



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-OP-ADM33

Revision: 01

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 HIGH CONTAMINATION AREA

_____ X _____ MINOR

_____ MAJOR

REASON FOR REVISION: Update NRC 6/2001 JPM for NRC 2/2004 .

THIS DOCUMENT REPLACES GG-1-JPM-OP-ADM33.00 .

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED 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)

Evaluator Signature: _____ Date: _____

**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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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 enter an area designated as a High 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 Electronic alarming dosimeter
- 04 Hard Hat
- 05 Safety Glasses
- 06 Ear Plugs
- 07 Paper coveralls (Optional)

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.

IT IS RECOMMENDED TO WEAR PAPER COVERALLS TO REDUCE 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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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)
with entry requirements for accessing a High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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 obtains required briefings and dosimetry for entry into a High 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 REACTOR WATER CLEANUP 'A' PUMP ROOM.**

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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 Page 6 of 13

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

Item 1 **(*)** Has Key Card and TLD.

Standard: Candidate should have Key Card and TLD in their
possession.

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 REACTOR WATER CLEANUP 'A' PUMP
ROOM. (This area should be a High 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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 Page 7 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 Reactor Water Cleanup
(RWCU) 'A' Pump Room. Obtain the HP Pre-Job brief
and permission for entry.

Standard: Candidate will inform HP of the entry into RWCU
'A' Pump Room and receive the Pre-Job brief and
permission to enter a High 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 RWCU 'A' Pump Room.**

SAT _____ UNSAT _____

**Do NOT allow candidate to enter the RWCU 'A' Pump Room.
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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 Page 8 of 13

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

Item 4 **(*)** Obtain Electronic Alarming Dosimeter 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 an Electronic Alarming
Dosimeter and insert the Electronic Alarming
Dosimeter 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 2004-1002 or 2004-
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 RWCU 'A' Pump Room.
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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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: **EVALUATOR SHOULD DISCUSS ACTIONS FOR ENTRY INTO A
HIGH 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 RWCU 'A' Pump Room.
This is based on ALARA considerations.**

Item 6 **(*)** Exiting of the CAA the candidate enters the
control point area and enters a PCM-2 Monitor.

Standard: Candidate clears PCM-2 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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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-2 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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 Page 11 of 13

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

Item 9 **(*)** Deactivates Electronic Alarming Dosimeter at
terminal at final exit of session.

Standard: Candidate will deactivate his Electronic Alarming
Dosimeter 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 High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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)
with entry requirements for accessing a High
Contamination Area.

JPM No. GJPM-OP-ADM33 Rev. 01 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:



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-SRO-A&E55
Revision: 00
Page: 1 of 9
Rtype:
QA Record
Number of pages _____
Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

EAL CLASSIFICATION: NRC 2/2004

____ MINOR
REASON FOR REVISION: NEW JPM.

____ X ____ MAJOR

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

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: NRC 2/2004

JPM No. GJPM-SRO-A&E55 Rev. 00 Page 2 of 9

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

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: NRC 2/2004

JPM No. GJPM-SRO-A&E55 Rev. 00 Page 3 of 9

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 determine the actions to be taken 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
- 03 ONEP 05-1-02-VI-4, Security Threat

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 ONEP 05-1-02-VI-4, Security Threat

Safety Consideration(s):

- 01 None

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

Task Title: EAL Classification: NRC 2/2004

JPM No. GJPM-SRO-A&E55 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): (DO NOT READ STANDARD to candidate.)

Emergency Plan is applied to classify the event as a SITE AREA EMERGENCY per EAL 14.4.1 and the Emergency Notification form is completed (See Attached).

Initial Condition(s):

The plant is operating at 100% power. Thunder showers are reported in Tensas Parish. The RHR Pump C and CCW Pump B were red tagged for repairs. Armed personnel have entered company property in an armored personnel carrier and have penetrated the Protected Area security fence. GGNS Security personnel are engaging the perpetrators in the Turbine Building on elevation 133 foot. Operations shift staff is fully manned and performing their normal duties.

Initiating Cue(s):

Determine the Emergency Action Level Classification, if any, and if required complete the required Emergency Notification Form and describe the PLANT actions that you would direct for these conditions. Communicators are available if required.

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

Start Time: _____

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

Task Title: EAL Classification: NRC 2/2004

JPM No. GJPM-SRO-A&E55 Rev. 00 Page 5 of 9

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 14.4.1 and classifies an **SITE AREA EMERGENCY** based on armed adversaries entering the Power Block. Security Condition is **RED**.

Comments:

SAT _____ UNSAT _____

Items 2, 3, and 4 are NOT required to be performed in any specific order.

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: NRC 2/2004

JPM No. GJPM-SRO-A&E55 Rev. 00 Page 6 of 9

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

Item 3 (*) Announce over the Site PA and Site Paging Phone # 7929 "There is a Site Security Code RED in affect and all personnel are to take cover immediately until further notice."

Standard: Candidate consults EPP 10-S-01-1 "Activation of the Emergency Plan" and states he would announce over the Site PA and Site Paging Phone # 7929 "There is a Site Security Code RED in affect and all personnel are to take cover immediately until further notice."

Comments: **SIMULATE THE ANNOUNCEMENT ONLY!**

SAT UNSAT

EVALUATOR NOTE: If the candidate does not discuss actions of the ONEP a cue is acceptable to determine the course of action for plant operations.

Item 4 (*) Initiate a manual scram of the reactor.

Standard: Candidate states he would order a manual scram of the reactor.

Comments: Candidate may discuss other actions to be taken per 10-S-01-1 section 6.1.5 and 05-1-02-VI-4. Those actions are not required for successful completion of the JPM.

SAT UNSAT

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

Task Title: EAL Classification: NRC 2/2004

JPM No. GJPM-SRO-A&E55 Rev. 00 Page 7 of 9

TERMINATING CUE(s) :

Emergency Plan is applied to classify the event as a SITE AREA EMERGENCY per EAL 14.4.1 and the Emergency Notification form is completed (See Attached).

Proper announcements have been made and the reactor scram ordered.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: EAL Classification: NRC 2/2004

JPM No. GJPM-SRO-A&E55 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. Thunder showers are reported in Tensas Parish. The RHR Pump C and CCW Pump B were red tagged for repairs. Armed personnel have entered company property in an armored personnel carrier and have penetrated the Protected Area security fence. GGNS Security personnel are engaging the perpetrators in the Turbine Building on elevation 133 foot. Operations shift staff is fully manned and performing their normal duties.

Initiating Cue(s):

Determine the Emergency Action Level Classification, if any, and if required complete the required Emergency Notification Form and describe the PLANT actions that you would direct for these conditions. Communicators are available if required.

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



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-SRO-ADM50

Revision: 00

Page: 1 of 13

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**DETERMINE LCO ACTIONS AND COMPLETE AN eSOMS
LCO**

REASON FOR REVISION: MINOR
NEW JPM.

MAJOR

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

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: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 2 of 13

Task List No: SRO-ADMIN-038

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

K/A GENERICS 2.1.12 - 4.0; 2.2.23 - 3.8; 2.2.22 - 4.1;

SAFETY FUNCTION: N/A

10CFR55.45a(12 & 13)

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 LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 3 of 13

DISCUSSION

Performance of this JPM will demonstrate the ability of a Senior Reactor Operator to properly evaluate a component and determine Technical Specification applicability, actions to be taken and complete the applicable LCO entries into ESOMS.

Required Material(s):

- 01 Administrative Procedure 02-S-01-17, Control of Limiting Conditions for Operation
- 02 Computer with the ESOMS Training LCO program
- 03 GGNS Technical Specifications/Technical Requirements Manual

General Reference(s):

- 01 Administrative Procedure 02-S-01-17, Control of Limiting Conditions for Operation
- 02 Computer with the ESOMS Training LCO program
- 03 GGNS Technical Specifications/Technical Requirements Manual

Safety Consideration(s):

- 01 **ENSURE CANDIDATE DOES NOT USE THE ACTUAL PLANT LCO PROGRAM.**

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 4 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): (DO NOT READ STANDARD to candidate.)

The eSOMS LCOTR has been initiated for Tech Spec 3.6.2.4 Condition C.1.

Initial Condition(s):

The plant is operating at 100% power. It is a Division I work week.

Initiating Cue(s):

Preplanned PM (WO# 50327868-01) on Div 1 SPMU Outboard Isolation Valve 1E30F002A Limit Switch is scheduled for today.

PM requires a tag out which opens the breaker for 1E30F001A with the valve closed.

A LCOTR was not prepared during work preauthorization because the work package was not sent to the shift last week.

Operators have informed you they have opened the breaker at 0943 to hang the red tag.

You are the Shift Supervisor. Initiate the appropriate eSOMS LCOTR through IMPLEMENTATION.

Start Time: _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 5 of 13

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

Item 1 (*) Log on to the eSOMS LCO Tracking System.

Standard: Candidate logs onto a network computer with the eSOMS LCO Tracking System.

Comments: **If needed, CUE the candidate to use the training program LOGON ID: sro, PASSWORD: sro.**

SAT _____ UNSAT _____

Item 2 (*) Open LCO Manager.

Standard: Candidate opens LCO Manager.

Comments:

SAT _____ UNSAT _____

Item 3 (*) Click ADD button to add a new LCOTR and selects Technical Specifications, Unit 1, then receives a new LCOTR number.

Standard: Candidate clicks ADD button and selects Technical Specifications, and Unit 1.

Comments:

SAT _____ UNSAT _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 6 of 13

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

Item 4 (*) Open the new LCOTR and adds initiating condition information and System/Component # under detail tab.

Standard: Candidate opens the new LCOTR and adds information in the Initiating Condition and System/ Component # under the detail tab.

Comments: **Wording under the initiating condition does NOT have to be exact. 1E30F002A out of service for planned maintenance and 1E30F001A tagged closed.**

SAT _____ UNSAT _____

Item 5 (*) Select Condition Statements tab and click ADD button.

Standard: Candidate selects Condition Statements tab and clicks ADD.

Comments:

SAT _____ UNSAT _____

Item 6 (*) Selects Type "TS", "Unit 1" and Section 3.6.2.4.

Standard: Candidate select Type "TS", "Unit 1" and section 3.6.2.4.

Comments: **Candidate may use the hard copy of Tech Specs, the Reference Library, or Display BM in MS Word to review the appropriate LCOs.**

SAT _____ UNSAT _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 7 of 13

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

Item 7 (*) Clicks the box for Required Action C.1 and selects OK button.

Standard: Candidate clicks the box for Required Action C.1 of Tech Spec 3.6.2.4 and selects OK.

Comments: **Candidate may also select Required Actions D.1 and D.2, these two actions are NOT critical.**

SAT _____ UNSAT _____

Item 8 () Highlights row with Condition C and Required Action C.1 and clicks Enter Action Statement button.

Standard: Candidate highlights row with Condition C and Required Action C.1 and clicks Enter Action Statement button.

Comments:

SAT _____ UNSAT _____

Item 9 (*) Selects Current Action Statement Only and sets the time to 0943 and clicks OK button.

Standard: Candidate selects Current Action Statement Only and sets the time to 0943 and clicks OK button.

Comments:

SAT _____ UNSAT _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 8 of 13

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

Item 10 (*) Verifies check box for Condition C.1 is checked and selects Actions/Timing tab.

Standard: Candidate verifies check box for Condition C.1 is checked and selects Actions/Timing tab.

Comments:

SAT _____ **UNSAT** _____

Item 11 (*) Clicks check box for Required Action C.1 and clicks OK button.

Standard: Candidate clicks check box for Required Action C.1 and clicks OK button.

Comments: Observes time start timing.

SAT _____ **UNSAT** _____

Item 12 () Selects Equipment tab and adds 1E30F002A and 1E30F001A from Equipment Manager.

Standard: Candidate selects Equipment tab and adds 1E30F002A and 1E30F001A from Equipment Manager.

Comments: **This action adds to the data base for historical purposes. Not required for successful completion of task.**

SAT _____ **UNSAT** _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 9 of 13

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

Item 13 () Select Actions/Timing tab and verifies clock has started on Required Action C.1.

Standard: Candidate selects Actions/Timing tab and verifies clock has started on Required Action C.1.

Comments: Not required for successful completion of task.

SAT _____ **UNSAT** _____

Item 14 () Select Attributes tab and check appropriate attributes.

Standard: Candidate selects Attributes tab and check appropriate attributes.

Comments: Not required for successful completion of task.

SAT _____ **UNSAT** _____

Item 15 (*) Selects Verification tab and double clicks Prepared row and enters 0943 for time.

Standard: Candidate selects Verification tab and double clicks Prepared row and enters 0943 for time.

Comments: **Time is NOT Critical but must complete preparation and implementation for LCO to be ready for Shift Manager. Candidate may enter their name, not required.**

SAT _____ **UNSAT** _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 10 of 13

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

Item 16 (*) Selects Verification tab and double clicks
Implemented row and enters 0943 for time.

Standard: Candidate selects Verification tab and double
clicks Implemented row and enters 0943 for time.

Comments: **Time is NOT Critical but must complete preparation
and implementation for LCO to be ready for Shift
Manager. Candidate may enter their name, not
required.**

SAT _____ **UNSAT** _____

Item 17 () Select Documents tab and add WO# 50327868-01.

Standard: Candidate selects Documents tab and add WO#
50327868-01.

Comments: Not required for successful completion of task.

SAT _____ **UNSAT** _____

Item 18 () Exit the computer application.

Standard: Candidate exits the computer application.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 Page 11 of 13

TERMINATING CUE(s) :

Candidate has completed LCOTR for Tech Spec 3.6.2.4 Condition C.1.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Determine LCO Actions and Complete eSOMS LCO

JPM No. GJPM-SRO-ADM50 Rev. 00 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):

The plant is operating at 100% power. It is a Division I work week.

Initiating Cue(s):

Preplanned PM (WO# 50327868-01) on Div 1 SPMU Outboard Isolation Valve 1E30F002A Limit Switch is scheduled for today.

PM requires a tag out which opens the breaker for 1E30F001A with the valve closed.

A LCOTR was not prepared during work preauthorization because the work package was not sent to the shift last week.

Operators have informed you they have opened the breaker at 0943 to hang the red tag.

You are the Shift Supervisor. Initiate the appropriate eSOMS LCOTR through IMPLEMENTATION.

LOGON ID for eSOMS LCOTR Training: sro
PASSWORD: sro



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-SRO-ADM51
Revision: 00
Page: 1 of 12
Rtype:
QA Record
Number of pages _____
Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**DETERMINE CONDITION REPORT OPERABILITY AND
COMPLETE PCRS ENTRIES**

____ MINOR
REASON FOR REVISION: NEW JPM.

____ X ____ MAJOR

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

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: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 2 of 12

Task List No: SRO-ADMIN-028

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

K/A GENERICS 2.2.21 - 3.5

SAFETY FUNCTION: N/A

10CFR55.45a(12 & 13)

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 Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 3 of 12

DISCUSSION

Performance of this JPM will demonstrate the ability of a Senior Reactor Operator to properly evaluate a condition report for operability and complete the entries into the Paperless Condition Reporting System (PCRS).

Required Material(s):

- 01 Corporate Nuclear Management Manual Procedure LI-102, Corrective Action Process
- 02 Computer with the PCRS Training program
- 03 GGNS Technical Specifications/Technical Requirements Manual
- 04 Administrative Procedure 01-S-06-44, Operability Assessment

General Reference(s):

- 01 Corporate Nuclear Management Manual Procedure LI-102, Corrective Action Process
- 02 Computer with the PCRS Training program
- 03 GGNS Technical Specifications/Technical Requirements Manual
- 04 Administrative Procedure 01-S-06-44, Operability Assessment

Safety Consideration(s):

- 01 **ENSURE CANDIDATE DOES NOT USE THE ACTUAL PCRS PROGRAM.**

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 4 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): (DO NOT READ STANDARD to candidate.)

The PCRS has a condition report initiated for Division 3 Diesel Generator as EQUIPMENT INOPERABLE and Reportability as NOT REPORTABLE.

Initial Condition(s):

The plant is operating at 100% power. It is a Division III work week.

Initiating Cue(s):

At 1015 this morning, an operator doing Outside Rounds found oil on the Div 3 D/G pedestal and floor near the 'A' side Generator Bearing.

No oil can be seen in the sightglass for the bearing.

Frank Weaver is your Shift Manager today and is in a meeting for planned RWCU outage.

You are the Shift Supervisor. Initiate a CR and perform the Initial Operability/Reportability review

Start Time: _____

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 5 of 12

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

ONLY USE THE TRAINING PCRS COMPUTER PROGRAM!

Item 1 (*) Log on to the PCRS System.

Standard: Candidate logs onto a network computer with the
PCRS System.

Comments: **If needed, CUE the candidate to use the training
program LOGON ID: sro, PASSWORD: sro.**

SAT _____ UNSAT _____

Item 2 (*) Select the New CR button.

Standard: Candidate selects the New CR button.

Comments:

SAT _____ UNSAT _____

Item 3 (*) Enter "Frank Weaver" as Supervisor and "2374 or
6621" for phone # and "Operations Staff" for
Originator Group.

Standard: Candidate enters "Frank Weaver" as Supervisor and
"2374 or 6621" for phone # and "Operations Staff"
for Originator Group.

Comments: **CUE if asked, which phone number to use, tell them
the Control Room and "Operations Staff" for
Originator Group.**

SAT _____ UNSAT _____

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 6 of 12

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

Item 4 (*) Enter the initiating condition in the Initiating
Condition text box.

Standard: Candidate enters the initiating condition in the
Initiating Condition text box.

Comments: **Wording under the initiating condition does NOT
have to be exact.**

SAT _____ **UNSAT** _____

Item 5 () Enter immediate actions to be taken in the
Immediate Action Description text box.

Standard: Candidate enters immediate actions to be taken in
the Immediate Action Description text box.

Comments: This action is NOT required. Wording may include
declared Division 3 Diesel Generator INOPERABLE
and placed in Maintenance.

SAT _____ **UNSAT** _____

Item 6 () Enter suggested actions to be taken in the
Suggested Action Description text box.

Standard: Candidate enters suggested actions to be taken in
the Suggested Action Description text box.

Comments: This action is NOT required. Wording may include
locate and repair oil leak on 3 Diesel Generator
and return to operable status.

SAT _____ **UNSAT** _____

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 7 of 12

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

Item 7 (*) Clicks the Initiate CR button and receives new
CR#.

Standard: Candidate clicks the Initiate CR button and
receives new CR#.

Comments:

SAT _____ **UNSAT** _____

Item 8 (*) Close New CR window.

Standard: Candidate closes New CR window.

Comments:

SAT _____ **UNSAT** _____

Item 9 (*) Double clicks the CR from Inbox.

Standard: Candidate double clicks the CR from Inbox.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 8 of 12

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

Item 10 (*) Selects Operability tab and sets the dropdown for
Immediate Report Code to NOT REPORTABLE.

Standard: Candidate selects Operability tab and sets the
dropdown for Immediate Report Code to NOT
REPORTABLE.

Comments:

SAT _____ **UNSAT** _____

Item 11 (*) Selects Operability tab and sets the dropdown for
Operability Code to EQUIPMENT INOPERABLE.

Standard: Candidate selects Operability tab and sets the
dropdown for Operability Code to EQUIPMENT
INOPERABLE.

Comments:

SAT _____ **UNSAT** _____

Item 12 () Enter reason for Operability Determination in the
Operability Desc text box.

Standard: Candidate enters reason for Operability
Determination in the Operability Desc text box.

Comments: **Not required for successful completion of task.**

SAT _____ **UNSAT** _____

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 9 of 12

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

Item 13 (*) Clicks Perform button.

Standard: Candidate clicks Perform button.

Comments:

SAT _____ **UNSAT** _____

Item 18 () Exit the computer application.

Standard: Candidate exits the computer application.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 Page 10 of 12

TERMINATING CUE(s) :

Candidate has completed PCRS entry and operability
determination as EQUIPMENT INOPERABLE.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Determine Condition Report Operability and Complete
PCRS entries

JPM No. GJPM-SRO-ADM51 Rev. 00 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 operating at 100% power. It is a Division III work week.

Initiating Cue(s):

At 1015 this morning, an operator doing Outside Rounds found oil on the Div 3 D/G pedestal and floor near the 'A' side Generator Bearing.

No oil can be seen in the sightglass for the bearing.

Frank Weaver is your Shift Manager today and is in a meeting for planned RWCU outage.

You are the Shift Supervisor. Initiate a CR and perform the Initial Operability/Reportability review



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-SRO-ADM52

Revision: 00

Page: 1 of 9

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

PLANT CHEMISTRY DETERMINATION

____ MINOR
REASON FOR REVISION: NEW JPM.

____ X ____ MAJOR

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

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: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 Rev. 00 Page 2 of 9

Task List No: SRO-A&E-001; A&E-005; A&E-006; NO-015; NO-019

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

K/A GENERICS 2.1.34 - 2.9; 2.1.6 - 4.3; 2.1.7 - 4.4;
 2.1.12 - 4.0; 2.1.33 - 4.0; 2.2.22 - 4.1;
 2.4.4 - 4.3; 2.4.11 - 3.6

SAFETY FUNCTION: N/A
10CFR55.45a(12 & 13)

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: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 Rev. 00 Page 3 of 9

DISCUSSION

Performance of this JPM will demonstrate the ability of a Senior Reactor Operator to properly evaluate a chemistry sample in preparation for a change in plant operational modes.

Required Material(s):

- 01 Administrative Procedure 01-S-08-29, EPRI Water Chemistry Guidelines
- 02 IOI 03-1-01-1, Cold Shutdown to Generator Carrying Minimum Load
- 03 ONEP 05-1-02-V-12, Condensate/Reactor Water High Conductivity
- 04 GGNS Technical Specifications/Technical Requirements Manual (6.4.1)
- 05 Completed Chemistry Report

General Reference(s):

- 01 Administrative Procedure 01-S-08-29, EPRI Water Chemistry Guidelines
- 02 IOI 03-1-01-1, Cold Shutdown to Generator Carrying Minimum Load
- 03 ONEP 05-1-02-V-12, Condensate/Reactor Water High Conductivity
- 04 GGNS Technical Specifications/Technical Requirements Manual (6.4.1)

Safety Consideration(s):

- 01 None

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

Task Title: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 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): (DO NOT READ STANDARD to candidate.)

Actions of the ONEP for Condensate/Reactor Water High Conductivity meet the requirements to manually scram the reactor and initiate RCIC for level control and isolate Condensate and Feedwater and place the Condensate and Feedwater Systems in cleanup and proceed to Cold Shutdown. See 05-1-02-V-12 section 3.5. Enter an LCO per TRM 6.4.1 Condition C. (restore to within limits 48 hour completion time.) (WORDING DOES NOT HAVE TO BE EXACT)

Initial Condition(s):

A plant startup is in progress in Operational Mode 2. Reactor Power is 11% at 950 psig ready for Main Turbine/Generator roll up.

Initiating Cue(s):

Plant Chemistry has just completed the required sampling of Condensate, Feedwater and Reactor Water in preparation for entry into Mode 1.

You are the Shift Manager. Review the Chemistry data and determine the course of action for plant operations.

SEE THE CHEMISTRY REPORT.

Start Time: _____

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

Task Title: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 Rev. 00 Page 5 of 9

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

Item 1 (*) Consult Admin Procedure 01-S-08-29, EPRI Water Chemistry Guidelines; ONEP 05-1-02-V-12, Condensate/Reactor Water High Conductivity; Technical Requirements Manual 6.4.1 Chemistry.

Standard: Candidate consults procedures and compares chemistry data to the procedures and standards and determines Reactor Water conductivity is out of limits requiring the following actions:

- _____ Manual scram of the reactor
- _____ Initiation of RCIC for level control
- _____ When RCIC and CRD can handle Reactor level control isolate Condensate and Feedwater and place them in cleanup.
- _____ Isolate the MSIVs and drains, use SRVs for Reactor pressure control
- _____ Proceed to Cold Shutdown within cooldown rate limits
- _____ Place the Main Condenser Hotwell Level controller in MANUAL at 50% to isolate the Hotwell from the CST and CRD.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 Rev. 00 Page 6 of 9

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

EVALUATOR NOTE: If candidate does not enter Tech Specs/TRM, the evaluator may cue the candidate to determine any Tech Spec actions.

Item 2 (*) Determines LCO entry for TRM 6.4.1 is required for Condition C.

Standard: Candidate determines LCO entry for TRM 6.4.1 is required for Condition C.

Comments: **CUE the candidate another SRO will complete LCO documentation.**

SAT _____ **UNSAT** _____

Item 3 () Informs Duty Manager, the Plant startup is suspended and a reactor scram has been inserted due to out of limits Reactor Water Chemistry.

Standard: Candidate contacts Duty Manager.

Comments: **CUE the candidate Duty Manager understands conditions.**

SAT _____ **UNSAT** _____

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

Task Title: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 Rev. 00 Page 7 of 9

TERMINATING CUE(s) :

Candidate has determined the actions for out of limits
Chemistry.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Plant Chemistry Determination

JPM No. GJPM-SRO-ADM52 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):

A plant startup is in progress in Operational Mode 2. Reactor Power is 11% at 950 psig ready for Main Turbine/Generator roll up.

Initiating Cue(s):

Plant Chemistry has just completed the required sampling of Condensate, Feedwater and Reactor Water in preparation for entry into Mode 1.

You are the Shift Manager. Review the Chemistry data and determine the course of action for plant operations.

SEE THE CHEMISTRY REPORT.

Preplanned PM (WO# 50327868-01) on Div 1 SPMU Outboard Isolation Valve 1E30F002A Limit Switch is scheduled for today. PM requires a tagout which opens the breaker for 1E30F001A with the valve closed. A LCOTR was not prepared during work preauthorization because the work package was not sent to the shift last week. Operators have informed you they have opened the breaker at 0943 to hang the red tag. Initiate the required LCO.

1. Candidate logs into eSOMS LCO Tracking System.
2. Candidate opens LCO Manger
3. Candidate clicks Add button to add new LCOTR by selecting Technical Specifications, Unit 1 and gets new LCOTR number
4. Candidate opens new LCOTR and adds Initiating Condition Information and System/Component # under the Detail Tab.
5. Candidate selects Condition Statements tab and clicks Add button.
6. Candidate selects Type "TS", Unit "1", and Section 3.6.2.4
7. Candidate clicks Display BM in MS Word button and reviews LCO 3.6.2.4 for applicable Conditions and Actions. (Not required if candidate uses hard copy TS)
8. Candidate clicks check box for Required Action C.1 and clicks OK button. (May also select Required Actions D.1 and D.2.)
9. Candidate highlights row with Condition C and Required Action C.1 and clicks the Enter Action Statement button.
10. Candidate selects Current Action Statement Only, sets the time to 0943 and clicks the OK button.
11. Candidate verifies check box for Condition C is checked and selects the Actions/Timing tab.
12. Candidate clicks check box for Required Action C.1 and clicks OK button.
13. Candidate may select Equipment tab and add 1E30F002A and 1E30F001A from equipment manager.
14. Candidate may select Actions/Timing tab and verify clock has started on Required Action C.1.
15. Candidate may select Attributes tab and check the appropriate attributes.

16. Candidate selects Verification tab, double clicks the Prepared row and enters 0943 for the time.
17. Candidate selects Verification tab, double clicks the Implemented row and enters 0943 for the time.
18. Candidate may select Documents tab, and add WO# 50327868-01.

At 1015 this morning, an operator doing Outside Rounds found oil on the Div 3 D/G pedestal and floor near the 'A' side Generator Bearing. No oil can be seen in the sightglass for the bearing. Frank Weaver is your Shift Manager today and is in a meeting for planned RWCU outage.

Initiate a CR and perform the Initial Operability/Reportability review.

1. Candidate logs into PCRS System.
2. Candidate selects new CR button.
3. Candidate enters "Frank Weaver" as Supervisor, "2374 or 6621" for Phone #, and "Operations Staff" for Originator Group.
4. Candidate enters Initiating Condition Description text box.
5. Candidate may enter Immediate Action Description text box and Suggested Action Description text box.
6. Candidate clicks Initiate CR button and receives new CR #.
7. Candidate closes new CR window and double clicks the CR from the Inbox.
8. Candidate selects Operability tab and sets the dropdown for Immediate Report Code to NOT REPORTABLE, and the dropdown for Operability Code to EQUIPMENT INOPERABLE.
9. Candidate enters reason for Operability Determination in the Operability Desc. text box.
10. Candidate clicks Perform button.

END OF TASK



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-RO-E1212

Revision: 01

Page: 1 of 14

Rtype:

QA Record

Number of pages _____

Date _____ **Initials** _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

STARTUP RHR SHUTDOWN COOLING ALTERNATE PATH E12-F053 FAILS TO OPEN

_____ **X** _____ **MINOR**

_____ **MAJOR**

REASON FOR REVISION: _____ Update JPM from NRC 3/1998 exam for NRC 2/2004.

THIS DOCUMENT REPLACES _____ GG-1-JPM-RO-E1212.00 _____.

REVIEW / APPROVAL:

PREPARED BY: _____ **DATE:** _____

REVIEWED BY: _____ **DATE:** _____
Reviewer

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: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 2 of 14

Task List No: CRO-E12-008

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

K/A 205000 A1.02 - 3.3/3.2; A2.10 - 2.9/2.9; A2.12 - 2.9/3.0;
A4.01 - 3.7/3.7; A4.02 - 3.6/3.5; A4.03 - 3.6/3.5; A4.09 - 3.1/3.1

SAFETY FUNCTION: 4

RO Group 2

SRO Group 2

10CFR 55.45(a) (3, 4, 5, 6, 7)

Time Required for Completion: 20 Minutes (approximate).

Time Critical: YES/NO

Faulted: YES/NO

Simulator

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: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 3 of 14

DISCUSSION

This JPM will evaluate the candidate's ability to manipulate the controls required to startup RHR in Shutdown Cooling and respond to a failure of the E12-F053B Shutdown Cooling Injection Valve to open. This JPM should be performed in the simulator, but may be simulated in the plant / control room.

Set up the simulator as follows:

1. Initialize the simulator to a Startup/Shutdown IC.
2. Insert override **di_1e12m615b** P601/17C E12-F053B **CLOSE**.
3. Close or verify Closed E12-F064B RHR B Minimum Flow Valve.
4. Close E12-F004B RHR B Suppression Pool Suction Valve.
5. Open E12-F006B, F008, F009 RHR B Shutdown Cooling Suction Valves.
6. Startup SSW B and align through the RHR B Heat Exchangers and startup the RHR B Room Cooler.
7. Insert the following overrides on **Trigger 1**
lo_1e12m615b_g E12-F053B indication **OFF**
lo_1e12ads12 P601/17B RHR B MOV Overload Power loss **ON**
(Status light)
p601_17a_h_2 RHR B SYS OOSVC **ON (1)** (Annunciator)

Required Material(s):

01 04-1-01-E12-1

General Reference(s):

01 04-1-01-E12-1

Safety Consideration(s):

- 01 If this JPM is being simulated in the plant/ control room, **DO NOT MANIPULATE ANY PLANT CONTROLS/EQUIPMENT**.
-

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 4 of 14

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): (DO NOT READ Standard to candidate.)

The candidate will startup RHR B Shutdown Cooling and notice that E12-F053B did not open. Once noted the candidate should either trip RHR "B" pump or open E12-F042B RHR "B" LPCI Injection Valve.

NOTE: If candidate fails to take actions prior to RPV level dropping to +11.4 inches, this constitutes a failure. If level drops to +11.4 inches after action has been initiated, this does NOT constitute a failure.

Initial Condition(s):

The plant is shutdown in mode 4. RHR "B" has been flushed and warmed and is ready to be placed in Shutdown Cooling. SSW "B" is in-service to the RHR "B" Heat Exchangers. Steps 4.2.2 a-d of 04-1-01-E12-1 have been completed.

Initiating Cue(s):

The Control Room Supervisor has requested you to startup RHR "B" Shutdown Cooling with a minimal cooldown.

NOTE: If asked flow is to be 5000 gpm.

Start Time: _____

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 5 of 14

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

Item 1 () Places MOV TEST Switches for RHR A, NSSSS Division 1 and 2 to TEST.

Standard: Places the RHR B, NSSSS Division 1 and 2 MOV TEST Switches 1H13-P601 section 17B, 19B, 18B in TEST.

Comments: MOV Test Switch annunciators will come in indicating in test.

SAT _____ **UNSAT** _____

Item 2 () Close or check closed E12-F064B.

Standard: Check closed E12-F064B RHR B Minimum Flow Valve noting green light indication on H13-P601-17C is ON.

Comments: E12-F064B should already be closed from the warmup process.

SAT _____ **UNSAT** _____

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 6 of 14

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

Item 3 () Turn off or verify off the RHR B Jockey Pump and close or check closed E12-F082B RHR B Jockey Pump Suction Valve.

Standard: RHR B Jockey Pump and E12-F082B have been checked off and closed on Control Room back panel H13-P872.

Comments: If asked, cue the candidate the RHR B Jockey Pump is off and E12-F082B RHR B Jockey Pump Suction Valve is closed.

SAT UNSAT

Item 4 () Dispatch an operator to unlock and close or check closed E12-F428B, Pressure Lock Isolation for F024B and E12-F438B, Pressure Lock Isolation for E12-F064B.

Standard: Operator dispatched and confirmation that E12-F428B and F438B are closed.

CUE as the Building Operator report that E12-F428B and F438B are closed.

Comments:

SAT UNSAT

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 7 of 14

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

Item 5 () Close or check closed E12-F004B.

Standard: Check closed E12-F004B RHR B Suppression Pool Suction Valve noting green light indication on H13-P601-17C is ON.

Comments: E12-F004B should already be closed from the warmup process.

SAT **UNSAT**

Item 6 () Open or check open E12-F010; F008; F009; F006B; F047B; and F048B.

Standard: Check OPEN E12-F010
Check OPEN E12-F008
Check OPEN E12-F009
Check OPEN E12-F006B
Check OPEN E12-F047B
Check OPEN E12-F048

noting red light indication on H13-P601-17C is ON.

Comments: These valve should already be open from the warmup process.

SAT **UNSAT**

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 8 of 14

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

Item 7 (*) Close E12-F003B RHR B Heat Exchanger Outlet Valve.

Standard: E12-F003B is closed as indicated by Position Indicator E12-ZI-R611B indicating 0% on H13-P601-17B.

Comments: This is to minimize cooldown.

SAT **UNSAT**

Item 8 () Close or check closed B21-F065A, FDW INL Shutoff Vlv.

Standard: Candidate closes B21-F065A on H13-P680-2C as indicated by the green indicating light is ON.

Comments:

SAT **UNSAT**

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 9 of 14

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

Item 9 () Open or check open E12-F027B.

Standard: Checks that E12-F027B is open on H13-P601-17C as indicated by the red indicating light being ON.

Comments: Candidate may note the OPTION they have been instructed to use is Option 1.

SAT **UNSAT**

Item 10 (*) Start RHR Pump B using the handswitch on H13-P601-17C.

Standard: Candidate starts RHR B Pump as indicated by red indicating light being ON.

Comments:

SAT **UNSAT**

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 10 of 14

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

SIMULATOR OPEATOR ACTIVATE TRIGGER 1.

Item 11 (*) Open E12-F053B.

Standard: Opens E12-F053B using the handswitch on H13-P601-17C. Notes the failure of the valve to begin opening.

Comments: The candidate may perform any of the following Items 12 or 13. The candidate may or may not solicit input from the Plant Supervisor. If input is solicited CUE the candidate to take appropriate actions to prevent reactor water from entering the Suppression Pool.

SAT _____ UNSAT _____

NOTE to EVALUATOR: Items 12 and 13 are the two different paths.

Item 12 (*) Trips RHR B Pump.

Standard: Places handswitch for RHR B Pump on H13-P601-17C to STOP and notes green light indication is ON.

Comments: This action will prevent the E12-F064B from coming open on minimum flow.

NOTE: If the candidate performs this item CUE the candidate as Control Room Supervisor to stop the evolution at this point until the problem can be resolved.

ITEM 13 may be performed instead of this Item. If Item 13 is performed then Item 12 is NOT CRITICAL.

SAT _____ UNSAT _____

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 11 of 14

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

Item 13 (*) Open E12-F042B RHR B LPCI Injection Valve.

Standard: E12-F042B RHR B LPCI Injection Valve handswitch is taken to open on H13-P601-17C as indicated by red indicating light is ON.

Comments: If this path is chosen by the candidate, he must note the altered lineup to the Control Room Supervisor. If this step is performed and asked CUE the candidate to establish flow of 5000 GPM through the heat exchanger bypass valve.

If NOT asked full flow through the E12-F048B is acceptable based on CAUTION page 27.

IF PUMP WAS TRIPPED THIS STEP WILL NOT BE PERFORMED. IF ITEM 12 WAS PERFORMED THIS ITEM IS NOT CRITICAL.

SAT _____ UNSAT _____

Item 14 () Throttles closed on E12-F048B to establish 5000 gpm RHR B flow.

Standard: Throttles E12-F048B closed using the handswitch on H13-P601-17C.

Comments: IF PUMP WAS TRIPPED THIS STEP WILL NOT BE PERFORMED.

SAT _____ UNSAT _____

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 12 of 14

TERMINATING CUE(s)

RHR B Shutdown Cooling is secured OR is running to the reactor via E12-F042B.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Startup of Shutdown Cooling RHR 'B'

JPM No. GJPM-RO-E1212 Rev. 01 Page 13 of 14

**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 shutdown in mode 4. RHR "B" has been flushed and warmed and is ready to be placed in Shutdown Cooling. SSW "B" is inservice to the RHR "B" Heat Exchangers. Steps 4.2.2 a-d of 04-1-01-E12-1 have been completed.

Initiating Cue(s):

The Control Room Supervisor has requested you to startup RHR "B" Shutdown Cooling with a minimal cooldown.



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-NLO-P5301

Revision: 02

Page: 1 of 10

Rtype:

QA Record

Number of pages _____

Date _____ **Initials** _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

REASON FOR REVISION: update JPM for NRC Exam 2/2004.

THIS DOCUMENT REPLACES GG-1-JPM-NLO-P5301.01

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED 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)

Evaluator Signature: _____ Date: _____

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 Page 3 of 10

DISCUSSION

This JPM evaluates a candidate's ability to locate and lineup valves for establishment of makeup nitrogen to the ADS accumulators. This task may be required by the Loss of Instrument Air ONEP to sustain safety/relief valve operation following a loss of instrument air.

Performance of this task requires the installation of nitrogen bottles and a regulator, set at 125 psig, at the test connection upstream of isolation valve P53-FA01. During simulation of this JPM, the evaluator will inform the candidate that the installation has been accomplished.

This JPM will be performed on the 139' and the 166' elevations of the Auxiliary building.

Required Material(s):

- 01 ONEP 05-1-02-V-9, Loss of Instrument Air
- 02 tye-wrap cutting device

General Reference(s):

- 01 ONEP 05-1-02-V-9, Loss of Instrument Air
- 02 P&ID, M-1067

Safety Consideration(s):

- 01 **Ensure no valves are physically manipulated.**
- 02 **Observe all Posted Radiological Area Postings.**
- 03 **Minimize time spent in Radiation areas.**

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 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) :

The nitrogen makeup is lined up to the ADS valve accumulators via the instrument air lines.

Initial Condition(s): (The location for the initial conditions to be given is the Control Room or Auxiliary Building.)

The Control Room Supervisor is currently directing operator activities per Loss of Instrument Air ONEP-2. Containment and drywell instrument air isolation is in effect and cannot be defeated. Maintenance has installed nitrogen bottles and a pressure regulator set at 125 psig to the instrument air test connection downstream of P53-FA01. Valve P53-F003 is CLOSED.

Initiating Cue(s) :

The Control Room Supervisor has given you a controlled copy of 05-1-02-V-9 Loss of Instrument Air ONEP and has directed you to lineup makeup nitrogen to the ADS valve accumulators.

Start Time: _____

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 Page 5 of 10

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

Step 1 () Locate test connection valve P53-FAO2 and CLOSE or CHECK CLOSED.

Standard: Candidate locates the test connection valve P53-FAO2 (Area 9, 166' el.) and verifies valve is closed by attempting to turn handwheel clockwise.

Comments: Valve should be in the CLOSED position. **If asked, cue valve has resistance in the clockwise direction.**

SAT _____ UNSAT _____

Step 2 (*) Locate test connection isolation valve P53-FAO1 and verify nitrogen bottles have been installed with a regulator.

Standard: Candidate locates test connection isolation valve P53-FAO1 (Area 9, 139' el.) and verifies nitrogen bottles and regulator are installed.

Comments: **If asked, cue the candidate that the bottle and regulator, set at 125 psig, is installed on the test connection downstream of P53-FAO1.**

SAT _____ UNSAT _____

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 Page 6 of 10

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

Step 3 (*) Open test connection isolation valve P53-FA01.

Standard: Candidate opens test connection isolation valve, P53-FA01 until fully open and observes the response of the pressure regulator.

Comments: Candidate should state he would open the valve by turning the handwheel counterclockwise until it mechanically stops. **If asked, cue the candidate that initial flow noise is heard and the regulator is responding properly.**

SAT _____ UNSAT _____

Step 4 (*) Unlock and slowly open P53-F043.

Standard: Candidate locates, unlocks and opens P53-F043 to the full open position.

Comments: Candidate locates P53-F043 (Area 9, 166' el.), and states he would remove the blue tye wrap and open the valve by turning the handwheel counterclockwise until it mechanically stops. **If asked, cue valve has resistance in the clockwise direction. CUE the candidate that pressure indicator P53-R028 indicates 125 psig.**

SAT _____ UNSAT _____

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 Page 7 of 10

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

Step 5 () Complete alteration tracking sheet for Compressed Gas Bottles installed.

Standard: Candidate initials Alteration Tracking Sheet for Compressed Gas Bottles installed.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 Page 8 of 10

TERMINATING CUE(s) :

Temporary nitrogen is lined up to the ADS valve accumulators.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: LINEUP MAKEUP NITROGEN TO ADS VALVE ACCUMULATORS

JPM No. GJPM-NLO-P5301 Rev. 02 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 Control Room Supervisor is currently directing operator activities per Loss of Instrument Air ONEP-2. Containment and drywell instrument air isolation is in effect and cannot be defeated. Maintenance has installed nitrogen bottles and a pressure regulator set at 125 psig to the instrument air test connection downstream of P53-FA01. Valve P53-F003 is CLOSED.

Initiating Cue(s):

The Control Room Supervisor has given you a controlled copy of 05-1-02-V-9 Loss of Instrument Air ONEP and has directed you to lineup makeup nitrogen to the ADS valve accumulators.



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-NLO-P6402

Revision: 00

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 FAILURE OF FIRST MANUAL POSITION)

REASON FOR REVISION: MODIFIED JPM from NRC exam 8/2002 for NRC 2/2004.

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED 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)

Evaluator Signature: _____ Date: _____

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

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

JPM No. GJPM-NLO-P6402 Rev. 02 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 Manager.

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-P6402 Rev. 02 Page 4 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): (DO NOT READ standard to candidate.)

Diesel Driven Fire Pump 'A' is operating on the Fire Water System.

Initial Condition(s): (The location for the initial conditions to be given is the Control Room, Security Island or Control Building entrance.)

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 Control Room has directed you to manually start Diesel Driven Fire Pump 'A'.

Start Time: _____

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

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

JPM No. GJPM-NLO-P6402 Rev. 02 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-P6402 Rev. 02 Page 6 of 12

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

EVALUATOR NOTE: Whichever MANUAL position is used first the pump fails to start, when the second MANUAL position is used the pump will start or the non control cabinet manual start.

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 attempt to start (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-P6402 Rev. 02 Page 7 of 12

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

SEE EVALUATOR NOTE AT ITEM 4.

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 2.

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 starts and comes up to rated discharge pressure.

SAT _____ UNSAT _____

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

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

JPM No. GJPM-NLO-P6402 Rev. 02 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.

IF THE CANDIDATE BYPASSED THE SECOND MANUAL POSITION THE FOLLOWING ITEMS BECOME CRITICAL, OTHERWISE THESE ITEMS WILL BE N/A.

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-P6402 Rev. 02 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-P6402 Rev. 02 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-P6402 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 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 Control Room Supervisor has directed you to manually start Diesel Driven Fire Pump 'A'.



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-B3311

Revision: 00

Page: 1 of 11

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

RECOVER FROM RECIRC FLOW CONTROL VALVE RUNBACK

 X MINOR

 MAJOR

REASON FOR REVISION: Update JPM from BANK for NRC 2/2004.

THIS DOCUMENT REPLACES GG-1-JPM-RO-B3311.00 .

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Reviewer

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: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 2 of 11

Task List No: CRO-B33(2)-008

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

K/A 202002 A2.08 - 3.3/3.3; A1.08 - 3.4/3.4; 2.1.30 - 3.9/3.4

SAFETY FUNCTION: 1

RO Group 1

SRO Group 1

10CFR 55.45(a) (6 & 8)

Time Required for Completion: 15 Minutes (approximate).

Time Critical: YES/NO

Faulted: YES/NO

Simulator

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: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 3 of 11

DISCUSSION

This JPM will evaluate the candidate's ability to recover the Recirculation System Flow Control Valve (FCV) operation following an automatic Runback Signal. This JPM should be performed in the simulator.

Set up the simulator as follows:

- Initialize the simulator to IC-17.
- Trip Reactor Feed Pump B.
- Allow the Reactor Recirculation System to Runback the Recirc Flow Control Valves (Adjust FCVs to 40%).
- Insert the first gang of control rods to reduce reactor power to within the capabilities of one Reactor Feed Pump.
- Reset the vibration monitor for Reactor Feed Pump A.
- Allow plant conditions to stabilize.

Place the simulator in FREEZE.

Required Material(s):

- 01 04-1-01-B33-1 Reactor Recirculation System

General Reference(s):

- 01 04-1-01-B33-1 Reactor Recirculation System

Safety Consideration(s):

- 01 None

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 4 of 11

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): (DO NOT READ Standard to candidate.)

Reactor Recirculation Flow Control Valves are reset with Total Core Flow at 67 Mlbm/hr.
(60% core flow - 67.5 Mlbm/hr \pm 2% is the acceptable range)

Initial Condition(s):

The plant has experienced a trip of Reactor Feed Pump B and subsequent Recirc Flow Control Valve Runback.

Initiating Cue(s):

The Control Room Supervisor has directed you to reset the Recirc Flow Control Valve Runback and return Reactor Total Core Flow to 67 Mlbm/hr. Other operators will perform all other tasks.

Start Time: _____

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 5 of 11

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

Item 1 () Verify Reactor Vessel Water Level is > low level alarm setpoint.

Standard: Candidate verifies Reactor Water level is above the Low Level Alarm Point by indications on H13-P680.

Comments: Candidate may verify one of the following to satisfy Item 1: Reactor Water Level High/Low annunciator (H13-P680 3A-A3) clear; Reactor Water level on Narrow Range Level indicators (H13-P680 section 2B) are indicating > 32 inches.

SAT _____ UNSAT _____

NOTE: Candidate may elect to operate Recirc Loop B first this is acceptable.

Item 2 (*) Using Recirc Loop A FLO CONT, lower signal output until one of the following occurs:
____ % Limiter Error is ZERO
____ % Servo Error is ZERO
____ FCV Motion is noticed in the close direction
____ reduction in associated loop flow is noticed

Standard: Candidate lowers Recirc Loop 'A' FLO CONT on H13-P680 section 3D until one of the above is observed.

Comments:

SAT _____ UNSAT _____

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 6 of 11

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

Item 3 (*) Press RECIRC PUMP 'A' CAV INTLK RESET pushbutton
 on H13-0P680 section 3C.

Standard: Candidate depresses RECIRC PUMP 'A' CAV INTLK
 RESET pushbutton on H13-0P680 section 3C.

Comments:

SAT _____ **UNSAT** _____

Item 4 () Observes RECIRC FCV A PARTIAL CLOSE/RFP TRIP
 annunciator resets. (H13-P680 3A-D1)

Standard: Candidate observes RECIRC FCV A PARTIAL CLOSE/RFP
 TRIP annunciator resets.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 7 of 11

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

NOTE: Candidate may elect to operate Recirc Loop B first this is acceptable.

Item 5 (*) Using Recirc Loop B FLO CONT, lower signal output until one of the following occurs:
____ % Limiter Error is ZERO
____ % Servo Error is ZERO
____ FCV Motion is noticed in the close direction
____ reduction in associated loop flow is noticed

Standard: Candidate lowers Recirc Loop 'B' FLO CONT on H13-P680 section 3D until one of the above is observed.

Comments:

SAT _____ **UNSAT** _____

Item 6 (*) Press RECIRC PUMP 'B' CAV INTLK RESET pushbutton on H13-0P680 section 3C.

Standard: Candidate depresses RECIRC PUMP 'B' CAV INTLK RESET pushbutton on H13-0P680 section 3C.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 8 of 11

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

Item 7 () Observes RECIRC FCV B PARTIAL CLOSE/RFP TRIP annunciator resets. (H13-P680 4A1-C4)

Standard: Candidate observes RECIRC FCV B PARTIAL CLOSE/RFP TRIP annunciator resets.

Comments:

SAT _____ **UNSAT** _____

Item 8 (*) Adjust Reactor Recirc Flow Control Valves to obtain Total Core Flow of 67 Mlbm/hr.

Standard: Candidate adjusts Reactor Recirc Flow Control Valves as necessary to obtain Total Core Flow of 67 Mlbm/hr.

Comments: **Acceptable range is 60% core flow $\pm 2\%$ (67.5 Mlbm/hr)**

SAT _____ **UNSAT** _____

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 9 of 11

TERMINATING CUE(s)

Reactor Recirc Flow Control Valve Runback is reset and Total Core Flow is 67 Mlbm/hr.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Recover from Recirc Flow Control Valve Runback

JPM No. GJPM-RO-B3311 Rev. 00 Page 10 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 has experienced a trip of Reactor Feed Pump B and subsequent Recirc Flow Control Valve Runback.

Initiating Cue(s):

The Control Room Supervisor has directed you to reset the Recirc Flow Control Valve Runback and return Reactor Total Core Flow to 67 Mlbm/hr. Other operators will perform all other tasks.



GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-C6106

Revision: 00

Page: 1 of 13

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

STARTUP RCIC FROM THE REMOTE SHUTDOWN PANEL TO
CONTROL RPV WATER LEVEL
ALTERNATE PATH
FAILED FLOW CONTROLLER

☒ MINOR

_____ MAJOR

REASON FOR REVISION: New JPM.

THIS DOCUMENT REPLACES N/A

REVIEW / APPROVAL:

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

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: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 2 of 13

Task List No: CRO-C61-005

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

K/A 295016 AA1.06 - 4.0/4.1; AK2.01 - 4.4/4.5; AK3.03 - 3.5/3.7;
AA1.07 - 4.2/4.3; AA2.02 - 4.2/4.3
2.1.30 - 3.9/3.4

SAFETY FUNCTION: 2 & 7

RO Group 1

SRO Group 1

10CFR 55.45(a) (4; 6 & 8)

Time Required for Completion: 20 Minutes (approximate).

Time Critical: YES/NO

Faulted: YES/NO

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: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 3 of 13

DISCUSSION

This JPM will evaluate the candidate's ability to startup and operate RCIC from the Remote Shutdown Panel. This JPM should be simulated in the plant. This JPM may be performed in the Simulator.

If the Simulator is to be used, set up the simulator as follows:

Initialize the simulator to any rated conditions IC.

Insert override **ai_1c61r100 @ 100** P150 1C61-FK-R100 RCIC
Turbine Flow Control

Place the simulator in FREEZE.

Required Material(s):

- 01 04-1-01-E51-1 Reactor Core Isolation Cooling System
- 02 05-1-02-II-1 Shutdown From Remote Shutdown Panel

General Reference(s):

- 01 04-1-01-E51-1 Reactor Core Isolation Cooling System
- 02 05-1-02-II-1 Shutdown From Remote Shutdown Panel

Safety Consideration(s):

- 01 **DO NOT OPERATE CONTROLS IN THE PLANT.**
-

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 4 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): (DO NOT READ Standard to candidate.)

RCIC is being operated at 800 gpm from the Remote Shutdown Panel with the flow controller in MANUAL.

Initial Condition(s):

Plant conditions have warranted abandoning the Main Control Room. Operators are stationed at the Remote Shutdown Panels. Upon leaving the Main Control Room RCIC was NOT initiated. Standby Service Water System 'A' is operating.

Initiating Cue(s):

The Control Room Supervisor has directed you to startup RCIC using a combination of the ONEP and E51 SOI and inject to the reactor at 800 gpm. Other operators will perform all other tasks.

Start Time: _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 5 of 13

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

Item 1 () Obtain a controlled copy of

Standard: Candidate obtains a controlled copy of SOI 04-1-
01-E51-1 Reactor Core Isolation Cooling System and
05-1-02-II-1 Shutdown From Remote Shutdown Panels
ONEP.

Comments:

SAT _____ **UNSAT** _____

Item 2 (*) Locate the Remote Shutdown Panels in area 25A 111
ft elevation.

Standard: Candidate locates the Remote Shutdown Panels.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 6 of 13

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

Item 3 (*) Transfer RCIC control to Remote Shutdown Panel by
placing TURB FLO CONT XFER switch to EMER
position.

Standard: Candidate transfers RCIC control to Remote
Shutdown Panel by placing TURB FLO CONT XFER
switch to EMER position on H22-P150.

Comments: **CUE the candidate TURB FLO CONT XFER switch is in
EMER.**

SAT _____ UNSAT _____

Item 4 (*) Shift RCIC FLO CONT to MANUAL.

Standard: Candidate shifts RCIC FLO CONT to MANUAL on H22-
P150.

Comments: **Cue the candidate RCIC FLO CONT is in MANUAL.**

SAT _____ UNSAT _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 7 of 13

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

Item 5 (*) Reduce RCIC FLO CONT to minimum.

Standard: Candidate reduces RCIC FLO CONT to minimum.

Comments: **CUE the candidate RCIC FLO CONT indicates 0%.**

SAT _____ UNSAT _____

Item 6 (*) Open E51-F046, RCIC WTR TO TURB LUBE OIL CLR.

Standard: Candidate opens E51-F046, RCIC WTR TO TURB LUBE
 OIL CLR.

Comments: **CUE the candidate E51-F046 red light is
 illuminated.**

SAT _____ UNSAT _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 8 of 13

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

Item 7 () Start Turbine Gland Seal Compressor.

Standard: Candidate starts Turbine Gland Seal Compressor.

Comments: **CUE the candidate the Turbine Gland Seal
Compressor is operating.**

SAT _____ UNSAT _____

Item 8 (*) Open E51-F095/ F045 RCIC STM SPLY BYP and RCIC STM
SPLY TO RCIC TURB using the combined handswitch.

Standard: Candidate opens E51-F095/ F045 RCIC STM SPLY BYP
and RCIC STM SPLY TO RCIC TURB using the combined
handswitch.

Comments: **CUE the candidate the E51-F095 opens followed by
E51-F045 with RCIC speed indicating on scale.**

SAT _____ UNSAT _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 9 of 13

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

Item 9 (*) Raise turbine speed to develop > 2000 rpm using
the RCIC FLO CONT in MANUAL.

Standard: Candidate raises turbine speed to develop > 2000
rpm using the RCIC FLO CONT in MANUAL.

Comments: **CUE the candidate RCIC speed indicates 2500 rpm.**

SAT _____ UNSAT _____

Item 10 (*) Raise turbine speed to develop discharge pressure
above reactor pressure using the RCIC FLO CONT in
MANUAL.

Standard: Candidate raises turbine speed to develop
discharge pressure above reactor pressure using
the RCIC FLO CONT in MANUAL.

Comments: **CUE the candidate RCIC discharge pressure is 100
psig above Reactor pressure.**

SAT _____ UNSAT _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 10 of 13

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

Item 11 (*) Open E51-F013 RCIC INJ SHUTOFF VLV.

Standard: Candidate opens E51-F013 RCIC INJ SHUTOFF VLV.

Comments: Cue the candidate E51-F013 has the red light
illuminated.

SAT _____ UNSAT _____

EVALUATOR NOTE:

The candidate may decide to null the controller to shift to
automatic and use the thumbwheel. When this occurs, CUE the
candidate the Controller is Nulled (red needle in the green band).

When the candidate shifts the controller to automatic and
attempts to control flow, CUE the candidate there is NO response
from RCIC. FLOW AND SPEED ARE NOT RESPONDING TO THE CONTROLLER IN
AUTOMATIC. If the candidate returns the controller to MANUAL and
adjusts RCIC, CUE the candidate that RCIC is responding to the
commands.

Item 12 (*) Raise RCIC flow to 800 gpm using RCIC FLO CONT.

Standard: Candidate may use the controller in manual or
automatic to raise RCIC flow to 800 gpm.

Comments: SEE CUE ABOVE for control indications. If asked,
CUE candidate as Control Room Supervisor to use
the means necessary to obtain 800 gpm flow to the
RPV.

SAT _____ UNSAT _____

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 Page 11 of 13

TERMINATING CUE(s)

RCIC is being operated at 800 gpm from the Remote Shutdown Panel
with the flow controller in MANUAL.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Startup RCIC from the Remote Shutdown Panel to control
RPV Water Level

JPM No. GJPM-RO-C6106 Rev. 00 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):

Plant conditions have warranted abandoning the Main Control Room. Operators are stationed at the Remote Shutdown Panels. Upon leaving the Main Control Room RCIC was NOT initiated. Standby Service Water System 'A' is operating.

Initiating Cue(s):

The Control Room Supervisor has directed you to startup RCIC using a combination of the ONEP and E51 SOI and inject to the reactor at 800 gpm. Other operators will perform all other tasks.



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-E2205

Revision: 00

Page: 1 of 11

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

RAISE SUPPRESSION POOL LEVEL WITH HPCS

☒ MINOR

☐ MAJOR

REASON FOR REVISION: Update JPM from bank for NRC 2/2004.

THIS DOCUMENT REPLACES N/A.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Reviewer

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: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 2 of 11

Task List No: CRO-E22-011; CRO-P41-005

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

K/A 223001 A2.11 - 3.6/3.8; A1.08 - 3.5/3.6
209002 A4.01 - 3.7/3.7; A4.04 - 3.1/3.1; A4.09 - 3.4/3.5

SAFETY FUNCTION: 5

RO Group 1

SRO Group 1

10CFR 55.45(a) (8)

Time Required for Completion: 20 Minutes (approximate).

Time Critical: YES/NO

Faulted: YES/NO

Simulator

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: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 3 of 11

DISCUSSION

This JPM will evaluate the candidate's ability to raise Suppression Pool Water Level using High Pressure Core Spray (HPCS) as required by the Emergency Procedures. This JPM should be performed in the simulator.

Set up the simulator as follows:

Initialize the simulator to a Power IC.
Lower Suppression Pool Water level to obtain low level annunciators.

Required Material(s):

01 04-1-01-E22-1 High Pressure Core Spray System

General Reference(s):

01 04-1-01-E22-1 High Pressure Core Spray System

Safety Consideration(s):

01 None

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 4 of 11

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): (DO NOT READ Standard to candidate.)

Suppression Pool Water Level Low annunciators are clear following raising water level using the HPCS Pump.

Initial Condition(s):

Suppression Pool Water level is low. Emergency Procedure 3 has been entered on Suppression Pool Level. HPCS and HPCS SSW are in standby.

Initiating Cue(s):

The Control Room Supervisor has directed you to raise Suppression Pool Water level by operating the HPCS Pump to transfer water from the Condensate Storage Tank to the Suppression Pool per the SOI to clear the Suppression Pool Level alarms. Perform a manual startup of HPCS Standby Service Water to support HPCS operation. Use a controlled startup of the HPCS Pump.

Start Time: _____

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 5 of 11

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

This may be performed at any point prior to starting the HPCS Pump.

Item 1 () Obtain a controlled copy of SOI 04-1-01-P41-1 Standby Service Water System.

Standard: Candidate obtains the SOI for HPCS SSW (SSW 'C').

Comments:

SAT _____ **UNSAT** _____

Note SSW 'C' MOV Test Switch NOT required for this situation since EP-3 is in affect.

Item 2 (*) Start HPCS SVC WTR PMP.

Standard: Candidate starts HPCS SVC WTR PMP on H13-P870.

Comments:

SAT _____ **UNSAT** _____

Item 3 (*) Open SSW LOOP C RTN TO CLG TWR A valve P41-F011.

Standard: Candidate opens P41-F011 on H13-P870.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 6 of 11

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

Item 4 () Check that SSW LOOP C FLO is about 960 gpm and PRESS indicates about 80 psig.

Standard: Candidate checks SSW LOOP C flow is about 960 gpm and pressure indicates about 80 psig on H13-P870.

Comments:

SAT _____ **UNSAT** _____

Item 5 () Obtain a controlled copy of SOI 04-1-01-E22-1 High Pressure Core Spray System.

Standard: Candidate obtains the SOI for HPCS.

Comments:

SAT _____ **UNSAT** _____

Note HPCS MOV Test Switch NOT required for this situation since EP-3 is in affect.

Item 6 () Closed E22-F305, E22-F004 Pressure Lock valve.

Standard: Candidate directs the Auxiliary Building Operator to closed E22-F305.

Comments: CUE the Auxiliary Building Operator reports E22-F305 is closed.

SAT _____ **UNSAT** _____

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 7 of 11

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

Item 7 (*) Start HPCS Pump using the HPCS Pump handswitch on H13-P601.

Standard: HPCS pump is started from H13-P601.

Comments: Section 5.2 for manually starting HPCS Pump.

SAT _____ **UNSAT** _____

Item 8 () Check the following:

- _____ HPCS Pump starts (red light ON)
- _____ HPCS Pump motor current is < 434 amps on II-R616, HPCS motor amps.
- _____ E22-F012, HPCS MIN FLO to SUPP POOL opens as discharge pressure indicated on PI-R601, HPCS PMP DISCH PRESS rises above 130 psig.
- _____ HPCS Service Water Pump is running at a discharge pressure of 80 psig and a flow of 880 gpm as indicated on P41-PI-R602 SSW Loop C Press and P41-FI-R601 SSW Loop C Flo on H13-P870-5B.
- _____ P41-F011, SSW LOOP C RTN to CLG TWR A, is open (H13-P870-5C)
- _____ HPCS Room Cooler Fan has started (red light ON above HPCS PMP RM CLR, T51-B001, H13-P870-5C)

Standard: Candidate observes the above indications.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 8 of 11

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

Item 9 () Reports the Low Suppression Pool Level is rising and annunciators are clear.

Standard: Candidate reports the Suppression Pool Level annunciators are clear. (H13-P870-4A/10A-C3)

Comments: **CUE the candidate another operator will secure HPCS.**

SAT _____ UNSAT _____

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 9 of 11

TERMINATING CUE(s)

Suppression Pool Water Level has been raised using HPCS pump.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Raise Suppression Pool Water Level using HPCS

JPM No. GJPM-RO-E2205 Rev. 00 Page 10 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):

Suppression Pool Water level is low. Emergency Procedure 3 has been entered on Suppression Pool Level. HPCS and HPCS SSW are in standby.

Initiating Cue(s):

The Control Room Supervisor has directed you to raise Suppression Pool Water level by operating the HPCS Pump to transfer water from the Condensate Storage Tank to the Suppression Pool per the SOI to clear the Suppression Pool Level alarms. Perform a manual startup of HPCS Standby Service Water to support HPCS operation. Use a controlled startup of the HPCS Pump.



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-RO-E2222

Revision: 01

Page: 1 of 10

Rtype:

QA Record

Number of pages _____

Date _____ **Initials** _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

MANUALLY INITIATE ADS ALTERNATE PATH NO PUMP PERMISSIVES

_____ **X** _____ MINOR

_____ MAJOR

REASON FOR REVISION: Update JPM from NRC 3/1998 exam for NRC 2/2004.

THIS DOCUMENT REPLACES GG-1-JPM-RO-E2222.00 .

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____
Reviewer

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: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 Page 2 of 10

Task List No: CRO-E22(1)-002

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

K/A 218000 A2.04 - 4.1/4.2; A4.01 - 4.4/4.4; A4.02 - 4.2/4.2

SAFETY FUNCTION: 3

RO Group 1

SRO Group 1

10CFR 55.45(a) (8)

Time Required for Completion: 5 Minutes (approximate).

Time Critical: YES/NO

Faulted: YES/NO

Simulator

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: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 Page 3 of 10

DISCUSSION

This JPM will evaluate the candidate's ability to manually initiate the Automatic Depressurization System (ADS) as required by the Emergency Procedures. This JPM should be performed in the simulator.

Set up the simulator as follows:

Initialize the simulator to a Power IC.

Place the ADS MANUAL INHIBIT A/B handswitches in INHIBIT.

Insert the following overrides:

p601_19a_e_2 ADS B RHR B/RHR C PERM to **OFF**(2)

p601_18a_e_2 ADS A LPCS/RHR A PERM to **OFF**(2)

di_1b21m629ed P601/19B ADS Logic E MAN Init DEPRS to
NORM

di_1b21m629fd P601/19B ADS Logic F MAN Init DEPRS to
NORM

di_1b21m605d P601/19C MSL D SRV (ADS) B21-F041D to **AUTO**

Insert Malfunction **rr063a @ 2%** Recirc Line break

Allow the simulator to pickup high drywell pressure signals and place the simulator in FREEZE.

Required Material(s):

01 04-1-01-B21-1 Nuclear Boiler System

General Reference(s):

01 04-1-01-B21-1 Nuclear Boiler System

Safety Consideration(s):

01 None

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

Task Title: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 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): (DO NOT READ Standard to candidate.)

Opening 8 ADS/SRVs in an emergency situation. (Accomplished using the SRV handswitches.) B21-F041D will fail to open with the handswitch requiring a NON-ADS valve to be opened.

Initial Condition(s):

The plant has experienced a LOCA on the Feedwater System and the Emergency Procedures are being implemented. Division 1 and 2 Low Pressure ECCS systems have Auto initiated. HPCS and RCIC are out of service.

Initiating Cue(s):

The Control Room Supervisor has determined that it is necessary to perform an emergency depressurization of the reactor vessel. He has directed you to manually initiate the Automatic Depressurization System (ADS). Other operators will perform all other tasks.

Start Time: _____

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

Task Title: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 Page 5 of 10

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

Item 1 () Verify at least one Low Pressure ECCS Pump is running.

Standard: Candidate verifies red indicating light energized for any one of the following pumps: E21-C001 (LPCS pump) or E12-C002A (RHR A pump) or E12-C002B (RHR B pump) or E12-C002C (RHR C pump). (H13-P601)

Comments: Candidate may verify one of the following to satisfy Item 1: ADS A LPCS/RHR A PERM (P601-18A-E2) or ADS B RHR B/RHR C PERM (P601-19A-E2) annunciators OR discharge pressure indication of approximately 350 psig on RHR A or RHR B HX PRESS indicators 1E12-PI-R606A-1 (RHR A) and 1E12-PI-R606B-1 (RHR B). (H13-P601)

Candidate may notice the absence of the ADS permissive annunciators and go straight to opening SRVs with the handswitches bypassing Items 2 & 3. THIS IS ACCEPTABLE.

SAT _____ UNSAT _____

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

Task Title: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 Page 6 of 10

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

Item 2 () Arm and depress the ADS LOGIC A and E MAN INIT pushbuttons on 1H13-P601.

Standard: ADS LOGIC A and E MAN INIT pushbuttons are armed and depressed.

Comments: Completion of JPM Item 2 will not result in satisfactory completion of this task; therefore, this task is not critical. Some candidates may go directly to the SRV handswitches for the ADS valves on H13-P601. This is acceptable.
If asked for guidance from shift supervision, CUE the candidate that the SRO wants eight ADS SRVs opened.

SAT _____ UNSAT _____

Item 3 () Arm and depress the ADS LOGIC B and F MAN INIT pushbuttons on 1H13-P601.

Standard: ADS LOGIC B and F MAN INIT pushbuttons are armed and depressed.

Comments: Completion of JPM Item 2 will not result in satisfactory completion of this task; therefore, this task is not critical. Some candidates may go directly to the SRV handswitches for the ADS valves on H13-P601. This is acceptable.
If asked for guidance from shift supervision, CUE the candidate that the SRO wants eight ADS SRVs opened.

SAT _____ UNSAT _____

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

Task Title: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 Page 7 of 10

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

Item 4 (*) Place the keylocked handswitches for eight
 ADS/SRVs in the OPEN position.

Standard: Keylocked handswitches for at least EIGHT of the
 20 SRVs are in the OPEN position with the valves
 indicating OPEN.

Comments: The candidate should note the failure of B21-F041D
 to open with the handswitch.
 **If asked, CUE the candidate that it is desired to
 have 8 SRVs OPEN.**
 The candidate should select another SRV and open
 the valve with its handswitch.

SAT _____ UNSAT _____

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

Task Title: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 Page 8 of 10

TERMINATING CUE(s)

Eight SRVs are open with their handswitches.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Manually Initiate ADS

JPM No. GJPM-RO-E2222 Rev. 01 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 has experienced a LOCA on the Feedwater System and the Emergency Procedures are being implemented. Division 1 and 2 Low Pressure ECCS systems have Auto initiated. HPCS and RCIC are out of service.

Initiating Cue(s):

The Control Room Supervisor has determined that it is necessary to perform an emergency depressurization of the reactor vessel. He has directed you to manually initiate the Automatic Depressurization System (ADS). Other operators will perform all other tasks.



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-RO-EP031

Revision: 01

Page: 1 of 16

Rtype:

QA Record

Number of pages _____

Date _____ **Initials** _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

DEFEAT RPS LOGIC TRIPS (EP-2 ATTACHMENT 19)

Minor _____X_____

Major _____

REASON FOR REVISION: updated for NRC exam 2/2004.

THIS DOCUMENT REPLACES GG-1-JPM-RO-EP031.00.

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED 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)

Evaluator Signature: _____ Date: _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 3 of 16

DISCUSSION

This JPM will evaluate the candidate's ability to defeat RPS Logic trips during an ATWS. This allows the RPS Scram signal to be reset closing the scram inlet and outlet valves and draining the Scram Discharge Volume. This is Attachment 19 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 19, Defeating RPS Logic Trips
- 02 Flashlight
- 03 Laser Pointer (optional)

General Reference(s):

- 01 Emergency Operating Procedure 05-S-01-EP-2, RPV Control Attachment 19, Defeating RPS Logic Trips

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 RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 4 of 16

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): (DO NOT READ standard to candidate.)

RPS logic trips are defeated using Attachment 19 of EP-2.

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

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 RPS Logic Trips per EP-2 Attachment 19.

Start Time: _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 5 of 16

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 19.

Standard: Candidate obtains a controlled copy of EP-2 Attachment 19.

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 four (4) jumpers.

Standard: Candidate locates jumper kit and verifies there are four (4) 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 RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 6 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 4 (*) Locate Main Control Room Panel H13-P692 Bay B.

Standard: Candidate locates Main Control Room Panel H13-P692 Bay B.

Comments:

SAT _____ UNSAT _____

Item 5 (*) Locates the affected relays C71-K9B (2nd row of agastat relays from top, 2nd relay from left)

Standard: Candidate locates the affected relay C71-K9B (2nd row of agastat relays from top, 2nd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

Item 6 (*) Locates the affected relays C71-K15B (3rd row of agastat relays from top, 3rd relay from left)

Standard: Candidate locates the affected relay C71-K15B (3rd row of agastat relays from top, 3rd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 7 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 7 (*) Install jumper between Terminals T1 on relay C71-K9B and T1 on relay C71-K15B.

Standard: Candidate locates terminals T1 on relay C71-K9B and T1 on relay C71-K15B and indicates the installation of a jumper between the terminals.

Comments: Candidate should point out the terminals.

SAT _____ **UNSAT** _____

Item 8 () 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 RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 8 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 9 (*) Locate Main Control Room Panel H13-P694 Bay B.

Standard: Candidate locates Main Control Room Panel H13-P694 Bay B.

Comments:

SAT _____ UNSAT _____

Item 10 (*) Locates the affected relays C71-K9D (2nd row of agastat relays from top, 2nd relay from left)

Standard: Candidate locates the affected relay C71-K9D (2nd row of agastat relays from top, 2nd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

Item 11 (*) Locates the affected relays C71-K15D (3rd row of agastat relays from top, 2nd relay from left)

Standard: Candidate locates the affected relay C71-K15D (3rd row of agastat relays from top, 2nd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 9 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 12 (*) Install jumper between Terminals T1 on relay C71-K9D and T1 on relay C71-K15D.

Standard: Candidate locates terminals T1 on relay C71-K9D and T1 on relay C71-K15D and indicates the installation of a jumper between the terminals.

Comments: Candidate should point out the terminals.

SAT _____ **UNSAT** _____

Item 13 () 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 RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 10 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 14 (*) Locate Upper Control Room Panel H13-P691 Bay B.

Standard: Candidate locates Upper Control Room Panel H13-P691 Bay B.

Comments:

SAT _____ UNSAT _____

Item 15 (*) Locates the affected relays C71-K9A (2nd row of agastat relays from top, 2nd relay from left)

Standard: Candidate locates the affected relay C71-K9A (2nd row of agastat relays from top, 2nd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

Item 16 (*) Locates the affected relays C71-K15A (3rd row of agastat relays from top, 3rd relay from left)

Standard: Candidate locates the affected relay C71-K15A (3rd row of agastat relays from top, 3rd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 11 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 17 (*) Install jumper between Terminals T1 on relay C71-K9A and T1 on relay C71-K15A.

Standard: Candidate locates terminals T1 on relay C71-K9A and T1 on relay C71-K15A and indicates the installation of a jumper between the terminals.

Comments: Candidate should point out the terminals.

SAT _____ **UNSAT** _____

Item 18 () Initials Alteration Tracking Sheet for Jumper 3 installed.

Standard: Candidate initials Alteration Tracking Sheet for Jumper 3.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 12 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 19 (*) Locate Upper Control Room Panel H13-P693 Bay B.

Standard: Candidate locates Upper Control Room Panel H13-P693 Bay B.

Comments:

SAT _____ UNSAT _____

Item 20 (*) Locates the affected relays C71-K9C (2nd row of agastat relays from top, 2nd relay from left)

Standard: Candidate locates the affected relay C71-K9C (2nd row of agastat relays from top, 2nd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

Item 21 (*) Locates the affected relays C71-K15C (3rd row of agastat relays from top, 2nd relay from left)

Standard: Candidate locates the affected relay C71-K15C (3rd row of agastat relays from top, 2nd relay from left).

Comments: Candidate should point out the relay.

SAT _____ UNSAT _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 13 of 16

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

SEQUENCE OF JUMPER INSTALLATION IS NOT CRITICAL.

Item 22 (*) Install jumper between Terminals T1 on relay C71-K9C and T1 on relay C71-K15C.

Standard: Candidate locates terminals T1 on relay C71-K9C and T1 on relay C71-K15C and indicates the installation of a jumper between the terminals.

Comments: Candidate should point out the terminals.

SAT _____ **UNSAT** _____

Item 23 () Initials Alteration Tracking Sheet for Jumper 4 installed.

Standard: Candidate initials Alteration Tracking Sheet for Jumper 4.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 14 of 16

TERMINATING CUE(s) :

Inform the Control Room Supervisor that EP-2 Attachment 19 has been installed to defeat RPS Logic Trips.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: DEFEAT RPS LOGIC TRIPS (EP-2 ATT. 19)

JPM No. GJPM-RO-EP031 Rev. 01 Page 15 of 16

**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 RPS Logic Trips per EP-2 Attachment 19.



ENTERGY

**GRAND GULF
NUCLEAR STATION**

**JOB PERFORMANCE
MEASURE**

Number: GJPM-RO-N2102

Revision: 00

Page: 1 of 15

Rtype:

QA Record

Number of pages _____

Date _____ **Initials** _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

**SHIFT FROM LONG CYCLE CLEANUP TO STARTUP LEVEL
CONTROL
ALTERNATE PATH
S/U LEVEL CONTROL VALVE FAILURE**

REASON FOR REVISION: New JPM.

THIS DOCUMENT REPLACES N/A

REVIEW / APPROVAL:

PREPARED BY: _____ **DATE:** _____

REVIEWED BY: _____ **DATE:** _____
Reviewer

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: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 2 of 15

Task List No: CRO-N21-025 & N19-010

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

K/A 259001 A4.04 - 3.1/2.9; A4.01 - 3.6/3.5; A4.05 - 4.0/3.9;
A2.07 - 3.7/3.8; A3.03 - 3.3/3.2; A3.04 - 3.8/3.7
259002 A1.05 - 2.9/2.9; A4.03 - 3.8/3.6 2.1.30 - 3.9/3.4

SAFETY FUNCTION: 2

RO Group 1

SRO Group 1

10CFR 55.45(a) (3; 4; & 8)

Time Required for Completion: 25 Minutes (approximate).

Time Critical: YES/NO

Faulted: YES/NO

Simulator

Low Power

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: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 3 of 15

DISCUSSION

This JPM will evaluate the candidate's ability to shift the Feedwater and Condensate System from Long Cycle Cleanup to the Startup Level Control Valve then respond to a failure of the Startup level Control Valve open. This JPM should be performed in the simulator.

Set up the simulator as follows:

Initialize the simulator to Startup IC with reactor pressure at 0 psig.
Place Condensate and Feedwater on Long Cycle Cleanup.
Insert malfunction **fw124 @ 100%** Startup Level Control Valve to 100%
Adjust IRMs to Range 10.

Place the simulator in FREEZE.

Required Material(s):

- 01 03-1-01-1 Cold Shutdown to Generator Carrying Minimum Load
- 02 05-1-02-V-6 Feedwater Failure Max Demand

General Reference(s):

- 01 03-1-01-1 Cold Shutdown to Generator Carrying Minimum Load
- 02 05-1-02-V-6 Feedwater Failure Max Demand

Safety Consideration(s):

- 01 None
-

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 4 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): (DO NOT READ Standard to candidate.)

Condensate and Feedwater are aligned to feed the reactor utilizing N21-F040 with the Startup Level Control Valve N21-F513 isolated via N21-F001.

Initial Condition(s):

The plant is in Startup with Reactor pressure at 0 psig. Condensate and Feedwater are in Long Cycle Cleanup. Plant Chemistry has reported Condensate and Feedwater iron content is <50 ppb iron and water chemistry supports feeding the reactor vessel. Feedwater and Condensate are aligned with 'A' Condensate Pump in operation. Main Condenser Hotwell temperature is 95 degrees F.

Initiating Cue(s):

The Control Room Supervisor has directed you to shift the Condensate and Feedwater System from Long Cycle Cleanup to Startup Level Control with Startup Level Control in Automatic at +36 inches per IOI-1 section 6.2.6. Other operators will perform all other tasks.

Start Time: _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 5 of 15

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

Item 1 () Obtain a controlled copy of IOI-1 03-1-01-1 Cold Shutdown to Generator carrying minimum load.

Standard: Candidate obtains a controlled copy of IOI-1 03-1-01-1 Cold Shutdown to Generator carrying minimum load.

Comments:

SAT _____ **UNSAT** _____

Item 2 () Check Condensate Storage Tank (CST) water level is sufficient to have a 2 foot level drop.

Standard: Candidate observes CST water level on H13-P870 panel and determines level is sufficient to support Startup Level Control operation.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 6 of 15

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

Item 3 (*) Close N21-F510 FW CU RECIRC VLV by placing its controller to 0% on 1H13-P680 section 1B.

Standard: Candidate closes N21-F510 FW CU RECIRC VLV by placing its controller to 0%.

Comments: If asked, cue the candidate as Radwaste the Condensate Precoat Filters and Deep Bed Demineralizers are being controlled.

SAT _____ UNSAT _____

Item 4 () Verify N23-F054, HTR DRN PMP COMMON DISCH VLV is closed.

Standard: Candidate contacts the Turbine Building Operator to verify N23-F054, HTR DRN PMP COMMON DISCH VLV is closed.

Comments: Cue as the Turbine Building Operator, N23-F054, HTR DRN PMP COMMON DISCH VLV is closed.

SAT _____ UNSAT _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 7 of 15

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

Item 5 () Open N23-F078, HEATER DRAIN PMPS DISCHARGE HDR MOV using its local handswitch.

Standard: Candidate contacts the Turbine Building Operator to open N23-F078, HEATER DRAIN PMPS DISCHARGE HDR MOV using its local handswitch.

Comments: **Cue as the Turbine Building Operator, N23-F078, HEATER DRAIN PMPS DISCHARGE HDR MOV is open.**

SAT _____ **UNSAT** _____

Item 6 (*) Close N21-F003 FW CLEANUP RECIRC LINE ISOL on 1H13-P870 section 5C.

Standard: Candidate closes N21-F003 FW CLEANUP RECIRC LINE ISOL.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 8 of 15

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

Item 7 () Open N21-F001, SU FCV OUTL ISOL VLV on H13-P870 section 5C.

Standard: Candidate opens N21-F001, SU FCV OUTL ISOL VLV.

Comments:

SAT _____ UNSAT _____

Item 8 (*) Close N21-F040 FW SU BYP VLV on 1H13-P680 section 1C.

Standard: Candidate closes N21-F040 FW SU BYP VLV.

Comments:

SAT _____ UNSAT _____

Item 9 () Verify RX WTR LVL SU CONT is in MAN and at 0% output on H13-P680 section 1B.

Standard: Candidate verifies RX WTR LVL SU CONT is in MAN and at 0% output.

Comments:

SAT _____ UNSAT _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 9 of 15

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

Item 10 (*) Open B21-F065A and B21-F065B, FW INL SHUTOFF VALVES on H13-P680 section 2C.

Standard: Candidate opens B21-F065A and B21-F065B, FW INL SHUTOFF VALVES.

Comments:

SAT _____ **UNSAT** _____

Item 11 () Using the RX WTR LVL SU CONT, C34-R602, maintain reactor water level between 32 - 40 inches by adjusting ↑ and ↓ while maintaining the RX WTR LVL HI/LO annunciator clear.

Standard: Candidate adjusts RX WTR LVL SU CONT, C34-R602, to maintain reactor water level between 32 - 40 inches by adjusting ↑ and ↓ pushbuttons while maintaining the RX WTR LVL HI/LO annunciator clear.

Comments: Candidate may not have to do anything at this point.

SAT _____ **UNSAT** _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 10 of 15

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

Item 12 (*) Place C34-R602, RX WTR LVL SU CONT in AUTO.

Standard: Candidate places C34-R602, RX WTR LVL SU CONT in AUTO.

Comments:

SAT _____ UNSAT _____

SIMULATOR OPERATOR ACTIVATE TRIGGER 1.

Item 13 (*) Using the RX WTR LVL SU CONT, C34-R602 in AUTO, adjust SET ↑ and ↓ pushbuttons slowly to adjust the setpoint to +36 inches while maintaining the RX WTR LVL HI/LO annunciator clear.

Standard: Candidate adjusts RX WTR LVL SU CONT, C34-R602 in AUTO, to adjust the setpoint to +36 inches while maintaining the RX WTR LVL HI/LO annunciator clear.

The malfunction will cause N21-F513 Startup Level Control Valve to fail full open.

Comments: The candidate should announce the failure and take actions to isolate the SU LVL Control valve per ONEP 05-1-02-V-6.

The candidate may attempt to take manual control of N21-F513 and close the valve. This will not function.

SAT _____ UNSAT _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 11 of 15

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

Item 14 (*) Secure operating Condensate Pump.

Standard: Candidate stops the operating Condensate Pump.

Comments: **CUE Stop the evolution until I&C has the opportunity to investigate the failure.**

If this step is performed the JPM stops here and items 15, 16, 17 are deleted and non-critical.

SAT _____ **UNSAT** _____

Item 15 () Shift the Startup level control valve N21-F513 to manual and attempt to close the valve.

Standard: Candidate attempts to take manual control of the Startup level control valve and close the valve.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 12 of 15

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

Item 16 (*) Close N21-F001, SU FCV OUTL ISOL VLV on H13-P870 section 5C.

Standard: Candidate closes N21-F001, SU FCV OUTL ISOL VLV.

Comments: If Item 14 is performed this item is NOT critical.

SAT _____ **UNSAT** _____

Item 17 (*) Throttles N21-F040 FW SU BYP VLV on 1H13-P680 section 1C to maintain level.

Standard: Candidate throttles N21-F040 FW SU BYP VLV.

Comments: **EVALUATOR NOTE:** A follow up question may be needed to verify method of level control for the throttling of N21-F040 since Reactor level will be high.

If Item 14 is performed this item is NOT critical.

SAT _____ **UNSAT** _____

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 Page 13 of 15

TERMINATING CUE(s)

Condensate Pumps secured with the lineup in place OR Condensate and Feedwater are aligned to feed the reactor utilizing N21-F040 with the Startup Level Control Valve N21-F513 isolated via N21-F001.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: Shift from Long Cycle Cleanup to Startup Level Control

JPM No. GJPM-RO-N2102 Rev. 00 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 Startup with Reactor pressure at 0 psig. Condensate and Feedwater are in Long Cycle Cleanup. Plant Chemistry has reported Condensate and Feedwater iron content is <50 ppb iron and water chemistry supports feeding the reactor vessel. Feedwater and Condensate are aligned with 'A' Condensate Pump in operation. Main Condenser Hotwell temperature is 95 degrees F.

Initiating Cue(s):

The Control Room Supervisor has directed you to shift the Condensate and Feedwater System from Long Cycle Cleanup to Startup Level Control with Startup Level Control in Automatic at +36 inches per IOI-1 section 6.2.6. Other operators will perform all other tasks.



ENTERGY

GRAND GULF
NUCLEAR STATION

JOB PERFORMANCE
MEASURE

Number: GJPM-RO-R2731

Revision: 00

Page: 1 of 17

Rtype:

QA Record

Number of pages _____

Date _____ Initials _____

TRAINING PROGRAM:

OPERATOR TRAINING

TITLE:

DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 AND 21

REASON FOR REVISION: MINOR _____ **x** _____ MAJOR
MODIFIED JPM

THIS DOCUMENT REPLACES N/A

REVIEW / APPROVAL:

PREPARED BY: _____ DATE: _____

REVIEWED 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: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 2 of 17

Task List No: CRO-R20/27-003; R20/27-006; R20/27-007

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

K/A 262001 A4.01 - 3.4/3.7; A4.02 - 3.4/3.4; A4.04 - 3.6/3.7
 A4.05 - 3.3/3.3
 2.1.30 - 3.9/3.4; 2.1.31 - 4.2/3.9

SAFETY FUNCTION - 6

RO GROUP 2

SRO GROUP 1

10CFR55.45(a) 8

Time Required for Completion: 30 Minutes (approximate).

Time Critical: YES/NO

Faulted JPM: YES/NO

SIMULATOR

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: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 3 of 17

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. Cross tie loads on the Service Transformers such that all loads are on Service Transformer 11.

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: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 4 of 17

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): (DO NOT READ standard to candidate.)

Electrical buses 11HD, 14AE, 16AB, and 17AC are supplied from Service Transformer 21.

Initial Condition(s):

Entergy - Mississippi workers have completed work on Service Transformer 21. The Electrical Distribution System is being supplied from Service Transformer 11. Service Transformer 21 has been returned to service and the 34.5 KV Switchyard has been aligned in the preferred lineup.

Initiating Cue(s):

The Control Room Supervisor has directed you to establish a preferred electrical lineup for the electrical distribution system. 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: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 5 of 17

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

BUSES MAY BE TRANSFERRED IN ANY ORDER

The candidate should review the SOIs and establish that 11HD, 14AE, 16AB and 17AC should be transferred to ST-21.

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 12B energized up to bus feeder breaker 252-1108.

Standard: Candidate verifies Transformer BOP 12B energized by observing the following indications on H13-P807:

_____ J5206 FDR to XFMR ST-21 closed
_____ 552-2105 XFMR ST-21 FDR to Bus 21R closed
_____ 2R25-R603 indicates voltage on bus 21R
_____ 552-2102 21R FDR to Bus 13R closed
_____ 589-2102D disconnect BOP XFMR 12B closed
_____ ENEGIZED Status light to 252-1108 is ON.

Comments: **May be checked in any order.**
 If asked, cue the candidate breaker 252-1108 has been verified racked in.

SAT UNSAT

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 6 of 17

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

Item 3 **(*)** Close 252-1108 XFMR 12B FDR to Bus 11HD.

Standard: Candidate closes breaker 252-1108 and observes red light is illuminated.

Comments:

SAT _____ **UNSAT** _____

Item 4 **()** Observes 252-1101 XFMR 11B FDR to Bus 11HD opens.

Standard: Candidate observes breaker 252-1101 opens by observing green light illuminated.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 7 of 17

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 12A energized up to bus feeder breaker 152-1402.

Standard: Candidate verifies Transformer BOP 12A energized by observing the following indications on H13-P807:

_____ J5206 FDR to XFMR ST-21 closed
_____ 552-2105 XFMR ST-21 FDR to Bus 21R closed
_____ 2R25-R603 indicates voltage on bus 21R
_____ 552-2102 21R FDR to Bus 13R closed
_____ 589-1102D disconnect BOP XFMR 12A closed
_____ ENEGIZED Status light to 152-1402 is ON.

Comments: **May be checked in any order.**
 If asked, cue the candidate breaker 152-1402 has been verified racked in.

SAT UNSAT

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 8 of 17

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

Item 7 **(*)** Close 152-1402 XFMR 12A FDR to Bus 14AE.

Standard: Candidate closes breaker 152-1402 and observes red light is illuminated.

Comments:

SAT _____ **UNSAT** _____

Item 8 **()** Observes 152-1415 XFMR 11A FDR to Bus 14AE opens.

Standard: Candidate observes breaker 152-1415 opens by observing green light illuminated.

Comments:

SAT _____ **UNSAT** _____

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 9 of 17

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 21 energized up to bus feeder breaker 152-1614.

Standard: Candidate verifies Transformer ESF 21 energized by observing the following indications on H13-P807:

_____ J5206 FDR to XFMR ST-21 closed
_____ 552-2105 XFMR ST-21 FDR to Bus 21R closed
_____ 2R25-R603 indicates voltage on bus 21R
_____ 552-2104 21R FDR to XFMR ESF 21 closed
_____ 152-2901 FDR FRM XFMR ESF 21 closed
_____ ENEGIZED Status light to 152-1614 is ON (H13-P864).

Comments: **May be checked in any order.**
 If asked, cue the candidate breaker 152-1614 has been verified racked in.

SAT UNSAT

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 10 of 17

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

Item 11 **(*)** Turn on the Sync Switch for breaker 152-1614 BUS 16AB FDR FRM XFMR ESF 21 source being transferred to.

Standard: Candidate turns on the Sync Switch for breaker 152-1614 and observes the sync scope needle is at 12o'clock \pm 10°.

Comments:

SAT **UNSAT**

Item 12 **(*)** Close 152-1614 BUS 16AB FDR FRM XFMR ESF 21.

Standard: Candidate closes breaker 152-1614 and observes red light is illuminated.

Comments:

SAT **UNSAT**

Item 13 **()** Observes 152-1601 BUS 16AB FDR FM ESF XFMR 11 opens.

Standard: Candidate observes breaker 152-1601 opens by observing green light illuminated.

Comments:

SAT **UNSAT**

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 11 of 17

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

Item 14 **()** Turn off the Sync Switch for breaker 152-1614 BUS 16AB FDR FRM XFMR ESF 21.

Standard: Candidate turns of the Sync Switch for breaker 152-1614.

Comments:

SAT **UNSAT**

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 12 of 17

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

BUSES MAY BE TRANSFERRED IN ANY ORDER

Item 15 () 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 16 () Verify Transformer ESF 21 energized up to bus feeder breaker 152-1705.

Standard: Candidate verifies Transformer ESF 21 energized by observing the following indications on H13-P807:

 J5206 FDR to XFMR ST-21 closed
 552-2105 XFMR ST-21 FDR to Bus 21R closed
 2R25-R603 indicates voltage on bus 21R
 552-2104 21R FDR to XFMR ESF 21 closed
 152-2902 FDR FRM XFMR ESF 21 closed
 ENEGIZED Status light to 152-1705 is ON (H13-P601).

Comments: **May be checked in any order.**
If asked, cue the candidate breaker 152-1705 has been verified racked in.

SAT UNSAT

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 13 of 17

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

Item 17 **(*)** Turn on the Sync Switch for breaker 152-1705 17AC FDR FRM XFMR ESF 21 source being transferred to.

Standard: Candidate turns on the Sync Switch for breaker 152-1705 and observes the sync scope needle is at 12o'clock \pm 10°.

Comments:

SAT **UNSAT**

Item 18 **(*)** Close 152-1705 17AC FDR FM ESF 21.

Standard: Candidate closes breaker 152-1705 and observes red light is illuminated.

Comments:

SAT **UNSAT**

Item 19 **()** Observes 152-1706 17AC FDR FM ESF 11 opens.

Standard: Candidate observes breaker 152-1706 opens by observing green light illuminated.

Comments:

Candidate may take the handswitch for Breaker 152-1706 to trip to clear annunciators.

SAT **UNSAT**

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 14 of 17

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

Item 20 () Turn off the Sync Switch for breaker 152-1705 17AC
FDR FRM XFMR ESF 21.

Standard: Candidate turns off the Sync Switch for breaker
152-1705.

Comments:

SAT **UNSAT**

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 15 of 17

TERMINATING CUE(s)

Electrical buses 11HD, 14AE, 16AB, and 17AC are supplied from Service Transformer 21.

STOP TIME: _____

OVERALL COMMENTS:

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

Task Title: DISTRIBUTE LOADS BETWEEN SERVICE TRANSFORMERS 11 & 21

JPM No. GJPM-RO-R2731 Rev. 00 Page 16 of 17

**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 have completed work on Service Transformer 21. The Electrical Distribution System is being supplied from Service Transformer 11. Service Transformer 21 has been returned to service and the 34.5 KV Switchyard has been aligned in the preferred lineup.

Initiating Cue(s):

The Control Room Supervisor has directed you to establish a preferred electrical lineup for the electrical distribution system. The Site Power Loop and Bus 28AG will be transferred by the Non-Licensed Operators in the field.

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

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

1. Complete a shift of Reactor Recirculation Pumps to Fast Speed.
2. Take actions in response to a Control Rod Drift and complete actions of the CRD Malfunctions ONEP.
3. Respond to a trip of RPS 'A' MG set and the implications of having both RPS buses on Alternate Source of power.
4. Make determination of *multiple* Control Rod Drifts following insertion and disarming CRD and taking actions for multiple Control Rod Drifts per CRD Malfunctions ONEP.
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. Take actions for a failure of Standby Liquid Control to inject to the Reactor during an ATWS.

Initial Conditions: Reactor Power is at 34 %.

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

CCW Pump 'B' is tagged out of service for pump seal replacement

RPS 'B' Motor Generator is out of service for EPA circuit breaker replacement, RPS 'B' is on its Alternate Source.

Service Air Compressor 'B' is in service with Service Air Compressor 'A' tagged out of service for oil replacement.

Appropriate clearances and LCOs are written.

Turnover: The plant is operating at 34% power. Reactor Recirculation Pump 'A' has been shifted to Fast speed. Continue operations to shift Reactor Recirculation Pump 'B' to Fast speed at step 5.11.4 of IOI-2. 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	2, 3, 4, 5, 6, 8	202002 A4.07; A4.08; A4.09 202001 A4.01; A4.02 A1.02; A1.07	R (RO) N (SS)	Shift Reactor Recirculation Pump 'B' to fast speed. (SOI 04-1-01-B33-1 section 4.2)
2	3, 4, 5, 6, 8	2.4.49; 2.4.4 201005 A2.13; A3.0; A4.01 201003 A2.03; A3.01	C(RO)	Respond to Control Rod Drift. Perform actions per ONEP 05-1-02-IV-1. Isolate/valve out of service the affected control rod.
3	6, 8	2.1.32; 2.1.33 212000 A2.01; K3.05	C(ALL)	Respond to trip of RPS 'A' Motor Generator trip. Complete Technical Specification/procedural determinations.
4	2, 3, 4, 5, 6, 8	2.4.4; 2.4.49 201005 A2.13; A3.0; A4.01 201003 A2.03; A3.01	C(RO)	Recognize and respond to <i>multiple</i> control rod drifts and insert a manual Reactor SCRAM per ONEP 05-1-02-IV-1.
5	3, 4, 5, 6, 7, 8	2.4.4; 2.4.49 295037 EA1.0; EA2.0	M (ALL)	Upon Reactor Scram recognize the failure of all control rods to fully insert and take actions per EOPs for ATWS.
	3, 4, 6, 7, 8	241000 A2.03 239002 A4.01; A4.05	C (BOP)	Recognize the failure of Main Steam Bypass Valves to open and control reactor pressure using SRVs within specified band.
	3, 6, 8	212000 A2.02; A4.14; A4.16; A4.17 295037 EA1.01; EA1.08		Recognize the loss of both Alternate Divisions of RPS EPAs when Low Pressure ECCS is manually initiated and restore power to RPS to allow insertion of control rods.
	3, 4, 6, 8	295037 EA1.04; EA1.10 211000 A2.01	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.

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

All events include 55.45(a) 12 & 13

K/A 2.1.30; 2.1.31; 2.4.45; 2.4.46; 2.4.47; and 2.4.48

Critical Tasks

- Insert manual scram on *multiple* Control Rod Drifts.
- 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 *before* 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**

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

1. Raise Reactor Power by withdrawing control rods.
2. Perform operator actions for a stuck control rod per ONEP.
3. Startup 2nd Reactor Feed Pump.
4. Respond to a failure of ESF UPS bus 1Y89 (inverter 1Y87).
5. Respond to a momentary loss of Grid 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 2 ECCS to initiate.
8. With a small break LOCA 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 three element Master Level Control.

INOPERABLE Equipment

APRM 'H' is INOP due to a failed power supply card
 RHR 'C' is tagged out of service for motor oil replacement
 CCW Pump 'B' is tagged out of service for pump seal replacement
 RPS 'B' Motor Generator is out of service for EPA circuit breaker replacement, RPS 'B' is on its Alternate Source.
Service Air Compressor 'A' is in service with Service Air Compressor 'B' is in service with Service Air Compressor 'A' tagged out of service for oil replacement.

Appropriate clearances and LCOs are written.

Turnover: 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	2, 3, 4, 5, 6	201005 A3.0; A4.0	R(RO)	Withdraw control rods to raise power. (Control Rod Pull Sheet & IOI 03-1-01-2)
2	4, 5, 6, 8	201005 A3.0; A4.0 201003 A2.01 201001 A4.03; A4.04 2.4.4; 2.4.49	C (RO, BOP)	Control Rod 24-49 is stuck, un-stick control rod per ONEP. (ONEP 05-1-02-IV-1)
3	2, 4, 5, 6, 8	259001 A4.02; A4.01; A4.04; A4.05; A4.07 259002 A4.01; A4.02; A4.03; A4.06	N (RO)	Startup 2 nd Reactor Feed Pump (SOI 04-1-01-N21-1)
4	3, 4, 8	2.1.33; 2.2.22 262002 A1.01; K3.0	C (RO, BOP)	Respond to a trip of ESF UPS Bus 1Y89 and Inverter 1Y87. (Multiple SOIs and ARIs)
5	3, 5, 6, 8	295003 AA1.0; AA2.0 262001 A1.0; A2.0; A3.0; A4.0 2.4.4; 2.4.49	M (ALL)	Respond to momentary Loss of Grid. (ONEP 05-1-02-I-4 & SOI Various) (GGNS Event 4/2003) Single Control Rod Stuck withdrawn.
	3, 4, 5, 6, 7, 8, 11	295024 EA1.0; EA2.0 295031 EA1.0; EA2.0	C (ALL)	Recirc Line 'B' ruptures in the Drywell with leakage from the reactor.
	3, 4, 5, 8	2.1.2 295024 EA1.0	I (BOP)	Failure of Division 2 ECCS to automatically initiate on High Drywell Pressure
	3, 5, 7	206002 A1.01; A2.03; A2.08; A3.01; A4.03	C (BOP)	HPCS injection valve failure to open on initiation

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

All events include 55.45(a) 12 & 13
K/A 2.1.30; 2.1.31; 2.4.45; 2.4.46; 2.4.47; 2.4.48

Critical Tasks

- Recognize failure of Division 2 to initiate and manually initiate Division 2
- Restore power and reestablish feed through Feedwater or RCIC or lower reactor pressure to allow injection from low pressure systems
- Upon receipt of second control rod drift, manually scram the reactor.

Facility: **GRAND GULF NUCLEAR STATION** Scenario No.: **3** Op-Test No.: **Day 2**

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

1. Start and Operate Division II Diesel Generator in parallel with the grid.
2. Take actions in response to a Low Pressure Feedwater Heater 3B Tube leak. Complete actions of the Loss of Feedwater Heating ONEP.
3. Take actions in response to a trip of Division II Diesel Generator
4. Cross tie BOP buses in response to a loss of Service Transformer 21 and restore power to ESF bus 16AB from an alternate source.
5. Take actions per the EOPs in response to a LOCA with degraded ECCS systems.

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

CCW Pump 'B' is tagged out of service for pump seal replacement

RPS 'B' Motor Generator is out of service for EPA circuit breaker replacement, RPS 'B' is on its Alternate Source. *Service Air Compressor 'B' is in service with Service Sir Compressor 'A' tagged out of service for oil replacement.*

Appropriate clearances and LCOs are written.

Turnover: The plant is operating at 100% power. Division II Diesel Generator is to be operated per the SOI for Engineering data collection. Standby Service Water 'B' has already been started in preparation for the diesel run. There are scattered thundershowers reported in the Tensas Parish area.

Scenario 3 Day 2 (Continued)

Event No.	10CFR 55.45(a)	K/A	Event Type*	Event Description
1	2, 6, 8	264000 A.2.01; A4.04; A4.05	N (BOP)	Start DG 12 and operate in parallel with the grid. (SOI 04-1-01-P75-1 section 4.2)
2	2, 3, 4, 5, 6	2.4.49 295014 AK2.06; AA1.07; AA2.03	R/C (RO) C (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.
3	3, 4, 5	2.1.33; 2.2.22 264000 A2.06	C (BOP)	Respond to a trip of DG 12. (ARI 04-1-02-1H13-P864 and Tech Specs)
4	2, 3, 4, 5, 6, 7, 8	262001 A1.02; A1.05; A2.07; A3.03; A3.04; A4.01 295003 AA1.01; AA1.02; AA1.03; AA2.02; AA2.04	M (ALL)	Respond to a lockout of Service Transformer 21 and crosstie buses to Service Transformer 11 and restore power to ESF bus 16AB. Restore loads to service per ONEP 05-1-02-I-4 and various SOIs.
5	4, 5, 6, 8, 11	295006 AA1.0; AA2.0 295009 AA1.0; AA2.01 295031 EA1.0; EA2.0	M (ALL)	Recognize loss of reactor inventory and LOCA conditions.
	5, 6, 7, 8	209002 A2.01; A3.0 217000 A2.10; A2.08; A3.0 259001 A4.02 256000 A4.01 203000 A3.08; A4.08	C (BOP)	Recognize degraded high pressure injection systems and take actions to makeup to the reactor.

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

All events include 55.45(a) 12 & 13
K/A 2.1.30; 2.1.31; A2.4.45; A2.4.46; A2.4.47; and A2.4.48

Critical Tasks

- Restore power to buses from alternate sources of power.
- Align systems as necessary to inject water into the RPV to maintain adequate core cooling or take actions to reduce reactor pressure to allow injection from low pressure systems.

Facility: **GRAND GULF NUCLEAR STATION** Scenario No.: **4** Op-Test No.: **BACKUP**

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

1. Raise Reactor Power by withdrawing control rods.
2. Start 2nd Circulating Water Pump.
3. Respond to an EHC failure.
4. Respond to a loss of Main Condenser Vacuum.
5. Respond to an automatic and manual scram function failure ATWS ARI/RPT will insert control rods with two control rods stuck withdrawn.
6. Respond to a steam leak in the Auxiliary Building Steam Tunnel and a failure of Group 1 to isolate.
7. Take actions per the EOPs in response to two stuck control rods following a Reactor Scram.
8. 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 45 % 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
 CCW Pump 'B' is tagged out of service for pump seal replacement
 RPS 'B' Motor Generator is out of service for EPA circuit breaker replacement, RPS 'B' is on its Alternate Source.
Service Air Compressor 'B' is in service with Service Sir Compressor 'A' tagged out of service for oil replacement.

Appropriate clearances and LCOs are written.

Turnover: Continue power ascension. There are scattered thundershowers reported in the Tensas Parish area.

Scenario 4 BACKUP (Continued)

Event No.	10CFR 55.45(a)	K/A	Event Type*	Event Description
1	2, 3, 5, 6, 8	201005 A3.0; A4.0	R (RO)	Raise reactor power by withdrawing control rods. (IOI 03-1-01-2 and Control Rod Movement Sheet)
2	2, 6, 8	2.1.30; 2.1.31	N (BOP)	Start 2nd Circulating Water. (SOI 04-1-01-N71-1)
3	3, 5, 8	241000 A1.11; A2.06	C (RO)	Respond to an EHC leak. (ARI 04-1-02-1H13-P680)
4	3, 4, 5, 6, 8	241000 A2.07; A3.08; A3.10 239001 A2.08 295002 AA1.0; AA2.0	C (BOP)	Respond to a lowering Main Condenser Vacuum. (ONEP 05-1-02-V-8)
5	2, 3, 4, 5, 6, 8	295006 AA1.01; AA1.07; AA2.01; AA2.05 295037 EA1.03	C (RO)	Recognize a failure to automatically scram and manually scram the reactor.
6	3, 4, 6, 8, 10	239001 A2.03; A2.07; A2.11; A2.12	M (ALL)	Recognize and respond to a steam leak in the Auxiliary Building Steam Tunnel.
	3, 4, 6, 8, 10	239001 A3.01 223002 A1.02; A4.02	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, 5, 6	295032 EA1.01; EA1.05; EA2.01; EA2.03		Recognize the failure of a single Main Steam line to isolate and take actions for mitigation of the leak.
	2, 3, 4, 5, 6, 8	295015 AA1.01; AA1.02; AA2.01; AA2.02	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.

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

All events include 55.45(a) 12 & 13
K/A 2.1.30; 2.1.31; 2.4.45; 2.4.46; 2.4.47; and 2.4.48

Critical Tasks

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