRED ACTION	¹² COMPLETION TIME	
A**	A.1. VERIFY BY ADMINISTRATIVE MEANS HIGH PRESSURE CORE SPRAY SYSTEM IS OPERABLE.**	1 HOUR**	
	A.2. RESTORE LOW PRESSURE ECCS SPRAY SUBSYSTEM TO OPERABLE STATUS**	14 DAYS**	
¹³ NAME OF DUTY MANAGER NOTIFIED IF LCO ≥ 7 DAYS N/A		¹⁴ IF OTHER DEPARTMENT REQUIRED TO COMPLETE ACTION: NAME/DEPARTMENT NOTIFIED. (COMPLETE ATT II)	
¹⁵ LCO 3.0.6 ENTERED N/A		¹⁶ LCO NO. EVALUATED FOR LOSS OF SAFETY FUNCTION XXX	
¹⁷ SHIFT SUPERVISOR CANDIDATE SIGNS HERE		¹⁸ SHIFT MANAGER	

¹⁹ SHIFT SUPERVISOR'S INITIAL INDICATES REQUIRED TESTING OR ACTIONS HAVE BEEN PERFORMED ON HIS SHIFT.

		24 HR		72 HR			7 DAY							14 DAY		
DATE																
00-08																
08-16																
16-24		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
														30 DAY		
DATE																
00-08																
08-16																
16-24	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

²⁰ LCO RESTORED DATE / TIME	²¹ COMMENTS / CORRECTIVE ACTION
²² SHIFT SUPERVISOR	²³ SHIFT SUPERINTENDENT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 2 of 10

Task List No: SRO-ADMIN-048

K/A Reference and Importance Factors (RO/SRO):

K/A 2.2.13 - 3.6/3.8; 2.1.2 - 3.0/4.0

Time Required for Completion: 30 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

ADMINISTRATIVE JPM

APPLICABLE METHOD OF TESTING

Performance: Simulate _____ Actual X

Setting: Classroom _____ Plant _____ Simulator X

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 3 of 10

DISCUSSION

Performance of this JPM will demonstrate the ability of an Supervisor to review a protective tagout for issue.

Required Material(s):

- 01 Facility prints (M-1087; E-1032 & E-1182)
- 02 01-S-06-1, Protective Tagging System
- 03 SOI 04-1-01-E21-1, Low Pressure Core Spray System
- 04 Completed tagout form ready for review (FOR CANDIDATE)
- 05 Operational Impact Statement
- 06 OPG-15 OPS Department Equipment Clearance Process Attachment 1 Clearance Checksheet

General Reference(s):

- 01 01-S-06-1, Protective Tagging System
- 02 SOI 04-1-01-E21-1, Low Pressure Core Spray System
- 03 Facility prints (M-1087; E-1032 & E-1182)

Safety Consideration(s):

- 01 NONE

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 4 of 10

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

Protective Tag has been reviewed for the LPCS Jockey Pump and discrepancy found for sequence of LPCS Pump Breaker and LPCS Jockey Pump handswitch.

Initial Condition(s) :

The plant is operating at 100% power. The LPCS Jockey Pump requires coupling checks and alignment.

Initiating Cue(s) :

The Tagging Group has just completed this tagout for the LPCS Jockey Pump. You are the Shift Supervisor complete the SRO Review of the Clearance. The Tagging Computer is out of service and the Tagging group generated the tag out manually.

EVALUATOR GIVE THE TAGOUT, IMPACT STATEMENT, AND REVIEW CHECKSHEET TO THE CANDIDATE.

Start Time:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 5 of 10

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Review the procedure for Protective Tagging 01-S-06-1.

Standard: Candidate reviews the Protective Tagging Procedure.

Comments: If Candidate indicates he is going to retrieve the procedure you may give the candidate a copy of the procedure. 01-S-06-1 is an Information Use Procedure. Obtaining a copy of the procedure is NOT required.

SAT UNSAT

Item 2 () Review the P & ID M-1087 and Electrical Prints E-1182 for boundaries for the 1E21-C001 LPCS pump.

Standard: Candidate locates the LPCS Jockey Pump on M-1087 and Electrical Prints E-1032 & E-1182 and identifies boundaries.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 7 of 10

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 5 (*) Indicates the following electrical lineup.

 ** E21 C001 LPCS PUMP Breaker 152-1506 – RACKED OUT/OPEN

 E21-C002 LPCS JKY PMP Breaker 52-151108 – OPEN

 Motor Space Heater for LPCS Pump Breaker 52-1P51130 – OPEN

Standard: Candidate indicates the above breakers are to be racked out and open OR open. **** Candidate should note the LPCS Pump Breaker is to be tagged prior to the LPCS Jockey Pump Handswitch. This is a sequence error for the candidate to identify.**

Comments: ***** LPCS JOCKEY PUMP HANDSWITCH IS OUT OF ORDER, SHOULD BE AFTER THE LPCS PUMP BREAKER.**

SAT UNSAT

Item 6 (*) Sequence for hanging of tags is indicated:

Standard: Candidate determines sequence is **UNSATISFACTORY**.

Note: Handswitch for the LPCS Jockey Pump should be after the LPCS Pump Breaker.

SEE ATTACHED COPY OF TAGOUT.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 8 of 10

TERMINATING CUE(s) :

Protective Tag reviewed for the LPCS Jockey Pump and sequence error noted.

STOP TIME :

OVERALL COMMENTS :

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: REVIEW A PROTECTIVE TAGOUT FOR A COMPONENT

JPM No. GJPM-SRO-ADM45 Rev. 00 Page 9 of 10

ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is operating at 100% power. The LPCS Jockey Pump requires coupling checks and alignment.

Initiating Cue(s):

The Tagging Group has just completed this tagout for the LPCS Jockey Pump. You are the Shift Supervisor complete the SRO Review of the Clearance. The Tagging Computer is out of service and the Tagging group generated the tag out manually.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 2 of 11

Task List No: AON-C11-010

K/A Reference and Importance Factors (RO/SRO):

K/A 201001 2.1.30 - 3.9/3.4; 2.1.29 - 3.4/3.3

Safety Function: 1

RO Group 1

SRO Group 2

10 CFR 55.45(a) 8 & 9

Time Required for Completion: 20 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

Plant RCA entry

APPLICABLE METHOD OF TESTING

Performance: Simulate X Actual

Setting: Classroom _____ Plant X Simulator

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License:
RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 3 of 11

DISCUSSION

This JPM will evaluate the candidate's ability to shift the CRD drive water filters, per SOI 04-1-01-C11-1.

This task is required to be performed whenever the drive water filter D/P is excessive.

The proper method to evaluate the candidate is by simulation at the Drive Water Filter in the Auxiliary Building.

If requested, the evaluator should provide the candidate with a controlled copy of SOI 04-1-01-C11-1.

Required Material(s):

01 SOI 04-1-01-C11-1

General Reference(s):

01 SOI 04-1-01-C11-1

Safety Consideration(s):

- 01 If the CRD pumps are running, then the area is a high noise area. Ensure ear protection is worn when entering the posted area.
- 02 Ensure appropriate radiological procedures are followed.
- 03 Do NOT allow candidate to manipulate plant equipment.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 5 of 11

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of SOI 04-1-01-C11-1.

Standard: Candidate obtains a controlled copy of SOI 04-1-01-C11-1.

Comments:

SAT _____ **UNSAT**

Item 2 () Verify that Filter D/P Indicator switch PDIS-N002 in service.

Standard: Candidate states that he would verify that PDIS-N002 is in service.

Comments:

SAT _____ **UNSAT**

Item 3 () Open or Check open C11-F020B, Drive Water Filter "B" inlet valve.

Standard: Candidate states he would open or check open C11-F020B by turning the handwheel counterclockwise until it mechanically stops.

Comments: NOTE: Valve is normally lined up OPEN.

SAT _____ **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 6 of 11

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 4 () Check closed C11-F023B, Drive Water Filter "B" drain valve.

Standard: Candidate states he would check C11-F023B closed by turning the handwheel clockwise until it mechanically stops.

Comments:

SAT _____ **UNSAT**

Item 5 () Slowly open vent valve C11-F022B and ensure that the "B" Drive Water Filter is full of water.

Standard: Candidate states he would slowly open C11-F022B by turning the handwheel counterclockwise and verify a solid stream of water flowing from the vent hose.

Comments: If asked, the evaluator should cue the candidate that he sees a solid stream of water flowing from the vent hose.

SAT _____ **UNSAT**

Item 6 () Close the vent valve C11-F022B.

Standard: Candidate states he would close C11-F022B by turning the handwheel clockwise until it mechanically stops.

Comments:

SAT _____ **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 7 of 11

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 8 of 11

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 7 (*) Slowly open C11-F021B, Drive Water Filter "B" Outlet valve.

Standard: Candidate states he would slowly open C11-F021B by turning the handwheel counterclockwise until it mechanically stops.

Comments:

SAT **UNSAT**

Item 8 (*) Close C11-F021A, Drive Water Filter "A" outlet.

Standard: Candidate states that he would close the C11-F021A by turning the handwheel clockwise until it mechanically stops.

Comments:

SAT **UNSAT**

Item 9 () Verify the local drive water filter differential pressure indication on PDIS-N002 remains \leq 20 psid.

Standard: Candidate states he would look at PDIS-N002 and verify d/p reading is \leq 20 psid.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 9 of 11

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 10 () Close C11-F020A, Drive Water Filter Inlet valve, if desired.

Standard: Candidate states that he would close the valve C11-F020A, if desired by Plant Supervisor, by turning the handwheel clockwise until it mechanically stops.

Comments: After candidate states he would close the valve C11-F020A, or if candidate asks is this desired, the evaluator should cue the candidate that it is NOT desired to close the C11-F020A at this time.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 10 of 11

TERMINATING CUE(s)

The Control Room is notified that the standby CRD Drive Water Filter is now in service and the d/p is within specifications.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: ROTATE THE CRD DRIVE WATER FILTERS

JPM No. GG-1-JPM-NLO-C1101 Rev. 00 Page 11 of 11

ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s) :

The plant is operating at 100% capacity. The CRD Drive Water Filter D/P High alarm is sealed in. Mechanics have placed a vent hose on the Drive Water Filter to be placed in service. The Control Room Supervisor has verified that there is a clean filter element in the standby filter.

Initiating Cue(s) :

The Control Room Supervisor has instructed you to swap from CRD Drive Water Filter "A" to Drive Water Filter "B".



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-NLO-P6401

Revision: 01

Page: 1 of 12

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**MANUAL START OF DIESEL DRIVEN FIRE PUMP
(FAULTED)**

REASON FOR REVISION: UPDATE FOR NRC EXAM 8/2002.

THIS DOCUMENT REPLACES GG-1-JP-NLO-P64501.00.

REVIEW / APPROVAL:

PREPARED BY: _____	DATE: _____
APPROVED BY: _____	DATE: _____
Facility Representative	

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 3 of 12

DISCUSSION

This JPM will evaluate the candidate's ability to perform a manual Diesel Driven Fire Pump at the Fire Water Pump House. This is an abnormal condition that would require operator action in the event of a fire on site and a failure of the Diesel Driven Fire Pump to automatically start.

The proper method of evaluation is by simulation in the plant at the Fire Water Pump House.

This JPM is written to be performed on Diesel Driven Fire Pump 'A', however, the evaluator may use Diesel Driven Fire Pump 'B' depending upon plant conditions and Shift Superintendent.

If requested, the evaluator should supply the candidate with a controlled copy of SOI 04-S-01-P64-1.

Required Material(s):

01 SOI 04-S-01-P64-1, Fire Protection Water System

General Reference(s):

01 SOI 04-S-01-P64-1, Fire Protection Water System

Safety Consideration(s):

01 Candidate should **NOT** manipulate any switches or valves on the Diesel Driven Fire Water Pumps.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 5 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of SOI 04-S-01-P64-1.

Standard: Candidate obtains a controlled copy of SOI 04-S-01-P64-1.

Comments: **Once candidate requests procedure, evaluator may provide a copy of the procedure.**

SAT **UNSAT**

Item 2 (*) Locate Diesel Driven Fire Pump 'A'.

Standard: Candidate locates Diesel Driven Fire Pump 'A'.

Comments: Diesel Driven Fire Pump 'A' is located in the Fire Water Pump House in the yard area near the Unit 1 Warehouse .

SAT **UNSAT**

Item 3 () Locate panel SH22-P135 for Diesel Driven Fire Pump 'A'.

Standard: Candidate locates panel SH22-P135 for Diesel Driven Fire Pump 'A'.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 6 of 12

NOTE: Critical items denoted by (*). Sequence is assumed unless denoted in the **Comments**.

Item 4 () On panel SH22-P135, place control switch to MANUAL 1.

Standard: Candidate states that he would place the local control switch for Diesel Driven Fire Pump to MANUAL 1.

Comments: Cue the candidate that the Control switch is in the position identified by the candidate.

NOTE: Candidate may elect to perform Item 6 instead of this item, this is acceptable. Candidate would have to perform at least Item 4&5 or Item 6&7.

SAT _____ UNSAT

Item 5 () Depress the local START pushbutton on SH22-P135.

Standard: Candidate states he would depress the local START pushbutton on SH22-P135.

Comments: CUE the candidate the DIESEL FIRE PUMP DOES NOT do anything (PUMP/DIESEL is as is).

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 7 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 6 () On panel SH22-P135, place control switch to MANUAL 2.

Standard: Candidate states that he would place the local control switch for Diesel Driven Fire Pump to MANUAL 1.

Comments: Cue the candidate that the Control switch is in the position identified by the candidate.

NOTE: Candidate may perform this item or go on to manual start.

SAT UNSAT

Item 7 () Depress the local START pushbutton on SH22-P135.

Standard: Candidate states he would depress the local START pushbutton on SH22-P135.

Comments: CUE the candidate the DIESEL FIRE PUMP DOES NOT do anything (PUMP/DIESEL is as is).

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 8 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 8 **(*)** Turn Manual Override knob on Fuel Control Valve to the fully clockwise position.

Standard: Candidate locates the Fuel Control Valve and states he would turn the Manual Override Knob fully clockwise.

Comments: **Cue the candidate that the Manual Override Knob MOTION HAS STOPPED.**

SAT UNSAT

Item 9 **()** Select a starter contactor and lift and hold contactor handle to crank diesel.

Standard: Candidate states he would lift and hold contactor handle to crank diesel.

Comments: **Cue the candidate the DIESEL FIRE PUMP DOES NOT do anything (PUMP/DIESEL is as is).**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 9 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 10 **(*)** ON BOTH starter contactors, lifts and holds both contactor handles to crank diesel. Release the handles when diesel starts.

Standard: Candidate states he would lift and hold both contactor handles to crank diesel. Release the handles when diesel starts.

Comments: **Cue the candidate the DIESEL FIRE PUMP STARTS.**

SAT _____ UNSAT

Item 11 **(*)** After Diesel Driven Fire Pump starts, throttle open P64-F323A, the Cooling Water Solenoid Bypass valve to maintain \approx 5 - 10 psig cooling water to diesel.

Standard: Candidate states he would throttle open P64-F323A, the Cooling Water Solenoid Bypass valve to maintain \approx 5 - 10 psig cooling water to diesel

Comments: **Cue the candidate that cooling water pressure indicates 7 psig.**

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 10 of 12

TERMINATING CUE(s) :

Diesel Driven Fire Pump is operating supplying the Fire Water System.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : MANUAL START OF DIESEL DRIVEN FIRE PUMP (FAULTED)

JPM No. GJPM-NLO-P6401 Rev. 01 Page 11 of 12

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is at 100% power. Diesel Driven Fire Pump 'B' is tagged out for bearing replacement. The Motor Driven Fire Pump tripped on start and cannot be started. There is a fire in the Unit 1 Turbine Building. The Control Room has attempted to start the Motor Driven and Diesel Driven Fire Pump 'A' and neither has started.

Initiating Cue(s):

The Shift Supervisor has directed you to manually start Diesel Driven Fire Pump 'A'.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-C6108

Revision: 02

Page: 1 of 13

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**PERFORM ATTACHMENT III OF SHUTDOWN FROM REMOTE
SHUTDOWN PANELS ONEP**

MINOR X MAJOR _____
REASON FOR REVISION: update for NRC Exam 8/2002.

THIS DOCUMENT REPLACES GG-1-JPM-RO-C6108.01 .

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 2 of 13

Task List No: CRO-C61-001

K/A Reference and Importance Factors (RO/SRO):

K/A 295016 AA1.07: 4.2/4.3; AK2.02: 4.0/4.1
2.1.30: 3.9/3.4; 2.4.35: 3.3/3.5

SAFETY FUNCTION - 7
RO Group unclassified
SRO Group unclassified
10 CFR 55.45 (a) (8, 9, & 12)

Time Required for Completion: 30 Minutes (approximate).

Time Critical: YES/NO
Faulted JPM: YES/NO

ENTERS RCA
Abnormal procedure implementation in the plant.

APPLICABLE METHOD OF TESTING

Performance: Simulate X Actual

Setting: Classroom _____ Plant X Simulator

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License:
RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 3 of 13

DISCUSSION

This JPM will evaluate the candidate's ability to perform Attachment III of the Shutdown from Remote Shutdown Panels ONEP. This attachment transfers control of selected Division I components from the Control Room to local Alternate Shutdown Panels. This task may be required by the Off Normal Event Procedure Shutdown from the Remote Shutdown Panels in the event of a fire in the Main Control Room.

This JPM will be performed in the Division I Switchgear room 111 ft elevation Control Building and 166 ft and 119 ft elevations of the Auxiliary Building. Prior to conducting this JPM, access permission must be obtained from the Shift Manager to allow entry into the affected cabinet(s) and to the required panel(s).

Required Material(s):

- 01 Attachment III of 05-1-02-II-1 - Shutdown from the Remote Shutdown Panels
- 02 Keys to the Remote Shutdown Panel Cabinet
- 03 Key to cover for Handswitch C61-HSS-M150 on Alternate Shutdown Panel H22-P152 (located in the Remote Shutdown Panel Cabinet)

General Reference(s):

- 01 Attachment III of 05-1-02-II-1

Safety Consideration(s):

- 01 Exercise extreme caution in and around Remote Shutdown Panels and Alternate Shutdown Panels.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 5 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain Attachment III from the Remote Shutdown Panels Cabinet and the key for H22-P152 handswitch cover.

Standard: Candidate has obtained Attachment III and the key for C61-HSS-M150 on H22-P152.

Comments: Provide the candidate with the Attachment III. Once the candidate notes the key is required to gain access to the handswitch have the candidate leave the KEY in the Remote Shutdown Panel Cabinet.

SAT _____ UNSAT

Item 2 (*) Locate Alternate Shutdown Panel H22-P152 and C61-HSS-M150.

Standard: Candidate has located panel H22-P152 and handswitch C61-HSS-M150.

Comments: Panel is located in Division I Switchgear Room with Bus 15AA on 111 ft elevation of the Control Building.

DO NOT LET CANDIDATE OPEN COVER FOR C61-HSS-M150.

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 6 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 3 (*) Opens the cover for C61-HSS-M150 and places the handswitch in ON.

Standard: Candidate indicates they would open the cover and place the handswitch in the ON position.

Comments: **CUE the candidate handswitch C61-HSS-M150 is in the ON position.**

SAT UNSAT

Item 4 () Observes that lockout relays R1-R36 trip to the LOCKOUT position.

Standard: Candidate indicates they would observe R1 - R36 in the LOCKOUT (trip) position.

Comments: **CUE the candidate R1 - R36 are in the LOCKOUT position.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 7 of 13

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 5 (*) Locate Alternate Shutdown Panel H22-P299.

Standard: Candidate has located panel H22-P299.

Comments: Panel is located in **Division I Switchgear Room with Bus 15AA on 111 ft elevation of the Control Building.**

SAT UNSAT

Item 6 (*) At H22-P299, places the following handswitches in LOCAL position:
C61-HSS-M512 through M520

Standard: Candidate has placed handswitches in LOCAL:

C61-HSS-M512	<u> </u>	C61-HSS-M517	<u> </u>
C61-HSS-M513	<u> </u>	C61-HSS-M518	<u> </u>
C61-HSS-M514	<u> </u>	C61-HSS-M519	<u> </u>
C61-HSS-M515	<u> </u>	C61-HSS-M520	<u> </u>
C61-HSS-M516	<u> </u>		

on H22-P299.

Comments: **Cue the candidate that you understand the positions of the handswitches.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 8 of 13

NOTE: **Critical items** denoted by (*). Sequence is assumed unless denoted in the **Comments**.

NOTE: Panels in the Auxiliary Building may be done in any order.

Item 7 (*) Locate Alternate Shutdown Panel H22-P295.

Standard: Candidate has located panel H22-P295.

Comments: Panel is located in Division I Switchgear Room in **Area 7 119 ft elevation of the Auxiliary Building.**

SAT _____ UNSAT

Item 8 (*) At H22-P295, places the following handswitches in LOCAL position:
C61-HSS-M500 through M503

Standard: Candidate has placed handswitches in LOCAL:

C61-HSS-M500 _____	C61-HSS-M502 _____
C61-HSS-M501 _____	C61-HSS-M503 _____

on H22-P295.

Comments: Cue the candidate that you understand the positions of the handswitches.

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 9 of 13

NOTE: Critical items denoted by (*). Sequence is assumed unless denoted in the **Comments**.

Item 9 (*) Locate Alternate Shutdown Panel H22-P296.

Standard: Candidate has located panel H22-P296.

Comments: Panel is located in **Division I Switchgear Room in area 9 119 ft elevation of the Auxiliary Building.**

SAT _____ UNSAT

Item 10 (*) At H22-P296, places the following handswitches in LOCAL position:
C61-HSS-M504 through M508

Standard: Candidate has placed handswitches in LOCAL:

C61-HSS-M504 _____	C61-HSS-M507 _____
C61-HSS-M505 _____	C61-HSS-M508 _____
C61-HSS-M506 _____	

on H22-P296.

Comments: Cue the candidate that you understand the positions of the handswitches.

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 10 of 13

NOTE: Critical items denoted by (*). Sequence is assumed unless
denoted in the **Comments**.

Item 11 (*) Locate Alternate Shutdown Panel H22-P298.

Standard: Candidate has located panel H22-P298.

Comments: Panel is located in Division I Switchgear Room in
area 7 166 ft elevation of the Auxiliary Building.

SAT _____ **UNSAT**

Item 12 (*) At H22-P298, places the following handswitches in
LOCAL position:
C61-HSS-M510 and M511

Standard: Candidate has placed handswitches in LOCAL:

C61-HSS-M510 _____ **C61-HSS-M511** _____

on H22-P298.

Comments: Cue the candidate that you understand the
positions of the handswitches.

SAT _____ **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 11 of 13

TERMINATING CUE(s)

The candidate reports to the SRO with the Command Function that Attachment III of the Shutdown from the Remote Shutdown Panels ONEP 05-1-02-II-1 is complete.

STOP TIME

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: Perform Attachment III of Shutdown from Remote
Shutdown Panels ONEP

JPM No. GJPM-RO-C6108 Rev. 02 Page 12 of 13

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

During a fire in the Control Room, the SRO with the Command Function has determined that the Control Room must be evacuated and assigns operators to man the Remote Shutdown Panels. The Reactor is shutdown and RCIC and Main Steam Bypass valves are controlling reactor parameters. Section B of the ONEP is being utilized.

Initiating Cue(s):

The SRO with the Command Function has directed you to obtain a controlled copy of Attachment III of the Shutdown from Remote Shutdown Panels ONEP and complete the handswitch lineup.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-E1231

Revision: 00

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Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**STARTUP ALTERNATE DECAY HEAT REMOVAL IN
REACTOR TO REACTOR MODE (FAULTED)**

REASON FOR REVISION: NEW JPM.

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 3 of 19

GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 4 of 19

DISCUSSION

This JPM will evaluate the candidate's ability to startup the Alternate Decay Heat Removal System in Reactor to Reactor mode of operation. The performance of this task is required during Refueling outages to allow work on the RHR systems thus reducing the outage time.

The proper method of evaluation is by performance in the simulator.

Initialize the simulator to an IC with the plant shutdown with the reactor temperature at some temperature <200 °F (Mode 4).

RHR A, B and C in LPCI Standby and secured. **Align RHR/ADHR per SOI section 5.13 complete to step 5.13.2d(5).** Tags for ADHR are removed.

Insert Malfunction **e12188e E12-F042C Loss of power on stroke**

All control room operations will be performed on panel 1H13-P601 unless otherwise noted.

Required Material(s):

01 SOI 04-1-01-E12-1, Residual Heat Removal System

General Reference(s):

01 SOI 04-1-01-E12-1, Residual Heat Removal System

Safety Consideration(s):

01 None.

GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 6 of 19

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 7 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of SOI 04-1-01-E12-1.

Standard: Candidate obtains a controlled copy of SOI 04-1-01-E12-1.

Comments:

SAT **UNSAT**

Item 2 () Place RHR 'C' MOV TEST switch to TEST.

Standard: Candidate places the key lock switch for RHR 'C' MOV TEST to TEST and observes "RHR C MOV IN TEST STATUS" status light is lit.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 8 of 19

NOTE: Critical items denoted by (*). Sequence is assumed unless denoted in the **Comments**.

Item 3 () Open or check open E12-F010, Inlet to SDC
(Shutdown Cooling).

Standard: Candidate observes the red light is illuminated on
P601 section 17C for E12-F010.

Comments:

SAT _____ UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 9 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 4 () Place NSSSS OTBD MOV TEST switch to TEST.

Standard: Candidate places the key lock switch for NSSSS OTBD MOV TEST to TEST and observes "RX Div 2 Isol Sys OOSVC" annunciator is received.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT UNSAT

Item 5 (*) Open E12-F009, SDC Inbd Suct Vlv.

Standard: Candidate places the handswitch for E12-F009 to OPEN and observes red light illumination on P601 section 17C.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 10 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 6 () Place NSSSS INBD MOV TEST switch to TEST.

Standard: Candidate places the key lock switch for NSSSS INBD MOV TEST to TEST and observes "RX Div 1 Isol Sys OOSVC" annunciator is received.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT UNSAT

Item 7 (*) Open E12-F008, SDC Otbd Suct Vlv.

Standard: Candidate places the handswitch for E12-F008 to OPEN and observes red light illumination on P601 section 20C.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 11 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 8 **(*)** Open E12-F006A, RHR PMP A Suct Fm SDC.

Standard: Candidate places the handswitch for E12-F006A to OPEN and observes red light illumination on P601 section 20C.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 12 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 9 () Close or check closed G41-F348, Spent Fuel Pool to RHR.

Standard: Candidate dispatches an operator to close or check closed G41-F348.

Comments: **CUE the candidate G41-F348, Spent Fuel Pool to RHR is closed.**

SAT UNSAT

Item 10 (*) Open or check open G41-F059, Spent Fuel Pool to RHR A and B.

Standard: Candidate dispatches an operator to open or check open G41-F059.

Comments: **CUE the candidate G41-F059, Spent Fuel Pool to RHR A and B is open.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 13 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 11 (*) Place RHR A ADHRS MODE TRIP ENABLE switch to ADHRS on H13-P629.

Standard: Candidate dispatches an operator to place the RHR A ADHRS MODE TRIP ENABLE switch to ADHRS.

Comments: Simulator Operator on Remote Function Action page for E12 select e12199 to ADHRS and e12198 to ON.

CUE the candidate the RHR A ADHRS MODE TRIP ENABLE switch is in ADHRS position.

SAT UNSAT

Item 12 (*) Open E12-F066A, FPC Assist to RHR PMP A.

Standard: Candidate places the handswitch for E12-F066A to OPEN and observes red light illumination on P601 section 20C.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 14 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 13 **(*)** Throttle open E12-F424, ADHR FCV to approximately 10%.

Standard: Candidate throttles open E12-F424 to 10% valve position as indicated on E12-ZI-R613 on P601 section 17B (electronic bar indicator).

Comments:

SAT **UNSAT**

Item 14 **()** Vent suction piping at E12-F800 and RHR C piping at E12-F231 and F232 then re-close the vents.

Standard: Candidate dispatches an operator to vent the ADHR suction piping at E12-F800 and RHR C piping at E12-F231 and F232.

Comments: **CUE** the candidate the ADHR suction piping has been vented at E1-F800 and RHR C piping at E12-F231 and F232.

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 15 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 15 **(*)** Start ADHR Pumps A and B.

Standard: Candidate places the handswitches for ADHR pumps A and B to START and observes red light illumination on P601 section 17C.

Comments: **NOTE: The candidate may elect to start first pump then establish flow path through E12-F042C prior to starting second pump and adjustments to E12-F424 at anytime in the process is acceptable.**

SAT UNSAT

Item 16 **(*)** Open E12-F042C, RHR C INJ Shutoff Vlv.

Standard: Candidate places the handswitch for E12-F042C to OPEN and observes a loss of power on E12-F0442C then reports this to the Control Room Supervisor.

Comments: **CUE the candidate to determine the circuit breaker that supplies E12-F042C and dispatch an operator to investigate and attempt to reset and close the circuit breaker.**

Circuit breaker number 52-161124

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 16 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 17 **(*)** Stops ADHR Pumps A and B.

Standard: Candidate places the handswitches for ADHR pumps A and B to STOP and observes green light illumination on P601 section 17C.

Comments: **The candidate should stop the ADHR Pumps until the E12-F042C is restored. Candidate may close E12-F424 requiring reopening later. Items 17 and 18 are not sequence dependent.**

SAT UNSAT

Item 18 **(*)** Dispatches an operator to circuit breaker 52-161124 to investigate and attempt to reset and close the circuit breaker.

Standard: Candidate dispatches an operator to circuit breaker 52-161124 to attempt to reset and close the circuit breaker.

Comments: **DELETE MALFUNCTION E12188E and report to the candidate the circuit breaker has NO obvious problems and the circuit breaker 52-161124 is reset and closed.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 17 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 19 (*) Start ADHR Pumps A and B.

Standard: Candidate places the handswitches for ADHR pumps A and B to START and observes red light illumination on P601 section 17C.

Comments: **NOTE: The candidate may elect to start first pump then establish flow path through E12-F042C prior to starting second pump and adjustments to E12-F424 at anytime in the process is acceptable.**

SAT UNSAT

Item 20 (*) Open E12-F042C, RHR C INJ Shutoff Vlv.

Standard: Candidate places the handswitch for E12-F042C to OPEN and observes red light illumination on P601 section 17C and flow rise on E12-FI-R633 (electronic bar indicator section 17B)

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 18 of 19

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 21 (*) Throttle E12-F424, ADHR FCV to attain 2000 gpm flow as indicated on E12-FI-R633.

Standard: Candidate throttles E12-F424 to attain 2000gpm flow indicated on E12-FI-R633.

Comments: **NOTE: If candidate exceeds 3600 gpm flow as indicated on E12-FI-R633, the candidate is unsat.**

SAT UNSAT

Item 22 () Place the following MOV TEST switches to NORM:

NSSSS INBD MOV TEST	_____
NSSSS OTBD MOV TEST	_____
RHR A MOV TEST	_____
RHR C MOV TEST	_____
CTMT DRWL DIV 1 MOV TEST	_____

Standard: Candidate places the key lock switches for the above in NORM and observes appropriate Test Status Light extinguish.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 19 of 19

TERMINATING CUE(s) :

ADHR is operating with 2000 gpm flow Reactor to Reactor operation
using RHR A Shutdown Cooling Suction.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : STARTUP ALTERNATE DECAY HEAT REMOVAL IN REACTOR TO
REACTOR MODE (FAULTED)

JPM No. GJPM-RO-E1231 Rev. 00 Page 20 of 19

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s) :

The plant is in mode 4 with coolant temperature \approx _____ °F. RHR B is in LPCI Standby. ADHR has been filled and vented per 04-1-01-E12-1 section 5.11. The PSW system has been aligned to the ADHR Heat Exchangers and CCW Controller P42-TIC-R016 has been set to 55°F. Signs indicating ADHR operation have been hung. The PSW Radiation Monitor has been placed in service. E12-F008 and F009 isolation capability has been verified. Health Physics has been notified of ADHR operation. The ADHR Room Air Conditioner has been started. ADHR has been flushed, filled, and vented.

Initiating Cue(s) :

The Control Room Supervisor has directed you start ADHR with two pumps in the RPV to RPV mode of operation using RHR A Shutdown Cooling as the source. SOI 04-1-01-E12-1 has been completed up to section 5.13.2d(5). Section 5.13.2e, f & g are N/A.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-E2209

Revision: 01

Page: 1 of 12

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

LOWER SUPPRESSION POOL LEVEL WITH HPCS

REASON FOR REVISION: update JPM for NRC Examination 8-2002

THIS DOCUMENT REPLACES GG-1-JPM-RO-E2209.00

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 3 of 12

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 4 of 12

DISCUSSION

This JPM will evaluate the candidate's ability to align the High Pressure Core Spray System to transfer water from the Suppression Pool to the Condensate Storage Tank as required by the Emergency Procedures.

This JPM should be performed in the simulator. Initialize the simulator to IC - 17 and perform the following:

Raise Suppression Pool water level to the High level alarms and observe the transfer of the HPCS and RCIC suctions to the Suppression Pool.

Place HPCS SSW in-service.

HPCS should be in Standby with suction from the Suppression Pool.

Freeze the simulator.

THE ULTIMATE GOAL OF THIS JPM IS TO DEMONSTRATE THE ABILITY TO USE HPCS TO TRANSFER WATER FROM THE SUPPRESSION POOL TO THE CST.

Required Material(s):

01 SOI 04-1-01-E22-1 Sect. 5.2 & 6.3

General Reference(s):

01 SOI 04-1-01-E22-1 Sect. 5.2 & 6.3

02 EOP 05-1-01-EP-3

Safety Consideration(s):

01 None

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 5 of 12

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

HPCS is operating and water level in the Suppression Pool has dropped from its previous level clearing high level annunciators.

Initial Condition(s) :

The plant is operating at rated conditions. Suppression Pool level has risen due to leaking SRVs and the high level alarms have been received.

Initiating Cue(s) :

The Control Room Supervisor has entered EP-3 and directed you to lower Suppression Pool level using High Pressure Core Spray. HPCS SSW is in operation. Inform the CRS when Suppression Pool level has cleared the high level alarms on H13-P601.

Start Time:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 6 of 12

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of SOI 04-1-01-E22-1.

Standard: Candidate obtains a controlled copy of 04-1-01-E22-1 HPCS SOI.

Comments:

SAT **UNSAT**

Item 2 () Verify Suppression Pool level is >18.81 feet and HPCS is aligned with suction from the Suppression Pool.

Standard: Candidate observes Suppression Pool level is > 18.81 feet on either H13-P870 or SPDS and observes E22-F015 is open on H13-P601 section 16C.

Comments:

SAT **UNSAT**

Item 3 () Verify Condensate Storage Tank Level is low enough not to exceed 29 feet.

Standard: Candidate observes Condensate Storage Tank level is < 18.81 feet on either H13-P870 or SPDS and observes E22-F015 is open on H13-P601 section 16C.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 7 of 12

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 4 **()** Close E22-F305 pressure lock valve.

Standard: Candidate dispatches an operator to close E22-F305 pressure lock valve.

Comments: **If asked, cue the candidate that E22-F305 is closed.**

SAT UNSAT

Item 5 **(*)** Start HPCS Pump.

Standard: Candidate starts HPCS Pump using the handswitch and observes red light illuminated H13-P601 section 16C.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 8 of 12

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 6 () Observes E22-F012, HPCS MIN FLO TO SUPP POOL open.

Standard: Candidate observes E22-F012 open by red light illuminated H13-P601 section 16C.

Comments:

SAT UNSAT

Item 7 () Verify Auxiliary Building isolation valves P11-F064 and P11-F065 are OPEN.

Standard: Candidate verifies P11-F064 and P11-F065 are open by observing red light indication on P11-F064 (H13-P870 section 3C) P11-F065 (H13-P870 section 9C) OR the Isolation Valve Status board.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 9 of 12

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 8 **(*)** Simultaneously opens E22-F010 and E22-F011 TEST RET TO CST by holding handswitches to the open position.

Standard: Candidate observes E22-F010 and F011 open by observing indication on E22-R606 and R604 indicate 100% valve position on H13-P601 section 16B.

Comments: **NOTE:** Once Valves open to 100% the valve will automatically stroke closed. The candidate may release the handswitches until the valves stroke closed.

The Candidate will repeat Item 6 until Suppression Pool Level has lowered sufficiently.

SAT UNSAT

Item 9 **()** Observes Condensate Storage Tank (CST) Level rise.

Standard: Candidate observes CST level rise on H13-P870 section 5B P11-LI-R601.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 10 of 12

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 10 () Observes Suppression Pool Level drop.

Standard: Candidate observes Suppression Pool level drop on H13-P870 section 4B E30-LR-R600A or section 10B E30-LR-R600B.

Comments: SPDS computer also provides this indication.

Other indications possibly observed as E22-F010 and F011 open, HPCS Pump discharge pressure will drop and Pump flow will rise and E22-F012 will cycle closed and open.

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 11 of 12

TERMINATING CUE(s)

The CRS is informed Suppression Pool Level has been lowered sufficiently to clear the Suppression Pool High level annunciators.

High Suppression Pool Level Annunciators

H13-P601 section 16A-C5 and 21A-C5

H13-P870 section 4A-C3 and 10A-C3

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: LOWER SUPPRESSION POOL LEVEL WITH HPCS

JPM No. GJPM-RO-E2209 Rev. 01 Page 12 of 12

ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:

Question K/A Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is operating at rated conditions. Suppression Pool level has risen due to leaking SRVs and the high level alarms have been received.

Initiating Cue(s):

The Control Room Supervisor has entered EP-3 and directed you to lower Suppression Pool level using High Pressure Core Spray. HPCS SSW is in operation. Inform the CRS when Suppression Pool level has cleared the high level alarms on H13-P601.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-EP030

Revision: 02

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Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS
(EP-2 ATTACHMENT 20)**

Minor _____

Major _____

REASON FOR REVISION: update JPM for NRC exam 8/2002.

THIS DOCUMENT REPLACES GG-1-JPM-RO-EP030.01.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 3 of 12

DISCUSSION

This JPM will evaluate the candidate's ability to defeat RCIS control rod drive blocks during an ATWS. This allows the insertion of control rods using normal control rod drive system. This is Attachment 20 of EP-2 RPV Control.

Inform the On-Duty Shift Manager and obtain permission to open the Main Control Room and Upper Control Room Back Panels.

The proper method of evaluation is by simulation in the Main Control Room.

Required Material(s):

- 01 Emergency Operating Procedure 05-S-01-EP-2, RPV Control Attachment 20, Defeating RC&IS Control Rod Drive Blocks
- 02 Flashlight
- 03 Laser Pointer (optional)

General Reference(s):

- 01 Emergency Operating Procedure 05-S-01-EP-2, RPV Control Attachment 20, Defeating RC&IS Control Rod Drive Blocks

Safety Consideration(s):

- 01 **Contact Shift Manager and obtain permission to enter Main Control Room and Upper Control Room back panels.**
- 02 **Candidate should not touch any of the relays or terminal boards in the back panels, use the flashlight and laser pointer to denote actions to be taken in the panels.**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 5 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 (*) Locate the Main Control Room Emergency Locker and the Emergency Procedure Jumper Kits.

Standard: Candidate locates the Main Control Room Emergency Locker and the Emergency Procedure Jumper Kits

Comments: (located in the Main Control Room just inside the door coming from the Control Building elevator)

SAT UNSAT

Item 2 () Obtain a controlled copy of EP-2 Attachment 20.

Standard: Candidate obtains a controlled copy of EP-2 Attachment 20.

Comments: **When the candidate locates the Attachment the evaluator may provide the candidate a copy of the procedure.**

SAT UNSAT

Item 3 (*) Inspect Jumper Kit for two (2) jumpers.

Standard: Candidate locates jumper kit and verifies there are two (2) jumpers.

Comments: **NOTE: Once the candidate locates the jumpers have the candidate leave the jumpers in the locker.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 6 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 4 (*) Locate Main Control Room Panel H13-P618 Bay C.

Standard: Candidate locates Main Control Room Panel H13-P618 Bay C.

Comments:

SAT UNSAT

Item 5 (*) Locates the affected relay C11A-K08 (3rd row of agastat relays from top, 6th relay from left)

Standard: Candidate locates the affected relay C11A-K08 (3rd row of agastat relays from top, 6th relay from left).

Comments: Candidate should point out the relay.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 7 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 6 (*) Install Jumper between Terminals M1 and T1 on relay C11A-K08.

Standard: Candidate locates terminals M1 and T1 and indicates the installation of a jumper between Terminals M1 and T1 on relay C11A-K08.

Comments: **Candidate should point out terminals M1 and T1.**

SAT UNSAT

Item 7 () Initials Alteration Tracking Sheet for Jumper 1 installed.

Standard: Candidate initials Alteration Tracking Sheet for Jumper 1.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 8 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 8 (*) Locate Upper Control Room Panel H13-P629 Bay C.

Standard: Candidate locates Upper Control Room Panel H13-P629 Bay C.

Comments:

SAT UNSAT

Item 9 (*) Locates the affected relay C11A-K1 (4th row of agastat relays from top, 1st relay from left)

Standard: Candidate locates the affected relay C11A-K1 (4th row of agastat relays from top, 1st relay from left).

Comments: **Candidate should point out the relay.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 9 of 12

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 10 **(*)** Install Jumper between Terminals M1 and T1 on relay C11A-K1.

Standard: Candidate locates terminals M1 and T1 and indicates the installation of a jumper between Terminals M1 and T1 on relay C11A-K1.

Comments: **Candidate should point out terminals M1 and T1.**

SAT UNSAT

Item 11 **()** Initials Alteration Tracking Sheet for Jumper 2 installed.

Standard: Candidate initials Alteration Tracking Sheet for Jumper 2.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 10 of 12

TERMINATING CUE(s) :

Inform the Control Room Supervisor that EP-2 Attachment 20 has been installed to defeat RC&IS Control Rod Drive Blocks.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: DEFEAT RC&IS CONTROL ROD DRIVE BLOCKS (EP-2 ATT. 20)

JPM No. GJPM-RO-EP030 Rev. 02 Page 11 of 12

ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s) :

The plant is at 30% power in an ATWS condition. The Control Room Supervisor is directing actions per EP-2A.

Initiating Cue(s) :

The Control Room Supervisor has directed you to defeat RC&IS Control Rod Drive Blocks per EP-2 Attachment 20.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-G3301

Revision: 01

Page: 1 of 15

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**ALIGN RWCU FOR VESSEL LEVEL CONTROL
(FAULTED)**

REASON FOR REVISION: update for NRC 8/2002.

THIS DOCUMENT REPLACES GG-1-JPM-RO-G3301.00.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 3 of 15

DISCUSSION

This JPM will evaluate the candidate's ability to align Reactor Water Cleanup for blow down operations. The performance of this task is required during plant shutdown and startup conditions to remove excess water from the reactor for level control.

The proper method of evaluation is by performance in the simulator.

Initialize the simulator to an IC with the plant startup with the reactor temperature at some temperature <200 °F (Mode 2).

RWCU should be operating in two pump Pre-Pump mode of operation with the **blow down lineup secured. ENSURE G33-F033 is set on controller G33-R606 at 0%.**

Insert override on G33-F234 handswitch to CLOSE.

di_1g33m617b p870/09c_close RWCUBLWDN TO MN CNDSR: G33-F234

All control room operations will be performed on panel 1H13-P680 unless otherwise noted.

Required Material(s):

01 SOI 04-1-01-G33-1, Reactor Water Cleanup System

General Reference(s):

01 SOI 04-1-01-G33-1, Reactor Water Cleanup System

Safety Consideration(s):

01 None.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 5 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of SOI 04-1-01-G33-1.

Standard: Candidate obtains a controlled copy of SOI 04-1-01-G33-1.

Comments:

SAT **UNSAT**

Item 2 (*) Check that G33-F033, RWCU SYS BLWDN F/D CONT VLV is $\approx 10\%$ open.

Standard: Candidate will have to adjust the G33-F033 controller G33-R606 to achieve $\approx 10\%$ open on H13-P680 section 11D. (horizontal meter on the controller)

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 6 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 3 () Place NSSSS INBD MOV TEST switch to TEST.

Standard: Candidate places the key lock switch for NSSSS INBD MOV TEST to TEST and observes "RX Div 1 Isol Sys OOSVC" annunciator is received.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT UNSAT

Item 4 (*) Open or check open G33-F028, RWCU BLWDN CTMT INBD ISOL.

Standard: Candidate places the key lock switch for G33-F028 on P680 section 11C to OPEN and observes the red light is illuminated.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 7 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 5 () Place NSSSS OTBD MOV TEST switch to TEST.

Standard: Candidate places the key lock switch for NSSSS OTBD MOV TEST to TEST and observes "RX Div 2 Isol Sys OOSVC" annunciator is received.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT UNSAT

Item 6 (*) Open or check open G33-F034, RWCU BLWDN CTMT OTBD ISOL.

Standard: Candidate places the key lock switch for G33-F034 on P680 section 11C to OPEN and observes the red light is illuminated.

Comments:

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 8 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 7 (*) Open or check open G33-F046, RWCU BLWDN TO MN CNDSR.

Standard: Candidate depresses the OPEN pushbutton for G33-F046 on P680 section 11C and observes the red light is illuminated.

Comments: **NOTE: Candidate has an option to use either Item 7 OR Item 8 either is acceptable. If Item 8 is selected this Item is NOT critical.**

SAT UNSAT

Item 8 (*) Open or check open G33-F041, RWCU BLWDN TO MN CNDSR BYP.

Standard: Candidate depresses the OPEN pushbutton for G33-F041 on P680 section 11C and observes the red light is illuminated.

Comments: **NOTE: Candidate has an option to use either Item 7 OR Item 8 either is acceptable. If Item 7 is selected this Item is NOT critical.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 9 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 9 (*) Open or check open G33-F235, RWCU BLWDN TO MN CNDSR.

Standard: Candidate places the handswitch for G33-F235 to OPEN and observes red light illuminated on P870 section 3C.

Comments: **NOTE: This Item may follow Item 10. This is acceptable. If Item 10 is performed first this Item may NOT be performed This is acceptable.**

SAT UNSAT

Item 10 (*) Open or check open G33-F234, RWCU BLWDN to MN CNDSR.

Standard: Candidate places handswitch for G33-F234 to OPEN the Valve will NOT stroke. The Candidate should report this to the Plant Supervisor.

Comments: **When failure is reported, CUE the candidate to restore the lineup for the Main Condenser to normal and lineup for blow down to Radwaste.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 10 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 11 (*) Close G33-F235, RWCU BLWDN TO MN CNDSR.

Standard: Candidate places the handswitch for G33-F235 to CLOSE and observes green light illuminated on P870 section 3C.

Comments: **NOTE: If Item 9 was NOT performed this Item will not be performed and is NOT critical.**

SAT UNSAT

Item 12 (*) Close G33-F046, RWCU BLWDN TO MN CNDSR **AND/OR** G33-F041, RWCU BLWDN TO MN CNDSR BYP.

Standard: Candidate depresses the CLOSE pushbutton for G33-F046 and/or G33-F041 on P680 section 11C and observes the green light is illuminated.

Comments: **NOTE: Candidate will close G33-F046 and/or F041 whichever was opened in ITEM 7 or 8.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 11 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 13 **(*)** Open G33-F035, RWCU BLWDN TO RADWST.

Standard: Candidate depresses the OPEN pushbutton for G33-F035 on P680 section 11C and observes the red light is illuminated.

Comments:

SAT UNSAT

Item 14 **(*)** Adjust controller G33-R606 for G33-F033 RWCU SYS BLWDN F/D CONT VLV to attain 60 gpm flow as indicated on G33-FI-R602. Opening of G33-F031, RWCU BLWDN ORF BYP VLV to obtain additional flow as necessary.

Standard: Candidate adjusts controller G33-R606 to obtain 60 gpm on G33-FI-R602 and open G33-F031 to obtain additional flow.

Comments: Note: If Candidate requests permission to throttle G33-F042 closed to obtain desired flow, CUE candidate to throttle G33-F042. OR Candidate may elect to open G33-F031, RWCU BLWDN ORF BYP VLV to obtain additional flow. Either method is acceptable.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 12 of 15

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 15 () Place NSSSS INBD and OTBD MOV TEST switches to NORM.

Standard: Candidate places the key lock switches for NSSSS INBD and OTBD MOV TEST to NORM and observes "RX Div 1 & 2 Isol Sys OOSVC" annunciators clear received.

Comments: **NOTE: Candidate may not perform this step this is acceptable.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 13 of 15

TERMINATING CUE(s) :

RWCU is aligned to blow down the reactor to Radwaste at 60 gpm as indicated on G33-R602.

STOP TIME :

OVERALL COMMENTS :

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title : ALIGN RWCU FOR VESSEL LEVEL CONTROL (FAULTED)

JPM No. GJPM-RO-G3301 Rev. 01 Page 14 of 15

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

The plant is in mode 2 with coolant temperature \approx _____ °F. Plant startup is in progress. Component Cooling Water is in operation. RWCW is in Pre-Pump Mode of operation with two pumps and two filters.

Initiating Cue(s):

The Control Room Supervisor has directed align the RWCW system for blow down flow to the Main Condenser at 60 gpm. Health Physics has been notified of the evolution.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-N3202

Revision: 00

Page: 1 of 9

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

OPERATE TURBINE PRESSURE CONTROL (FAULTED)

REASON FOR REVISION: N/A.

THIS DOCUMENT REPLACES NEW JPM.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____
APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: OPERATE TURBINE PRESSURE CONTROL (FAULTED)

JPM No. GJPM-RO-N3202 Rev. 00 Page 3 of 9

DISCUSSION

This JPM will evaluate the candidate's ability to operate the Turbine Pressure Control System and take actions with a failure of the Pressure Controller to manually operate the Turbine Bypass Control Valves on the Manual Jack. The performance of this task is required during ATWS conditions or during conditions of manual pressure control of the reactor.

The proper method of evaluation is by performance in the simulator.

Initialize the simulator to an IC with the plant at any power.

Insert malfunction

**c11164 @ 20% Scram discharge volume Hydraulic block
tc079 @ 0% Pressure Controller failure on TRIGGER 1**

Candidate is given the initial conditions and initiating cue for the JPM.

Once the candidate understands the conditions, take the simulator out of freeze and the Simulator operator will take the Reactor Mode Switch to SHUTDOWN, Initiate ATWS ARI then turn the simulator over to the candidate.

All control room operations will be performed on panel 1H13-P680 unless otherwise noted.

Required Material(s):

01 SOI 04-1-01-N32-2, Turbine Generator Control

General Reference(s):

01 SOI 04-1-01-N32-2, Turbine Generator Control

02 EOP 05-1-01-EP-2, RPV Control

Safety Consideration(s):

01 None.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: OPERATE TURBINE PRESSURE CONTROL (FAULTED)

JPM No. GJPM-RO-N3202 Rev. 00 Page 5 of 9

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 (*) Lowers Turbine Pressure Reference Setpoint on H13-P680 section 9C to 900 psig.

Standard: Candidate lowers Turbine Pressure Reference Setpoint to 900 psig (± 30 psig).

Indication on N32-R672 or N32-R610 on H13-P680.

Comments: **SIMULATOR OPERATOR: Once candidate reports Turbine Pressure Reference setpoint is at 920 psig Activate Trigger 1. (Turbine Bypass Control Valves will fail CLOSED.)**

CUE - When candidate reports failure of the Turbine Bypass Valves closed, as the CRS order the control of Reactor Pressure using the Manual Bypass Jack.

SAT UNSAT

Item 2 () Obtain a controlled copy of SOI 04-1-01-N32-2 Attachment V.

Standard: Candidate obtains a controlled copy of SOI 04-1-01-N32-2 Attachment V.

Comments: Laminated Operator Aid.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: OPERATE TURBINE PRESSURE CONTROL (FAULTED)

JPM No. GJPM-RO-N3202 Rev. 00 Page 6 of 9

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 3 (*) Energize Manual Bypass Valve Controller by simultaneously depressing MANUAL BYPASS CONTROL RELEASE pushbutton and the MANUAL BYPASS VALVE CONTROLLER ON pushbutton until ON pushbutton remains illuminated.

Standard: Candidate energizes Manual Bypass Valve Controller by simultaneously depressing MANUAL BYPASS CONTROL RELEASE pushbutton and the MANUAL BYPASS VALVE CONTROLLER ON pushbutton until ON pushbutton remains illuminated.

Comments: In some cases this may take more than one try, this is acceptable as long as the task is accomplished.

SAT UNSAT

Item 4 (*) Using the RAISE and/or LOWER pushbuttons open the Turbine Bypass Control Valves to maintain Reactor pressure 800 to 900 psig.

Standard: Candidate depresses the RAISE and LOWER pushbuttons as needed to open/close the Turbine Bypass Control Valves to control Reactor pressure between 800 - 900 psig.

Bypass Control Valve Position is N11-R602A, B, C on H13-P680 section 9D.

Comments: Control between 750 to 950 psig is acceptable if the CRS is informed of out of band situations. These valves are extremely slow to react.

When the Evaluator is satisfied with control the JPM may be terminated.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: OPERATE TURBINE PRESSURE CONTROL (FAULTED)

JPM No. GJPM-RO-N3202 Rev. 00 Page 7 of 9

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: OPERATE TURBINE PRESSURE CONTROL (FAULTED)

JPM No. GJPM-RO-N3202 Rev. 00 Page 8 of 9

TERMINATING CUE(s) :

Report to the Control Room Supervisor, Reactor pressure is being controlled on the Manual Bypass Jack between 800 - 900 psig.

STOP TIME :

OVERALL COMMENTS :

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: OPERATE TURBINE PRESSURE CONTROL (FAULTED)

JPM No. GJPM-RO-N3202 Rev. 00 Page 9 of 9

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY
THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s) :

An ATWS has occurred.

Initiating Cue(s) :

The Control Room Supervisor has directed you to control Reactor Pressure by lowering Turbine Pressure Reference setpoint to 900 psig. Other operators will control other plant parameters. Report when pressure is being controlled on the Main Turbine Bypass Valves at 900 psig.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-R2730

Revision: 00

Page: 1 of 15

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**TRANSFER ELECTRICAL LOADS FROM SERVICE
TRANSFORMER 21 TO SERVICE TRANSFORMER 11**

REASON FOR REVISION: NEW JPM

THIS DOCUMENT REPLACES N/A

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____
Facility Representative

DATE TRANSMITTED TO DC	INITIAL RECEIPT BY DC (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY DC (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 3 of 15

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 4 of 15

DISCUSSION

This JPM will evaluate the candidate's ability to transfer loads under normal conditions between the two station service transformers.

This JPM should be performed in the simulator. Initialize the simulator to any IC and verify the electrical distribution system is in the preferred line up.

Required Material(s) :

01	SOI 04-1-01-R21-11
02	SOI 04-1-01-R21-14
03	SOI 04-1-01-R21-16
04	SOI 04-1-01-R21-17

General Reference(s) :

01	SOI 04-1-01-R21-11
02	SOI 04-1-01-R21-14
03	SOI 04-1-01-R21-16
04	SOI 04-1-01-R21-17

Safety Consideration(s) :

01	None
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**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 5 of 15

READ TO TRAINEE

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. Prior to actually starting the performance of this JPM, I will answer any questions you have. For each step you perform, describe or state what indications you are observing and what indications you expect to see in response to your action. When you have completed the task, inform me.

Task Standard(s) :

Electrical buses 11HD, 14AE, 16AB, and 17AC are supplied from Service Transformer 11.

Initial Condition(s) :

Entergy - Mississippi workers are preparing to perform maintenance on Service Transformer 21. The Electrical Distribution System is in the Preferred Line up. There are no deviations from current electrical line up check lists.

Initiating Cue(s) :

The Control Room Supervisor has directed you to transfer 11HD, 14AE, 16AB, and 17AC to Service Transformer 11. The Site Power Loop and Bus 28AG will be transferred by the Non-Licensed Operators in the field.

Start Time:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 6 of 15

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

BUSES MAY BE TRANSFERRED IN ANY ORDER

Item 1 () Obtain a controlled copy of SOI 04-1-01-R21-11.

Standard: Candidate obtains a controlled copy of 04-1-01-R21-11 Bus 11HD SOI.

Comments:

SAT **UNSAT**

Item 2 () Verify Transformer BOP 11B energized up to bus feeder breaker 252-1101.

Standard: Candidate verifies Transformer BOP 11B energized by observing the following indications on H13-P807:

 J5234 FDR to XFMR ST-11 closed
 552-1105 XFMR ST-11 FDR to Bus 11R closed
 R25-R603 indicates voltage on bus 11R
 552-1101 11R FDR to Bus 12R closed
 589-1101D disconnect BOP XFMR 11B closed
 ENEGIZED Status light to 252-1101 is ON.

Comments: **May be checked in any order.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 7 of 15

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 3 **(*)** Close 252-1101 XFMR 11B FDR to Bus 11HD.

Standard: Candidate closes breaker 252-1101 and observes red light is illuminated.

Comments:

SAT **UNSAT**

Item 4 **()** Observes 252-1108 XFMR 12B FDR to Bus 11HD opens.

Standard: Candidate observes breaker 252-1108 opens by observing green light illuminated.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 8 of 15

NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

BUSES MAY BE TRANSFERRED IN ANY ORDER

Item 5 () Obtain a controlled copy of SOI 04-1-01-R21-14.

Standard: Candidate obtains a controlled copy of 04-1-01-R21-14 Bus 14AE SOI.

Comments:

SAT **UNSAT**

Item 6 () Verify Transformer BOP 11A energized up to bus feeder breaker 152-1415.

Standard: Candidate verifies Transformer BOP 11A energized by observing the following indications on H13-P807:

 J5234 FDR to XFMR ST-11 closed
 552-1105 XFMR ST-11 FDR to Bus 11R closed
 R25-R603 indicates voltage on bus 11R
 552-1101 11R FDR to Bus 12R closed
 589-1101C disconnect BOP XFMR 11A closed
 ENEGIZED Status light to 152-1415 is ON.

Comments: **May be checked in any order.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

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NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 7 **(*)** Close 152-1415 XFMR 11A FDR to Bus 14AE.

Standard: Candidate closes breaker 152-1415 and observes red light is illuminated.

Comments:

SAT **UNSAT**

Item 8 **()** Observes 152-1402 XFMR 12A FDR to Bus 11HD opens.

Standard: Candidate observes breaker 152-1402 opens by observing green light illuminated.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

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NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

BUSES MAY BE TRANSFERRED IN ANY ORDER

Item 9 () Obtain a controlled copy of SOI 04-1-01-R21-16.

Standard: Candidate obtains a controlled copy of 04-1-01-R21-16 Bus 16AB SOI.

Comments:

SAT **UNSAT**

Item 10 () Verify Transformer ESF 11 energized up to bus feeder breaker 152-1601.

Standard: Candidate verifies Transformer ESF 11 energized by observing the following indications on H13-P807:

 J5234 FDR to XFMR ST-11 closed
 552-1105 XFMR ST-11 FDR to Bus 11R closed
 R25-R603 indicates voltage on bus 11R
 552-1104 11R FDR to XFMR ESF 11 closed
 152-1901 FDR FRM XFMR ESF 11 closed
 ENEGIZED Status light to 152-1601 is ON (H13-P864).

Comments: **May be checked in any order.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

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NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 11 **(*)** Turn on the Sync Switch for breaker 152-1601 BUS 16AB FDR FRM XFMR ESF 11 source being transferred to.

Standard: Candidate turns on the Sync Switch for breaker 152-1601 and observes the sync scope needle is at 12o'clock \pm 10°.

Comments:

SAT **UNSAT**

Item 12 **(*)** Close 152-1601 BUS 16AB FDR FRM XFMR ESF 11.

Standard: Candidate closes breaker 152-1601 and observes red light is illuminated.

Comments:

SAT **UNSAT**

Item 13 **()** Observes 152-1614 BUS 16AB FDR FM ESF XFMR 21 opens.

Standard: Candidate observes breaker 152-1614 opens by observing green light illuminated.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

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**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

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NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

BUSES MAY BE TRANSFERRED IN ANY ORDER

Item 14 () Obtain a controlled copy of SOI 04-1-01-R21-17.

Standard: Candidate obtains a controlled copy of 04-1-01-R21-17 Bus 17AC SOI.

Comments:

SAT **UNSAT**

Item 15 () Verify Transformer ESF 11 energized up to bus feeder breaker 152-1706.

Standard: Candidate verifies Transformer ESF 11 energized by observing the following indications on H13-P807:

 J5234 FDR to XFMR ST-11 closed
 552-1105 XFMR ST-11 FDR to Bus 11R closed
 R25-R603 indicates voltage on bus 11R
 552-1104 11R FDR to XFMR ESF 11 closed
 152-1902 FDR FRM XFMR ESF 11 closed
 ENEGIZED Status light to 152-1706 is ON (H13-P601).

Comments: **May be checked in any order.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

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NOTE: **Critical items** denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 16 **(*)** Turn on the Sync Switch for breaker 152-1706 17AC FDR FRM XFMR ESF 11 source being transferred to.

Standard: Candidate turns on the Sync Switch for breaker 152-1706 and observes the sync scope needle is at 12o'clock \pm 10°.

Comments:

SAT **UNSAT**

Item 17 **(*)** Close 152-1706 17AC FDR FM ESF 11.

Standard: Candidate closes breaker 152-1706 and observes red light is illuminated.

Comments:

SAT **UNSAT**

Item 18 **()** Observes 152-1705 17AC FDR FM ESF 21 opens.

Standard: Candidate observes breaker 152-1705 opens by observing green light illuminated.

Comments:

Candidate may take the handswitch for Breaker 152-1705 to trip to clear annunciators.

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 15 of 15

TERMINATING CUE(s)

Electrical buses 11HD, 14AE, 16AB, and 17AC are supplied from Service Transformer 11.

STOP TIME:

OVERALL COMMENTS:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: TRANSFER ELECTRICAL LOADS FROM ST-21 TO ST-11

JPM No. GJPM-RO-R2730 Rev. 00 Page 16 of 15

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO
CLARIFY THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question K/A Rating

Expected Response Time

Reference(s) Required: Yes / No Reference(s):

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s):

Entergy - Mississippi workers are preparing to perform maintenance on Service Transformer 21. The Electrical Distribution System is in the Preferred Line up. There are no deviations from current electrical line up check lists.

Initiating Cue(s):

The Control Room Supervisor has directed you to transfer 11HD, 14AE, 16AB, and 17AC to Service Transformer 11. The Site Power Loop and Bus 28AG will be transferred by the Non-Licensed Operators in the field.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-T4801

Revision: 03

Page: 1 of 13

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**PLACE SBTG TRAIN IN STANDBY WITH AN AUTO
START SIGNAL PRESENT (FAULTED)**

REASON FOR REVISION: update for NRC Exam 8/2002.

THIS DOCUMENT REPLACES GG-1-JPM-RO-T4801.02.

REVIEW / APPROVAL:

PREPARED BY: _____	DATE: _____
APPROVED BY: _____	DATE: _____
Facility Representative	

DATE TRANSMITTED TO RM	INITIAL RECEIPT BY RM (DATE/INITIAL)	RETURNED FOR CORRECTIONS (DATE/INITIAL)	RETURN RECEIPT (DATE/INITIAL)	FINAL ACCEPTANCE BY RM (DATE/INITIALS)

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBGT TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 2 of 13

Task List No: CRO-T48-003

K/A Reference and Importance Factors (RO/SRO):

K/A 261000 A4.03 - 3.0/3.0; A4.02 - 3.1/3.1; A4.09 - 2.7/2.7
 2.1.30 - 3.9/3.4; 2.1.31 - 4.2/3.9

SAFETY FUNCTION - 9

RO Group 1

SRO Group 1

10CFR55.45a (9)

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/**NO**

Faulted JPM: **YES**/NO

APPLICABLE METHOD OF TESTING

Performance: Simulate _____ Actual X

Setting: Classroom _____ Plant _____ Simulator X

EVALUATION

Date Performed:

Performer: _____ SSN: _____ License: RO/SRO

Score: PASS _____ FAIL _____ Time to complete:

Evaluator Signature: _____ Date:

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBTG TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 3 of 13

DISCUSSION

This JPM will evaluate the candidate's ability to place Standby Gas Treatment (SBGT) System in Standby with an Automatic Initiation signal and perform a follow up manual start. The performance of this task is required if SBTG is in Standby with an automatic initiation signal and a subsequent plant condition requires operation of the SBTG System.

The proper method of evaluation is by performance in the simulator.

Initialize the simulator to an IC with the plant at any power.

Insert malfunction

rm157l PRM FHA Vent Exh D17K617 B/C High Rad

rm157m PRM FHA Vent Exh D17K617 A/D High Rad

Allow the simulator to stabilize.

Follow up malfunctions are:

Place on Trigger 1

rm157n PRM FPS Vent Exh D17K618 B/C High Rad

rm157o PRM FPS Vent Exh D17K618 A/D High Rad

All control room operations will be performed on panel 1H13-P870 unless otherwise noted.

Required Material(s):

01 SOI 04-1-01-T48-1, Standby Gas Treatment System

General Reference(s):

01 SOI 04-1-01-T48-1, Standby Gas Treatment System

02 ARI 04-1-02-P601-19A-B10 & C10
ARI 04-1-02-P870-8A-F3

03 EOP 05-S-01-EP-4

Safety Consideration(s):

01 None.

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBGT TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 4 of 13

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBGT TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 6 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 1 () Obtain a controlled copy of SOI 04-1-01-T48-1.

Standard: Candidate obtains a controlled copy of SOI 04-1-01-T48-1.

Comments:

SAT **UNSAT**

Item 2 () Check that the following are operating on SBGT Train 'A':

 Annunciator "SGTS DIV 1 OPER" P870-2A-A3

 SGTS Filter Train Fan A is running

 Enclosure Building Recirculation Fan A is running

 Dampers and valves F001, F004, F006, F007, F009, F011, F013, F015, F017, F019, F021, F023, AND F025 are OPEN.

 Dampers and valves M41-F036, M41-F008, T41-F007, T42-F004, T42-F011, T42-F019 are CLOSED.

Standard: Candidate observes the above indications.

Comments: **May not be performed based on Initial Conditions given.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBGT TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 7 of 13

NOTE: Critical items denoted by (*). Sequence is assumed unless denoted in the **Comments**.

Item 3 () Check that the following are operating on SBGT Train 'B':

_____ Annunciator "SGTS DIV 2 OPER" P870-8A-A3

_____ SGTS Filter Train Fan B is running

_____ Enclosure Building Recirculation Fan B is running

_____ Dampers and valves F002, F003, F005, F008, F010, F012, F014, F016, F018, F020, F022, F024 AND F026 are OPEN.

_____ Dampers and valves M41-F037, M41-F007, T41-F006, T42-F003, T42-F012, T42-F020 are CLOSED.

Standard: Candidate observes the above indications.

Comments: **May not be performed based on Initial Conditions given.**

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBTG TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 8 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 4 () Monitor SGTS A and B filter differential pressure, filter flow and Enclosure Building Pressure chart recorders:

 T48-R601A & B SGTS FLTRA & B DP

 R600A & B SGTS FLTR TR A & B FLO

 R602A & B ENCL BLDG PRESS

Standard: Candidate observes indications are acceptable and no annunciators associated with FLTR DP, FLTR Flow and Enclosure Building Pressure.

Comments: **Candidate may inform the SRO of indications on SBTG prior to securing 'B' Train. This is acceptable.**

SAT UNSAT

Item 5 (*) Place SGTS DIV 2 MODE SEL keylock switch to STDBY position and observe amber light illuminates.

Standard: Candidate **places keylock switch for SGTS DIV 2 MODE SEL to STBY** and observes amber light illuminated and white light extinguishes.

Comments: **NOTE: Light is non-critical.**
Annunciator H13-P870 8A-F3 "SGTS DIV 2 IN STBY MODE" will illuminate.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBTG TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 9 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 6 (*) Reset Manual Initiation signal for filter train by turning SGTS DIV 2 MAN INIT RESET keylock switch to RESET position and back to NORM.

Standard: Candidate places the keylock switch SGTS DIV 2 MAN INIT RESET to RESET and back to NORM on panel P870 section 8B.

Comments:

SAT **UNSAT**

Item 7 (*) Stop B SGTS filter train fans by taking ENCL BLDG RECIRC FAN B handswitch to STOP.

Standard: Candidate places handswitch for ENCL BLDG RECIRC FAN B to STOP and observes the green light illuminated on Panel P870 section 8C.

Comments: **Items 7 and 8 may be performed in any order.**

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBTG TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 10 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 8 (*) Stop B SGTS filter train fans by taking SGTS FLTR TR B EXH FAN handswitch to STOP.

Standard: Candidate places handswitch for SGTS FLTR TR B EXH FAN to STOP and observes the green light illuminated on Panel P870 section 8C.

Comments: **Items 7 and 8 may be performed in any order.**

SAT UNSAT

Item 9 () Verify adequate enclosure building vacuum draw down still exists.

Standard: Candidate observes Enclosure Building pressure is adequate T48-PDR-R602 A & B on panel P870 sections 2B and 8B.

Comments: **Candidate will report the 'B' Standby Gas Treatment Train is in Standby.**

SIMULATOR OPERATOR INSERT MALFUNCTIONS as follows:

rm157n PRM FPS VENT EXH D17K618A/D HIGH RAD
rm157o PRM FPS VENT EXH D17K618B/C HIGH RAD

OBSERVE ANNUNCIATORS P601-19A-B10 and C10 COME IN. IF ASKED BY THE CANDIDATE, CUE THE CANDIDATE TO RESPOND TO THE ANNUNCIATORS.

SBGT B WILL NOT AUTO RESTART.

AS CONTROL ROOM SUPERVISOR ORDER THE IMMEDIATE RESTART OF SBTG TRAIN B PER EP-4.

SAT UNSAT

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBGT TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 11 of 13

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBTG TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 12 of 13

NOTE: Critical items denoted by **(*)**. Sequence is assumed unless denoted in the **Comments**.

Item 10 (*) Manually initiate SBTG B by simultaneously depressing the SGTS DIV 2 MAN INIT pushbuttons OR place the SGTS DIV 2 MODE SEL keylock switch to AUTO.

Standard: Candidate simultaneously depresses the SGTS DIV 2 MAN INIT pushbuttons on P870 section 8B and observes the white lights extinguish over the pushbuttons OR places SGTS DIV 2 MODE SEL keylock switch to AUTO and observes the amber light extinguish and white light illuminate.

Comments: **NOTE: Either method is acceptable and will accomplish the same end point.**

SAT **UNSAT**

Item 11 () Observe SGTS FLTR TR B EXH FAN and ENCL BLDG RECIRC FAN B start.

Standard: Candidate observes SGTS FLTR TR B EXH FAN and ENCL BLDG RECIRC FAN B start as indicated by red light illuminated on P870 section 8C for each fan. Annunciator P870 8A-F3 will clear if the MODE SELECT switch is returned to AUTO.

Comments:

SAT **UNSAT**

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SBTG TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 13 of 13

TERMINATING CUE(s) :

Report to the Control Room Supervisor, "Standby Gas Treatment Train
'B'; has been restarted" following being placed in standby.

STOP TIME :

OVERALL COMMENTS :

**GRAND GULF NUCLEAR STATION
JOB PERFORMANCE MEASURE WORKSHEET**

Task Title: PLACE SGT TRAIN IN STANDBY WITH AN AUTO START SIGNAL
PRESENT (FAULTED)

JPM No. GJPM-RO-T4801 Rev. 03 Page 14 of 13

**ADDITIONAL QUESTION ASKED AFTER THE PERFORMANCE OF THE JPM TO CLARIFY
THE TRAINEE'S ACTION OR UNDERSTANDING OF TASK PERFORMED:**

Question _____ K/A _____ Rating _____

Expected Response Time _____

Reference(s) Required: Yes / No Reference(s): _____

Question:

Trainee's Response / Comments:

Correct Response:

THIS PAGE MAY BE GIVEN TO THE TRAINEE

Initial Condition(s) :

Both Standby Gas Trains are operating for an I&C Surveillance on Fuel Handling Area Radiation Level.

Initiating Cue(s) :

The Control Room Supervisor has directed place Standby Gas Treatment Train 'B' in STANDBY. Health Physics has been notified of the evolution.