

CLINTON POWER STATION**Job Performance Measure**

Determine the effects of a Failed Relay

JPM Number: 013.01

Revision Number: 01

Date: 12/09/03

Developed By: T. Pickley 12/09/03
Instructor Date

Validated By: T. Coe 12/12/03
SME or Instructor Date

Review By: P. Ryan 12/15/03
Operations Representative Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor Date

SME/Instructor Date

SME/Instructor Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

Revision Record (Summary)

1. **Revision 00,** This is a new JPM
2. **Revision 01,** Incorporated NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

Operator's Name: _____ SSN: _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title/Number: Determine the effect of Relay 1UAY-CC516H1 coil failure
Task Number and Title: 0.13 Read mechanical and electrical prints

Suggested Testing Environment: Any

Actual Testing Environment: ☒ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Perform **Faulted:** ☐ No
☒ **Alternate Path:** ☐ No

Time Critical: ☐ No

Estimated Time to Complete: 20 minutes **Actual Time Used:** _____ minutes

References:

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM,
and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

Not Applicable

TASK STANDARDS:

Determines that 1IA005 and 1IA008 will not close on a Level 1 signal.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

E02-1CC99 Sh 16
E02-1IA99 Sh 5

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS:

The plant is operating at rated power in the middle of the operating cycle, when relay 1UAY-CC516H1 relay coil opens.

INITIATING CUE:

Use electrical prints to determine the affect(s) of this component failure on system operation during normal and accident conditions.
Brief the CRS on your findings.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

=====

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

=====

PERFORMANCE STEPS

1 Candidate checks for current revision of prints

Standard Candidate determines current revision using passport

CUE After candidate determines revision for one print, tell him all other prints are current.

Comments SAT UNSAT Comment Number

***2 Candidate identifies print # E02-1CC99-016 shows the relay.**

Standard Candidate identifies print # E02-1CC99-016.

CUE

Comments SAT UNSAT Comment Number

3 Candidate identifies only one active contact on effected relay.

Standard Candidate identifies only one active contact.

CUE

Comments SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

***4** **Candidate goes to print # E02-1IA99-005.**

Standard **Candidate goes to print # E02-1IA99-005.**

CUE

Comments

SAT UNSAT Comment Number

***5** **Candidate identifies relay 1UAY-IA505B is failed energized by the failure of relay 1UAY-CC516H1.**

Standard **Candidate identifies relay 1UAY-IA505B is failed energized.**

CUE

Comments

SAT UNSAT Comment Number

6 **Candidate identifies 2 contacts are active on relay 1UAY-IA505B (and a seal-in contact).**

Standard **Candidate identifies 2 contacts are active on relay 1UAY-IA505B.**

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

***7** **Candidate identifies that the 2 contacts will be closed and will not open on Level 1.**

Standard **Candidate identifies that the 2 will not open on Level 1.**

CUE

Comments

SAT UNSAT Comment Number

***8** **Candidate identifies that valves 1IA005 and 1IA008 will not auto close on a Level 1.**

Standard **Candidate states that that 1IA005 and 1IA008 will not close on a Level 1 signal.**

CUE

Comments

SAT UNSAT Comment Number

9 Candidate determines system impact.

Standard Candidate states that there is no impact on system operation during normal operation.

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

STOP TIME: _____

TERMINATING CUES:

Candidate determines impact of failed relay.

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
Generic	2.1.24	2.8	3.1

Ability to obtain and interpret station electrical and mechanical drawings.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 013.01

REVISION: 01

INITIAL CONDITIONS:

The plant is operating at rated power in the middle of the operating cycle, when relay 1UAY-CC516H1 relay coil opens.

INITIATING CUE:

Use electrical prints to determine the affect(s) of this component failure on system operation during normal and accident conditions.
Brief the CRS on your findings.

CLINTON POWER STATION**Job Performance Measure**

Prepare an ENW Form

JPM Number: 1405.0401

Revision Number: 02

Date: 12/09/03

Developed By: T. Pickley 12/25/03
Instructor **Date**

Validated By: T. Coe 12/12/03
SME or Instructor **Date**

Review By: P. K. Ryan 12/15/03
Operations Representative **Date**

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

Revision Record (Summary)

1. **Revision 00,** This is a new JPM
2. **Revision 01,** Revised for new format and procedure
3. **Revision 02,** Incorporated NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

Operator's Name: _____ SSN: _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title/Number: 1405.0401, Prepare an ENW Form

Revision Number: 02

Task Number and Title: 140504.01, Apply the administrative requirements for NRC
NOTIFICATION REQUIREMENTS.

Suggested Testing Environment: Any

Actual Testing Environment: ☒ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Faulted: ☐ No
Alternate Path: ☐ No

Time Critical: ☐ No

Estimated Time to Complete: 12 minutes **Actual Time Used:** _____ minutes

References:

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM,
and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

None

TASK STANDARDS:

ENW Form completed for an ALERT and NRC informed within 1 hour of initiation of event.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

EP-AA-114r4, NOTIFICATIONS

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

Provide the operator with the following:

- EP-AA-114r4, NOTIFICATIONS
- EP-MW-114-100, MWROG Offsite Notifications
- NARS form (completed)
- ENW Form (blank)
- Control Room Logs
- Initial Conditions And Initiating Cue

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

INITIAL CONDITIONS

The plant was at 90% power when an event occurred.

INITIATING CUE:

You are called to the MCR to complete and send an ENW form to the NRC within 1 hour of the event.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

1. Facility or Organization

Standard CPS

CUE

Comments

SAT UNSAT Comment Number

2. Unit

Standard 1

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

3. Callers Name

Standard As applicable

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

4. Callback #

Standard (217) 935-9812

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

5. EVENT TIME

Standard Present time minus 15 minutes

CUE

Comments Time in logs is recorded as T-## minutes.

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

***6. Power/Mode before**

Standard 90%/1

CUE

Comments Information obtained from logs/cue.

SAT UNSAT Comment Number

***7. Power/mode after**

Standard 0%/3

CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

***8. Classification**

Standard ALERT

CUE

Comments Information obtained from logs/NARS form.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

9. Description as follows:

Standard RCS leakage into Drywell in excess of 50 gpm, cause is unknown, currently
CUE in mode 3 plan to cool down to mode 4

Comments Information obtained from logs.

SAT UNSAT Comment Number

10. Notifications to:

Standard NRC Resident - YES
State - YES
Local - YES
Other Agencies - YES
CUE Media/Press - YES

Comments Information obtained from logs.

SAT UNSAT Comment Number

11. Anything unusual or not understood

Standard No
CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

12. All systems function as required

Standard Yes

CUE

Comments Information obtained from logs.

SAT	UNSAT	Comment Number
-----	-------	----------------

13. Mode of operation until corrected

Standard UNKNOWN or MODE 4

CUE

Comments Information obtained from logs.

SAT	UNSAT	Comment Number
-----	-------	----------------

14. Additional information on back

Standard Yes

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

***15. LOCATION OF LEAK**

Standard UNKNOWN

CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

***16. Leak Rate**

Standard EXCEEDS 50 GPM

CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

17. Sudden or long term

Standard Sudden

CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

18. Coolant Activity

Standard Sampling in Progress

CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

19. Safety Systems not operational

Standard None

CUE

Comments Information obtained from logs.

SAT UNSAT Comment Number

***20. Calls NRC (Simulated) and completes form by filling in “Notification Time” on page 1 of 2.**

Standard Examinee simulates calling NRC either on FTS2000 or via commercial line.

CUE Evaluator acts as NRC and provides applicable time.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

STOP TIME: _____

TERMINATING CUES:

ENW Form completed for an ALERT and NRC informed of event.

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
Generic	2.4.43	2.8	3.5

Knowledge of emergency communications systems and techniques.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 1405.0401

REVISION: 02

INITIAL CONDITIONS

The plant was at 90% power when an event occurred.

INITIATING CUE:

You are called to the MCR to complete and send an ENW form to the NRC within 1 hour of the event.

CLINTON POWER STATION

Job Performance Measure

Complete an SRV actuation report

JPM Number: 3831.0101

Revision Number: 01

Date: 12/09/03

Developed By:	<u>T. Pickley</u>	<u>12/09/03</u>
	Instructor	Date
Validated By:	<u>T. Delaney</u>	<u>10/16/03</u>
	SME or Instructor	Date
Review By:	<u>P. K. Ryan</u>	<u>12/12/03</u>
	Operations Representative	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3832.0101

REVISION: 01

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

Revision Record (Summary)

1. **Revision 00,** This is a new JPM
2. **Revision 01,** Incorporate NRC comments, no revalidation required.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

Operator's Name: _____ SSN: _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title/Number: 3831.0101, Complete an SRV actuation report

Revision Number: 01

Task Number and Title: 383101.01, Complete Control Room actions to document data on failures and actuation's of the Safety Relief Valves in the Main Steam System and to generate reports required by the Nuclear Regulatory Commission

Suggested Testing Environment: Any

Actual Testing Environment: ☒ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate **Faulted:** ☐ Yes
☒ Perform **Alternate Path:** ☐ No

Time Critical: ☐ No

Estimated Time to Complete: 18 minutes **Actual Time Used:** _____ minutes

References:

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

None

TASK STANDARDS:

SRV actuation report is correctly filled out and the SRV has been identified as leaking.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST
CPS 3831.01, SAFETY RELIEF VALVE REPORT

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

Provide the operator with the following:

- CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST
- CPS 9056.02C001, SAFETY/RELIEF VALVE MANUAL ACTUATION CHECKLIST
- CPS 3831.01, SAFETY RELIEF VALVE REPORT
- CPS 3831.01D002, ACTUATION LOG
- DCS Display 6D-04
- DCS Display D05AD1
- DCS Display DD5BD3
- SRV Tailpipe temperature graph

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

INITIAL CONDITIONS:

You are the B CRO.

The plant is operating at 80% power.

CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST was performed on the previous shift at steady state power.

INITIATING CUE:

You are to complete CPS 3831.01, SAFETY RELIEF VALVE REPORT.

The CRS has N/A appropriate blocks on 3831.10D002.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

8.1.1 Fill in block 302 of the CPS No. 3831.01D002, ACTUATION LOG.

Standard B21-F047A

CUE

Comments

SAT UNSAT Comment Number

8.1.1 Fill in block 303 of the CPS No. 3831.01D002, ACTUATION LOG.

Standard

CUE

Comments

Already filled in

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

8.1.1 Fill in block 304 of the CPS No. 3831.01D002, ACTUATION LOG.

Standard

CUE

Comments Already filled in

SAT	UNSAT	Comment Number
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***8.1.1 Fill in block 305 of the CPS No. 3831.01D002, ACTUATION LOG.**

Standard B

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

***8.1.1 Fill in block 306 of the CPS No. 3831.01D002, ACTUATION LOG.**

Standard C

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

***8.1.1** **Fill in block 307 of the CPS No. 3831.01D002, ACTUATION LOG.**

Standard E

CUE

Comments

SAT UNSAT Comment Number

8.1.1 Fill in block 308 of the CPS No. 3831.01D002, ACTUATION LOG.

Standard 80

CUE

Comments

SAT UNSAT Comment Number

***8.1.1** **Fill in block 309 of the CPS No. 3831.01D002, ACTUATION LOG.**

Standard **Determines that the tail pipe has not returned to normal and that the SRV is leaking.**

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

8.1.1 Fill in block 310 of the CPS No. 3831.01D002, ACTUATION LOG.

Standard

CUE

Comments Already filled in

SAT	UNSAT	Comment Number
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8.1.1 Fill in block 311 of the CPS No. 3831.01D002, ACTUATION LOG.

Standard 1013

CUE

Comments

SAT	UNSAT	Comment Number
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8.1.2 Fill in block 312 of the CPS No. 3831.01D002 ACTUATION LOG, if available at the time of reporting or enter "not available" when completing the log. Additional data may be entered later for cross reference.

Standard 1013

CUE

Comments

SAT	UNSAT	Comment Number
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CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

8.1.2 Fill in block 313 of the CPS No. 3831.01D002 ACTUATION LOG, if available at the time of reporting or enter "not available" when completing the log. Additional data may be entered later for cross reference.

Standard N/A or \approx 1 Minute

CUE

Comments

SAT	UNSAT	Comment Number
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8.1.2 Fill in block 314 of the CPS No. 3831.01D002 ACTUATION LOG, if available at the time of reporting or enter "not available" when completing the log. Additional data may be entered later for cross reference.

Standard A or B

CUE

Comments

SAT	UNSAT	Comment Number
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CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

8.1.2 Fill in block 315 of the CPS No. 3831.01D002 ACTUATION LOG, if available at the time of reporting or enter "not available" when completing the log. Additional data may be entered later for cross reference.

Standard

CUE

Comments Already filled in

SAT	UNSAT	Comment Number
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8.1.3 If a COMMENT SHEET, CPS No. 3831.01F001, is completed for this log entry, indicate "YES" in block 316, if a comment sheet was not completed, indicate "NO" in block 316 .

Standard Yes or No

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

REVISION: 01

STOP TIME: _____

TERMINATING CUES:

The SRV actuation log is complete.

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
Generic	2.1.18	2.9	3.0

Ability to make accurate / clear and concise logs / records / status boards / and reports.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0101

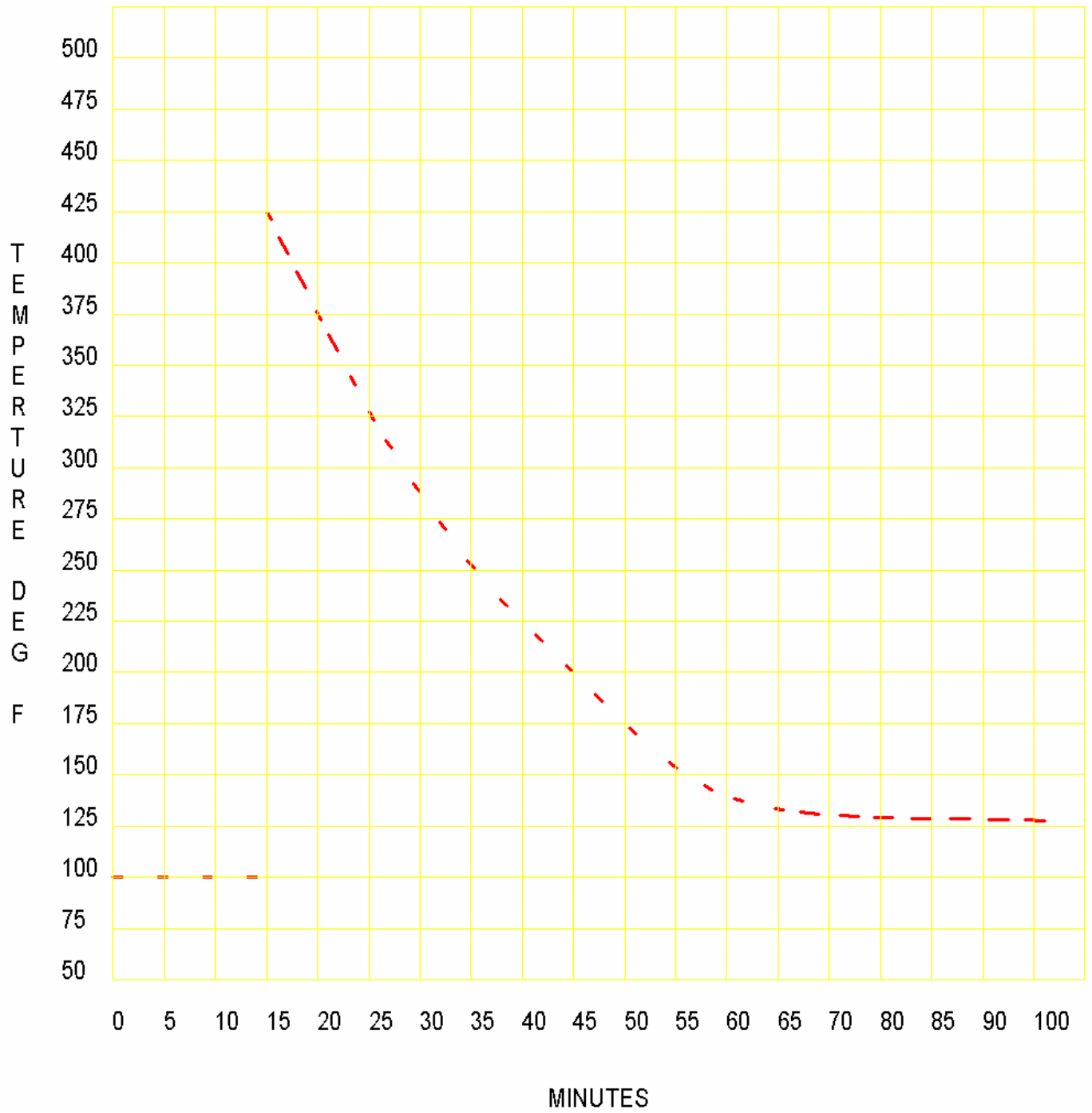
REVISION: 01

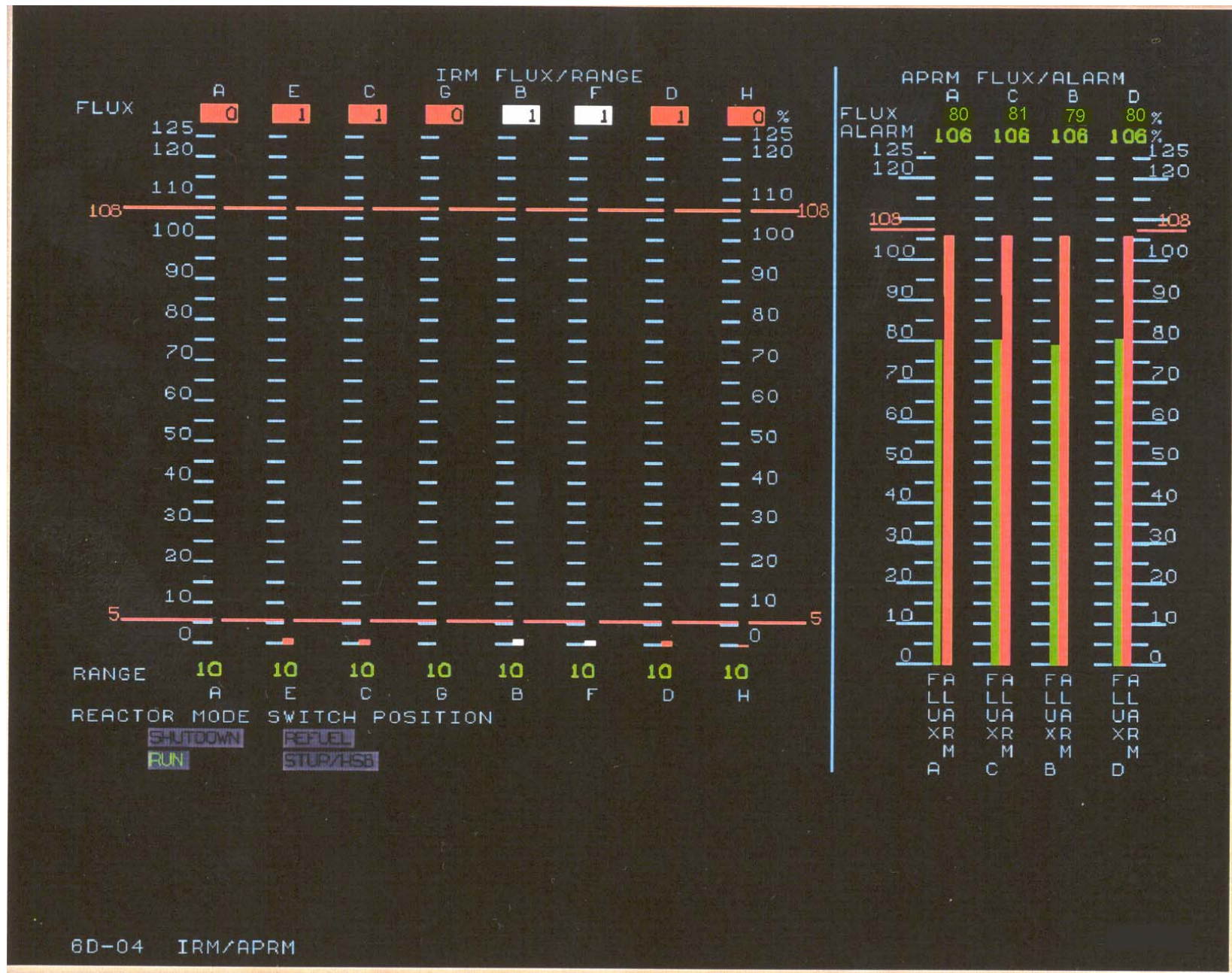
INITIAL CONDITIONS:

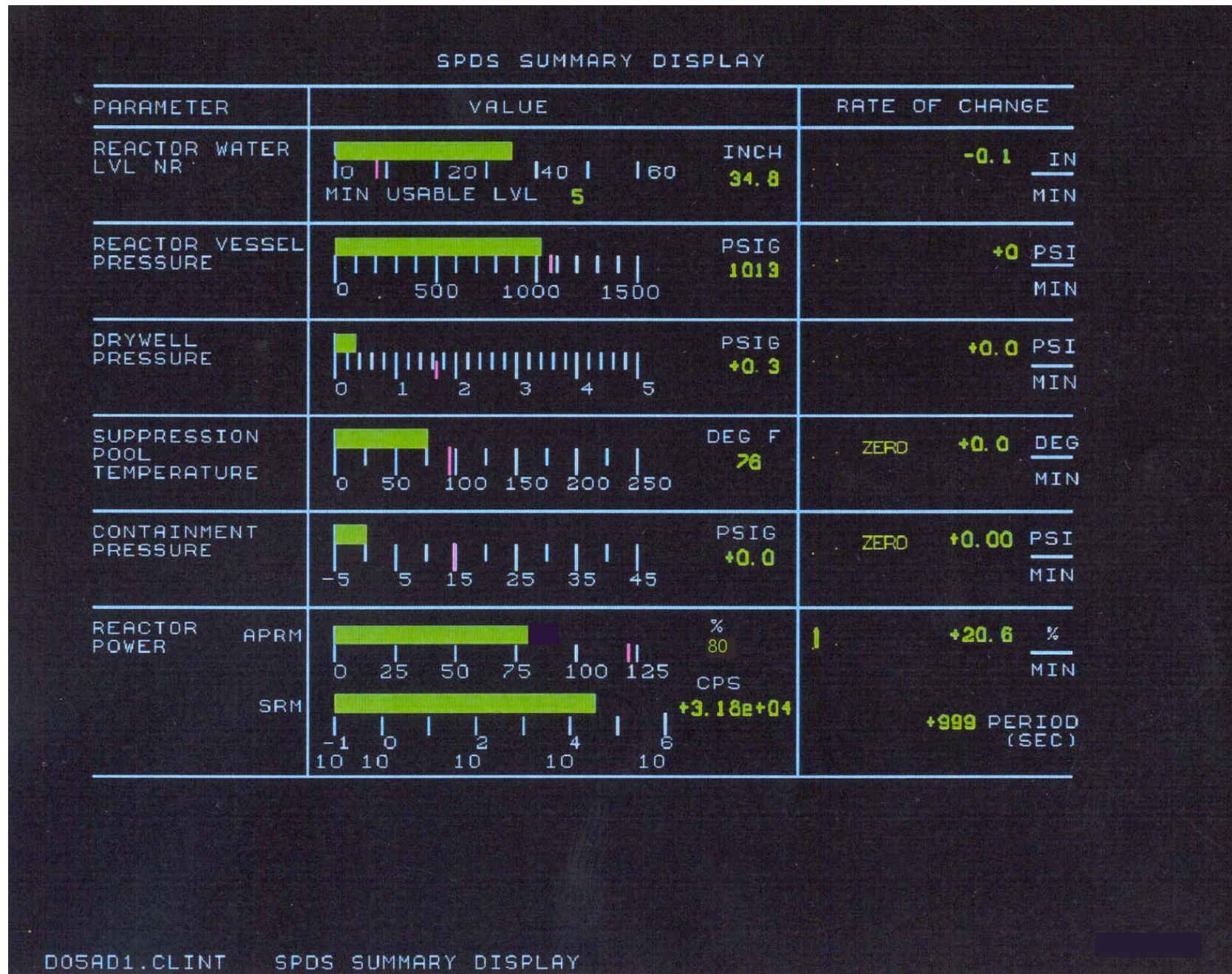
The plant is operating at 80% power. CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST was performed on the previous shift at steady state power.

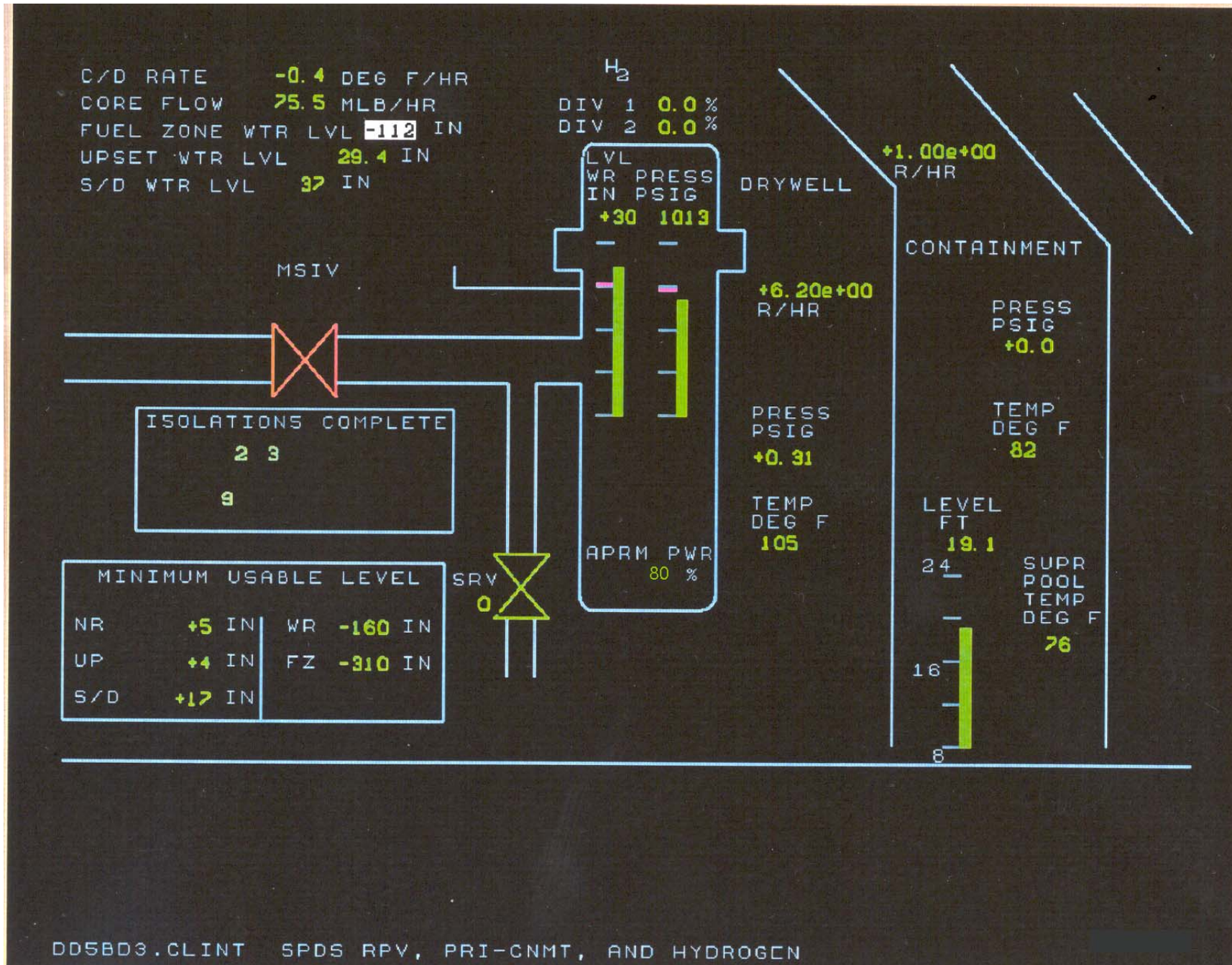
INITIATING CUE:

You are to complete CPS 3831.01, SAFETY RELIEF VALVE REPORT. The CRS has N/A appropriate blocks on 3831.10D002









CLINTON POWER STATION

Job Performance Measure

Perform the Restoration Section of CPS No. 9011.01 CONTROL
ROD/POSITION INDICATION OPERABILITY-Faulted

JPM Number: 9011.0102

Revision Number: 04

Date: 12/08/03

Developed By:	<u>T Pickley</u>	<u>12/08/03</u>
	Instructor	Date
Validated By:	<u>T. Coe</u>	<u>12/15/03</u>
	SME or Instructor	Date
Review By:	<u>P. K. Ryan</u>	<u>12/15/03</u>
	Operations Representative	Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

Revision Record (Summary)

1. **Revision 00,** This is a new RO Administrative JPM
2. **Revision 01,** Add Terminating Cue
 Update to the current revision of the procedure
3. **Revision 02,** Incorporating NRC validation comments
4. **Revision 03,** Update to the current revision of the procedure
5. **Revision 04,** Incorporate NRC comments

CLINTON POWER STATION
ADMIN JPM

JPM NUMBER: 9011.0102

Rev. 04

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Perform the Restoration Section of CPS No. 9011.01 CONTROL ROD/POSITION
INDICATION OPERABILITY-Faulted

JPM Number: 9011.0102

Task Number and Title: 901101.01, Complete control room actions to perform the Control
Rod/Position Indication Operability

K/A Number: 2.2.12 Importance: 3.0

Suggested Testing Environment: Any

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate **Alternate Path / Faulted:** ☒ Yes
 ☒ Perform

Time Critical: ☐ No

Estimated Time to Complete: 17 minutes **Actual Time Used:** _____ minutes

References: CPS No. 9011.01, CONTROL ROD/POSITION INDICATION OPERABILITY,
Revision 27d

CLINTON POWER STATION
ADMIN JPM

JPM NUMBER: 9011.0102

Rev. 04

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
ADMIN JPM

JPM NUMBER: 9011.0102

Rev. 04

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

Not Applicable

TASK STANDARDS:

CPS 9011.01 restoration section has been completed.
Misaligned control rod has been identified.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

Marked up copy of CPS 9011.01 completed up to step 8.3.
Copy of an OD-7 Option 2, OD-7 Option 4 and an Official 3D Case.

PROCEDURAL/REFERENCES:

CPS 9011.01, CONTROL ROD/POSITION INDICATION OPERABILITY, Revision 27d

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.
Provide initial OD-7 option 2 and surveillance after reading the initiating cue.

INITIAL CONDITIONS:

The plant is at Rated Power. The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability for the weekly surveillance with the exception of the restoration section.

INITIATING CUE:

You have just relieved the A RO and are directed to complete the restoration section. Report when the task is complete.

START TIME: _____

CLINTON POWER STATION
ADMIN JPM

JPM NUMBER: 9011.0102

Rev. 04

=====

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

=====

PERFORMANCE STEPS

***1. Obtain final PMS Control Rod Position printout: OD-7 Option 2, OD-7 Option 4, or Official 3D Case.**

Standard Printout demanded.

CUE Give operator the OD-7 Option 2, OD-7 Option 4, or Official 3D Case when requested.

Comments

SAT UNSAT Comment Number

***2. Compare the initial and final Control Rod Position printouts to verify proper rod positions.**

Standard Operator performs review and identifies that rod 36-29 is at position 6 instead of position 4.

CUE
Comments

SAT UNSAT Comment Number

***3. Notify the SMngt that rod 36-29 is at position 6 instead of position 4.**

Standard SMngt is notified

CUE

- Acknowledge notification of mis-positioned control rod.
- Acknowledge entry into Inadvertent Rod Movement CPS 4007.02

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
ADMIN JPM

JPM NUMBER: 9011.0102

Rev. 04

***4. Enter into Inadvertent Rod Movement CPS 4007.02**

Standard Obtain a 3D case
 Contact the Reactor Engineer

CUE
Comments

SAT UNSAT Comment Number

***5. Return Control Rod back to position 04**

Standard Control Rod is at position 04

CUE As the Reactor Engineer, direct the operator to move control rod 36-29 from
 06 to 04. Hand the examinee the move sheet.

Comments

SAT UNSAT Comment Number

**6. Document the rod movement in CPS 9000.09D002 CONTROL ROD
 MANIPULATION LOG SHEET**

Standard Rod movement is documented

CUE
Comments

SAT UNSAT Comment Number

7. Complete CPS 9011.01 and notify the SMngt of the completion of the test.

Standard SMngt is notified.

CUE
Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
ADMIN JPM

JPM NUMBER: 9011.0102

Rev. 04

Terminating Cue:

9011.01, Restoration section has been completed and Shift Management has been notified.

STOP TIME: _____

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	Importance Rating	
		<u>RO</u>	<u>SRO</u>
GENERIC	2.2.12	3.0	3.4

Knowledge of surveillance procedures.

SYSTEM JPM

JPM NUMBER 9011.0102

Rev. 04

INITIAL CONDITIONS:

The plant is at Rated Power. The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability for the weekly surveillance with the exception of the restoration section.

INITIATING CUE:

You have just relieved the A RO and are directed to complete the restoration section. Report when the task is complete.

CONTROL ROD/POSITION INDICATION OPERABILITY

SCOPE OF REVISION:

- Incorporated PAC 0407-97: Editorial typo. Rev marks not retained.
- Format/Organizational title updates, placekeeping aid enhancements, section 5.1 updated to include annunciator impact per 1005.01.
- CR1-98-02-110 (MLSR Project):
Incorporated performance criteria and credit for
ITS SR 3.9.5.1 MODE 5 control rod position checks.
- Documentation content of canceled CPS 9011.01C001, Control Rod Operability Checklist incorporated into body of this procedure.
- ❶ Incorporated PAC 0502-99, PDRs 99-0906 and 00-0298.
- ❷ Added flags for critical steps.
- ❸ Updates format, revised to make consistent with Limitations in CPS 3304.01, Control Rod Hydraulic & Control (RD).
- ❹ Specific rev 27d [Sheffield]: CR 130905:
Added to review control rod database prior to movement of a single rod at elevated drive water pressure to establish what seal conditions are.

CONTAINS CRITICAL STEPS

CONTINUOUS USE

ORIGINATOR *Thomas J. Landin*

CLASS CODE: *SNNN*

:

ITR: *K. Zipprich*

APPROVAL *SEP 16 1998*
DATE:

CURRENT CHANGES TO GENERAL REVISION

	Change #	Date	List of Affected Pages
❶	27a	02/21/01	1, 4, 6, 7
❷	27b	08/13/01	1, 3, 6
❸	27c	01/02/02	1, 4
❹	27d	02/05/03	1 and 7
❺			

c 1.0

PURPOSE

Provide instructions for verifying control rod insertion capability by inserting each applicable PARTIALLY or FULLY withdrawn control rod one notch and observing that the control rod moves, thereby ensuring the control rod is not stuck and is free to insert on a SCRAM.

Instructions are also provided to return the control rods to their original positions to verify each applicable control rod is operable and that the position indication for each applicable control rod is operable.

This surveillance satisfies ITS SR requirements:

3.1.3.2, Insert each FULLY withdrawn control rod one notch (7 days)

3.1.3.3, Insert each PARTIALLY withdrawn control rod one notch (31 days)

①

3.9.5.1, Insert each withdrawn control rod one notch (7 days - MODE 5)

2.0

DISCUSSION/DEFINITIONS

2.1

FREQUENCY «LBD-1»

2.1.1

Normal Frequency (MODEs 1, 2):

7 Days - for FULLY withdrawn control rods with
THERMAL POWER > LPSP of the RPCS

31 Days - for PARTIALLY withdrawn control rods with
THERMAL POWER > LPSP of the RPCS

2.1.2

Other Triggers:

a) Within 24 hours from discovery of any withdrawn control rod that is stuck (will not insert by either CRD drive water or scram pressure) - for all control rods either PARTIALLY or FULLY withdrawn, concurrent with THERMAL Power > the LPSP of the RPCS.

①

b) MODE 5 when control rod withdrawn triggered via
CPS 9000.01D002, Control Room Operator Surveillance Log - MODE 4,5 DATA SHEET (7 day frequency).

2.2

Individual sections or an individual step or individual steps within a section of this procedure may be performed independently for PMT or other maintenance activities. Those steps within a section that are not performed should be marked N/A. When only parts of a section are performed, it is the responsibility of the SMngt and the performer to ensure that all necessary prerequisites, precautions and limitations are met for those steps that will be performed. Additionally, the impact of NOT performing the remaining steps must also be understood.

2.0 DISCUSSION/DEFINITIONS (cont'd)

2.3 All applicable control rods (control rods not required to have their directional control valves disarmed electrically or hydraulically) will be moved at least one notch to verify proper rod motion and position indication response. Control rod exercising should be performed by a single notch insertion and single notch withdrawal, in as short a time as possible.

3.0 **RESPONSIBILITY**

Operations Department Head is responsible for the implementation of this procedure.

4.0 **PRECAUTIONS**

4.1 Plant evolutions which may result in reactivity changes should be avoided during performance of this surveillance.

4.2 Document control rod movement per
CPS 9000.09, CPS Control Rod Manipulation Logs.

5.0 PREREQUISITES

INITIAL

- ② 5.1 This procedure contains critical steps. A **Critical Step** is "Any action that, when performed improperly, will lead to an unintentional change that adversely impacts plant, system, or personnel". Performance of this procedure requires screening for a **High Risk/High Production Risk/Risk Sensitive** activity IAW WC-AA-104 and any existing requirements for Command and Control Standards. Critical steps are indicated by a **{CS}** in the left margin."

- 5.2 In conjunction with the SMngt,
review the following impact statements to determine required plant status to perform this test:

OPERABILITY IMPACT:

ITS LCO 3.1.3 - Control Rod Operability

SYSTEMS AFFECTED:

- 0** AFFECTED ANNUNCIATORS AND COMPUTER POINTS: None

RPS TRIP: N/A

CRVICS ISOLATION: N/A

REQUIRED OPERABLE CHANNELS: N/A

- ## ① PLANT/SYSTEM CONDITIONS REQUIRED TO CONDUCT TEST

When in MODEs 1, 2: Power > low power set point (LPSP) of the Rod Pattern Control System (RPCS).

When in MODEs 1, 2: For control rods not FULLY withdrawn, MAPRAT ≤ 0.96 . If MAPRAT > 0.96 a power reduction will be required prior to testing control rods that are not FULLY withdrawn.

COINCIDENT CHANNELS TO PREVENT ACTUATION: N/A

\mathcal{SM}	/	\mathcal{DL}
SMngt		Test Performer

- | | | | | |
|---|-----|---|-------------|-----------|
| 0 | 5.3 | MODE 1, 2: Reactor power (> LPSP).
[N/A when in MODE 5.] | <u>90</u> % | <u>DL</u> |
|---|-----|---|-------------|-----------|

- 5.4 SM/CRS permission to perform this surveillance. SM
SMngt

XX:XX / XX/XX/XX
Time/Date

6.0 **LIMITATIONS**

6.1 **IF** a control rod (or gang) is found out of sequence, **THEN** enter CPS 4007.02, Inadvertent Rod Movement.

6.2 In the event of accidental insertion of more than one notch, withdrawal should be by single notch to avoid any possible over-notching on the withdrawal.

① 6.3 MODEs 1, 2: MAPRAT shall be ≤ 0.96 when exercising PARTIALLY withdrawn control rods. This limitation does not apply to FULLY withdrawn control rods.

① ③ 6.4 The Rod Withdraw Limiter (RWL) function of the Rod Control and Information system establishes a 4 notch withdraw limit when reactor power is between the Low Power Set Point (LPSP) and the High Power Set Point (HPSP), and a 2 notch withdraw limit when power is above the HPSP. The purpose of the RWL is to prevent fuel damage, caused by rod withdrawal which would uncover fuel that has been operating at a relatively low power level. The limit is set at 2 or 4 notches (as applicable) from the position of the control rod, the first time a Withdraw signal is applied after the rod is selected.

IF a control rod is inserted with the intent of leaving the rod at the new inserted position, **OR** power condition have changed significantly (RR flow changes or Xenon transient) since the control rod was inserted, **THEN** prior to withdrawing that control rod, deselect and reselect the control rod, to establish the RWL notch limits.

IF a control rod is inserted with the intent of returning the control rod to its original position for notch testing, **THEN** withdrawing the control rod to its original position in the continuous withdraw mode is permitted, **AND** is within the design basis of the RWL as long as power condition have not changed significantly.

Control rods should be deselected, any time that MCR personnel are **NOT** actively engaged in control rod movement activities. «CM-1»

7.0 **MATERIALS/TEST EQUIPMENT** - None

8.0	<u>PROCEDURE</u>	<u>Initial</u>
❶ 8.1	Obtain a Plant Monitoring System (PMS) Control Rod Position printout, using either: OD-7 Option 2, OD-7 Option 4, or Official 3D Case.	<u>DL</u>
❶ 8.1.1	From the OD-7 edit or Official 3D Case, determine which control rods are not required to be tested because they are not withdrawn.	<u>DL</u>
8.1.2	Identify any control rods which are disarmed.	<u>DL</u>
8.1.3	Identify any control rods which are PARTIALLY withdrawn.	<u>DL</u>

NOTE

When exercising PARTIALLY withdrawn rods during the monthly test, a “P/” should be used before initials to differentiate between partially withdrawn and fully withdrawn rods.

In this manner, the MODE 1, 2 requirement to limit MAPRAT ≤ 0.96 can be more readily determined.

8.1.4 On the CORE MAP (page 7):

- Mark disarmed control rods with “DA”. DL
- Mark FULLY inserted control rods with “N/A”. DL
- Mark partially withdrawn control rods with “P/” (if exercising PARTIALLY inserted rods). DL
- Mark partially withdrawn control rods with “N/A” (if not exercising PARTIALLY inserted rods). N/A

NOTE

Drives with new seals should not be moved per single notch with elevated drive water pressure, due to increase potential for double-notching. Consult control rod database for seal condition

MODE 1 or 2:

Individual and/or ganged rod movement may be used to perform this surveillance.

FULLY withdrawn control rods are not required to be performed until 8 days 18 hours after the control rod is fully withdrawn and THERMAL POWER is > LPSP of the RPCS.

Rods at position 46 for cooling shall be considered FULLY withdrawn and subject to the 7 day frequency. These rods may be required to be returned to position 48 first to perform the surveillance.

PARTIALLY withdrawn control rods are not required to be performed until 38 days 18 hours after the control rod is withdrawn and THERMAL POWER > LPSP of the RPCS.

MODE 5:

Individual rod movement shall be used to perform this surveillance.

Withdrawn control rods are not required to be performed until 7 days after the control rod is withdrawn.

8.2 **Exercise of FULLY (PARTIALLY)
Withdrawn Control Rods**

Initial

- | | | | |
|-------|-------|---|-------------------------------|
| 0 | 8.2.1 | MODEs 1, 2 PARTIALLY withdrawn rods only
(N/A for FULLY withdrawn rods or MODE 5):

Verify $\text{MAPRAT} \leq 0.96$. <u>0.821</u> MAPRAT

If $\text{MAPRAT} > 0.96$, then a power reduction shall
be required to achieve $\text{MAPRAT} \leq 0.96$ prior
to testing any PARTIALLY withdrawn control rods. | <u>DL</u> |
| 2{CS} | 8.2.2 | Select and insert the desired rod(s) one notch,
noting proper position indication tracking. | <u>X</u>
Place Keeping Aid |
| 2{CS} | 8.2.3 | Withdraw the selected rod(s) one notch to
original position. | <u>X</u>
Place Keeping Aid |
| | a) | Observe proper rod position indication
tracking to the original rod position. | <u>X</u>
Place Keeping Aid |
| | b) | Check off the selected rod(s) after the
rod(s) is tested by initialing the rod(s).
[Document on CORE MAP] | <u>X</u>
Place Keeping Aid |

- 8.2.4 Repeat steps 8.2.2 and 8.2.3 for each
FULLY (PARTIALLY) withdrawn control rod.

 X
Place Keeping Aid

8.3 **RESTORATION**

Initial

- ❶ 8.3.1 Obtain a PMS Control Rod Position printout:
OD-7 Option 2, OD-7 Option 4, or
Official 3D Case. _____
- 8.3.2 Compare the initial and final Control Rod Position printouts to verify proper rod
positions. _____
- ❶ 8.3.3 Notify the SMngt of the completion of this test. _____

Time/Date

9.0 **ACCEPTANCE CRITERIA**

- 9.1 Operability Requirements - Failure to meet the Acceptance Criteria shall constitute a
failure to comply with the applicable LCO. ITS should be immediately reviewed to
identify Action Statements needed for implementation. Refer to Supplemental Review
Sheet for applicable LCOs.
- 9.1.1 All withdrawn control rods not required to have their directional control valves
disarmed electrically or hydraulically are inserted at least 1 notch.
- 9.1.2 The indicated control rod position changes during
movement of the Control Rod Drive.
- 9.2 Other Requirements - None

10.0 **FINAL CONDITIONS**

The control rods are returned to their original positions.

11.0 **REFERENCES**

- 11.1 CPS 4007.02, Inadvertent Rod Movement
- 11.2 CPS 9000.01D002, Control Room Operator Surveillance
 Log - MODE 4,5 Data Sheet
- 11.3 CPS 9000.09, CPS Control Rod Manipulation Logs
- 11.4 LBD-1: ITS SR 3.1.3.2, SR 3.1.3.3, SR 3.9.5.1
- 11.5 USAR 3.1.2.3.2.1, 4.6.3.1.1.5
- 11.6 GE Control Rod Drive Design Spec Data Sheet 22A5395 AE
- 11.7 GE Letter GGJ-88-100 dated 7-29-88
- ❶ 11.8 CM-1: CR 1-99-04-097

12.0 **APPENDICES** - None❶ 13.0 **DOCUMENTS** - None

CORE MAP

			<u>DL</u> 16-53	<u>DL</u> 20-53	<u>DL</u> 24-53	<u>DL</u> 28-53	<u>DL</u> 32-53	<u>DL</u> 36-53	<u>DL</u> 40-53			
		<u>DL</u> 12-49	<u>DL</u> 16-49	<u>DL</u> 20-49	<u>DL</u> 24-49	<u>DL</u> 28-49	<u>DL</u> 32-49	<u>DL</u> 36-49	<u>DL</u> 40-49	<u>DL</u> 44-49		
	<u>DL</u> 08-45	<u>DL</u> 12-45	<u>DL</u> 16-45	<u>DL</u> 20-45	<u>DL</u> 24-45	<u>DL</u> 28-45	<u>DL</u> 32-45	<u>DL</u> 36-45	<u>DL</u> 40-45	<u>DL</u> 44-45	<u>DL</u> 48-45	
<u>DL</u> 04-41	<u>DL</u> 08-41	<u>DL</u> 12-41	<u>DL</u> 16-41	<u>DL</u> 20-41	<u>DL</u> 24-41	<u>DL</u> 28-41	<u>DL</u> 32-41	<u>DL</u> 36-41	<u>DL</u> 40-41	<u>DL</u> 44-41	<u>DL</u> 48-41	<u>DL</u> 52-41
<u>DL</u> 04-37	<u>DL</u> 08-37	<u>DL</u> 12-37	<u>DL</u> 16-37	<u>P/ DL</u> 20-37	<u>DL</u> 24-37	<u>P/ DL</u> 28-37	<u>DL</u> 32-37	<u>P/ DL</u> 36-37	<u>DL</u> 40-37	<u>DL</u> 44-37	<u>DL</u> 48-37	<u>DL</u> 52-37
<u>DL</u> 04-33	<u>DL</u> 08-33	<u>DL</u> 12-33	<u>DL</u> 16-33	<u>DL</u> 20-33	<u>DL</u> 24-33	<u>DL</u> 28-33	<u>DL</u> 32-33	<u>DL</u> 36-33	<u>DL</u> 40-33	<u>DL</u> 44-33	<u>DL</u> 48-33	<u>DL</u> 52-33
<u>DL</u> 04-29	<u>DL</u> 08-29	<u>DL</u> 12-29	<u>DL</u> 16-29	<u>P/ DL</u> 20-29	<u>DL</u> 24-29	<u>DL</u> 28-29	<u>DL</u> 32-29	<u>P/ DL</u> 36-29	<u>DL</u> 40-29	<u>DL</u> 44-29	<u>DL</u> 48-29	<u>DL</u> 52-29
<u>DL</u> 04-25	<u>DL</u> 08-25	<u>DL</u> 12-25	<u>DL</u> 16-25	<u>DL</u> 20-25	<u>DL</u> 24-25	<u>DL</u> 28-25	<u>DL</u> 32-25	<u>DL</u> 36-25	<u>DL</u> 40-25	<u>DL</u> 44-25	<u>DL</u> 48-25	<u>DL</u> 52-25
<u>DL</u> 04-21	<u>DL</u> 08-21	<u>DL</u> 12-21	<u>DL</u> 16-21	<u>P/ DL</u> 20-21	<u>DL</u> 24-21	<u>P/ DL</u> 28-21	<u>DL</u> 32-21	<u>P/ DL</u> 36-21	<u>DL</u> 40-21	<u>DL</u> 44-21	<u>DL</u> 48-21	<u>DL</u> 52-21
<u>DL</u> 04-17	<u>DL</u> 08-17	<u>DL</u> 12-17	<u>DL</u> 16-17	<u>DL</u> 20-17	<u>DL</u> 24-17	<u>DL</u> 28-17	<u>DL</u> 32-17	<u>DL</u> 36-17	<u>DL</u> 40-17	<u>DL</u> 44-17	<u>DL</u> 48-17	<u>DL</u> 52-17
	<u>DL</u> 08-13	<u>DL</u> 12-13	<u>DL</u> 16-13	<u>DL</u> 20-13	<u>DL</u> 24-13	<u>DL</u> 28-13	<u>DL</u> 32-13	<u>DL</u> 36-13	<u>DL</u> 40-13	<u>DL</u> 44-13	<u>DL</u> 48-13	
		<u>DL</u> 12-09	<u>DL</u> 16-09	<u>DL</u> 20-09	<u>DL</u> 24-09	<u>DL</u> 28-09	<u>DL</u> 32-09	<u>DL</u> 36-09	<u>DL</u> 40-09	<u>DL</u> 44-09		
			<u>DL</u> 16-05	<u>DL</u> 20-05	<u>DL</u> 24-05	<u>DL</u> 28-05	<u>DL</u> 32-05	<u>DL</u> 36-05	<u>DL</u> 40-05			

CONTROL ROD OPERABILITY CHECKLIST

CORRECTIVE ACTION TAKEN

9.1 ACCEPTANCE CRITERIA

ITS LCOs: 3.1.3 3.9.5

ORM ORs: None

ODCM ORs: None

As applicable:

Initiated Condition Report _____
(yes/no)

Initiated Maintenance Request (MR) No.

9.2 ACCEPTANCE CRITERIA

As applicable:

Initiated Condition Report
(yes/no)

Initiated Maintenance Request (MR) No. _____

COMMENTS/DEFICIENCIES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on its right side, suggesting it's resting on a surface.

REVIEW AND APPROVAL

Surveillance Coordinator _____

(Signature) (Date)

Job Performance Measure (JPM)

PAGE 1, **INITIAL**

CORE PARAMETERS			CLINTON CYCLE 6	SEQUENCE NO 23
POWER	MWT	3125	3D MONICORE	today-2xxx xx:xx CALCULATED
POWER	MWE	1062	PERIODIC LOG	today-2xxx xx:xx PRINTED
FLOW	MLB/HR	75.844	CALC RESULTS	CASE ID FMLD1950708205855
FPAPDR		0.824		RESTART FMLD1950708195845
SUBC	BTU/LB	23.49	Keff	1.0000
PR	PSIa	1027.9	XE WORTH %	-2.52
CORE	MWD/sT	20850.8	XE/RATED	1.00
CYCLE	MWD/sT	8741.6		
MCPR		1.268		
				LOAD LINE SUMMARY
				CORE POWER 89.9%
				CORE FLOW 89.8%
				LOAD LINE 100.0%

CORRECTION FACTOR: MFLCPR= 1.000 MFLPD= 1.000 MAPRAT= 0.999
 OPTION: ARTS DUAL LOOP MANUAL FLOW MCPRLIM= 1.240

MOST LIMITING LOCATIONS (NON-SYMMETRIC)							
MFLCPR	LOC	MFLPD	LOC	MAPRAT	LOC	PCRAT	LOC
0.978	37-28	0.912	17-22-18	0.821	7-28- 5	0.798	41-28-16
0.976	39-26	0.912	7-28- 5	0.817	15-30-16	0.798	19-28-16
0.975	41-28	0.912	41-28-16	0.817	11-22-13	0.797	7-28- 5
0.973	11-28	0.902	19-28-16	0.816	19-26-16	0.791	39-22-20
0.940	13-32	0.896	15-38-18	0.813	19-30-15	0.782	9-22-13
0.939	9-26	0.895	21-26-16	0.803	7-26-12	0.779	11-20-13
0.937	11-20	0.893	17-26-16	0.802	9-36-13	0.779	17-26-16
0.930	39-22	0.889	9-22-13	0.798	11-30-11	0.777	11-28-15
0.927	7-28	0.889	11-20-13	0.796	9-26- 5	0.776	13-32-16
0.923	9-22	0.888	13-32-16	0.795	39-22-20	0.774	47-26-12

SEQ. B-2	C=MFLCPR	D=MFLPD	M=MAPRAT	P=PCRAT	*=MULTIPLE	CORE AVE AXIAL
						NOTCH REL PW LOC
53						00 0.238 25
49						02 0.446 24
L						04 0.804 23
45						06 0.963 22
						08 1.056 21
41			P			10 1.158 20
L						12 1.191 19
37		18	C4	18		14 1.163 18
						16 1.182 17
33						18 1.220 16
L						20 1.215 15
29		4		4		22 1.187 14
						24 1.212 13
25						26 1.207 12
L						28 1.181 11
21		18	4	18		30 1.170 10
						32 1.166 09
17		D				34 1.131 08
L						36 1.085 07
13						38 1.072 06
						40 1.050 05
09						42 0.998 04
L			M			44 0.920 03
05	L	L	L	L	L	46 0.749 02
	04	08	12	16	20	48 0.237 01
			24	28	32	
				36	40	
					44	
					48	
					52	

CORE AVERAGE RADIAL POWER DISTRIBUTION

RING #	1	2	3	4	5	6	7
REL PW	0.890	1.084	1.113	1.102	1.155	1.145	0.727

Job Performance Measure (JPM)

PAGE 2
CLINTON CYCLE 6

INSTRUMENT READINGS/STATUS						SEQUENCE NO 23
CALIBRATED LPRM READINGS						8-JUL-1995 20:58 CALCULATED
CALIBRATED LPRM READINGS						today-2xxx xx:xx CALCULATED
						today-2xxx xx:xx PRINTED
47D	40.1	49.8	55.7	45.9	30.2	CASE ID FMLD1950708205855
C	57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL CORE
B	61.2	63.6	60.9	69.2	41.9	
A	51.1	54.9	49.5	63.0	27.7	# OF TIPS REJECTED: 1
39D	35.4	51.3	58.4	61.1	57.5	46.0
C	55.8	62.7	60.3	59.6	66.5	67.9
B	60.0	65.2	60.7	57.0	66.7	70.2
A	52.7	61.1	50.4	44.4	54.7	63.8
31D	39.9	51.6	55.8	56.0C	55.7	48.5
C	63.7	71.1	68.3	63.1	72.6P	70.4
B	69.6	71.2	66.7	59.2	72.9	73.4
A	67.6M	69.0	61.1	45.4	71.1	71.8
23D	40.0	54.3	58.1	57.9	59.5	48.0
C	62.2	67.3D	63.7	59.2	66.8	69.0
B	67.1	67.1	61.4	56.9	66.6	71.1
A	66.5	58.6	48.7	44.2	55.6	66.1
15D	28.5	46.2	55.5	57.2	0.0	39.4
C	42.4	63.6	62.8	59.1	65.4	59.1
B	43.2	68.6	61.9	57.4	67.6	62.2
A	0.0	61.7	49.9	44.3	64.3	50.4
07D	29.1	39.3	40.7	36.6		
C	41.4	58.6	56.6	54.5		
B	42.3	64.8	61.8	58.3		
A	31.2	57.2	55.6	48.4		
06	14	22	30	38	46	

T = TIP RUN RECOMMENDED
 C = MFLCPR LOCATION
 M = MAPRAT LOCATION
 D = MFLPD LOCATION
 P = PCRAT LOCATION
 * = MULTIPLE LIMIT

CORE SUMMARY

CORE POWER	89.9%	CALC SUB FLOW	91.3%	DP MEAS PSI	15.52
CORE FLOW	89.8%	OPER SUB FLOW	-1.2%	DP CALC PSI	20.52
LOAD LINE	100.0%	FLOW BASIS	MEAS	FEEDWTR FLOW MLB/HR	13.5

APRM CALIBRATION

	A	B	C	D
READING	100.4	100.6	100.2	100.2
AGAF	0.994	0.992	0.997	0.997

TIP RUNS RECOMMENDED

STRINGS: NONE

Job Performance Measure (JPM)

UNIT 1, PAGE 1 OF 1

**INITIAL
Positions**

OD-7, CONTROL ROD NOTCH POSITIONS, NEW SCAN

OPTION 2

53				48	48	48	48	48	48	48			
49			48	48	48	48	48	48	48	48	48		
45		48	48	48	48	48	48	48	48	48	48	48	
41	48	48	48	48	48	48	48	48	48	48	48	48	48
37	48	48	48	48	18	48	4	48	18	48	48	48	48
33	48	48	48	48	48	48	48	48	48	48	48	48	48
29	48	48	48	48	4	48	48	48	4	48	48	48	48
25	48	48	48	48	48	48	48	48	48	48	48	48	48
21	48	48	48	48	18	48	4	48	18	48	48	48	48
17	48	48	48	48	48	48	48	48	48	48	48	48	48
13		48	48	48	48	48	48	48	48	48	48	48	
9			48	48	48	48	48	48	48	48	48		
5				48	48	48	48	48	48	48			
	4	8	12	16	20	24	28	32	36	40	44	48	52

Job Performance Measure (JPM)

PAGE 1, **FINAL**

CORE PARAMETERS			CLINTON CYCLE 6	SEQUENCE NO 23
POWER	MWT	3125	3D MONICORE	today-2xxx xx:xx CALCULATED
POWER	MWE	1052	PERIODIC LOG	today-2xxx xx:xx PRINTED
FLOW	MLB/HR	75.844	CALC RESULTS	CASE ID FMLD1950708205855
FPAPDR		0.824		RESTART FMLD1950708195845
SUBC	BTU/LB	23.49	Keff	1.0000
PR	PSIa	1027.9	XE WORTH %	-2.52
CORE	MWD/sT	20850.8	XE/RATED	1.00
CYCLE	MWD/sT	8741.6		
MCPR		1.268		
				LOAD LINE SUMMARY
				CORE POWER 89.9%
				CORE FLOW 89.8%
				LOAD LINE 100.0%

CORRECTION FACTOR: MFLCPR= 1.000 MFLPD= 1.000 MAPRAT= 0.999
 OPTION: ARTS DUAL LOOP MANUAL FLOW MCPRLIM= 1.240

MOST LIMITING LOCATIONS (NON-SYMMETRIC)							
MFLCPR	LOC	MFLPD	LOC	MAPRAT	LOC	PCRAT	LOC
0.978	37-28	0.912	17-22-18	0.821	7-28- 5	0.798	41-28-16
0.976	39-26	0.912	7-28- 5	0.817	15-30-16	0.798	19-28-16
0.975	41-28	0.912	41-28-16	0.817	11-22-13	0.797	7-28- 5
0.973	11-28	0.902	19-28-16	0.816	19-26-16	0.791	39-22-20
0.940	13-32	0.896	15-38-18	0.813	19-30-15	0.782	9-22-13
0.939	9-26	0.895	21-26-16	0.803	7-26-12	0.779	11-20-13
0.937	11-20	0.893	17-26-16	0.802	9-36-13	0.779	17-26-16
0.930	39-22	0.889	9-22-13	0.798	11-30-11	0.777	11-28-15
0.927	7-28	0.889	11-20-13	0.796	9-26- 5	0.776	13-32-16
0.923	9-22	0.888	13-32-16	0.795	39-22-20	0.774	47-26-12

SEQ. B-2	C=MFLCPR	D=MFLPD	M=MAPRAT	P=PCRAT	*=MULTIPLE	CORE AVE AXIAL
						NOTCH REL PW LOC
53						00 0.238 25
49						02 0.446 24
L						04 0.804 23
45						06 0.963 22
						08 1.056 21
41			P			10 1.158 20
L						12 1.191 19
37		18	C4	18		14 1.163 18
						16 1.182 17
33						18 1.220 16
L						20 1.215 15
29		4		6		22 1.187 14
						24 1.212 13
25						26 1.207 12
L						28 1.181 11
21		18	4	18		30 1.170 10
						32 1.166 09
17		D				34 1.131 08
L						36 1.085 07
13						38 1.072 06
						40 1.050 05
09						42 0.998 04
L			M			44 0.920 03
05	L	L	L	L	L	46 0.749 02
	04	08	12	16	20	48 0.237 01
			24	28	32	
				36	40	
					44	
					48	
					52	

CORE AVERAGE RADIAL POWER DISTRIBUTION

RING #	1	2	3	4	5	6	7
REL PW	0.890	1.084	1.113	1.102	1.155	1.145	0.727

Job Performance Measure (JPM)

PAGE 2
CLINTON CYCLE 6

INSTRUMENT READINGS/STATUS						SEQUENCE NO 23
CALIBRATED LPRM READINGS						8-JUL-1995 20:58 CALCULATED
CALIBRATED LPRM READINGS						today-2xxx xx:xx CALCULATED
						today-2xxx xx:xx PRINTED
47D	40.1	49.8	55.7	45.9	30.2	CASE ID FMLD1950708205855
C	57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL CORE
B	61.2	63.6	60.9	69.2	41.9	
A	51.1	54.9	49.5	63.0	27.7	# OF TIPS REJECTED: 1
39D	35.4	51.3	58.4	61.1	57.5	46.0
C	55.8	62.7	60.3	59.6	66.5	67.9
B	60.0	65.2	60.7	57.0	66.7	70.2
A	52.7	61.1	50.4	44.4	54.7	63.8
31D	39.9	51.6	55.8	56.0C	55.7	48.5
C	63.7	71.1	68.3	63.1	72.6P	70.4
B	69.6	71.2	66.7	59.2	72.9	73.4
A	67.6M	69.0	61.1	45.4	71.1	71.8
23D	40.0	54.3	58.1	57.9	59.5	48.0
C	62.2	67.3D	63.7	59.2	66.8	69.0
B	67.1	67.1	61.4	56.9	66.6	71.1
A	66.5	58.6	48.7	44.2	55.6	66.1
15D	28.5	46.2	55.5	57.2	0.0	39.4
C	42.4	63.6	62.8	59.1	65.4	59.1
B	43.2	68.6	61.9	57.4	67.6	62.2
A	0.0	61.7	49.9	44.3	64.3	50.4
07D	29.1	39.3	40.7	36.6		
C	41.4	58.6	56.6	54.5		
B	42.3	64.8	61.8	58.3		
A	31.2	57.2	55.6	48.4		
06	14	22	30	38	46	

CORE SUMMARY

CORE POWER	89.9%	CALC SUB FLOW	91.3%	DP MEAS PSI	15.52
CORE FLOW	89.8%	OPER SUB FLOW	-1.2%	DP CALC PSI	20.52
LOAD LINE	100.0%	FLOW BASIS	MEAS	FEEDWTR FLOW MLB/HR	13.5

APRM CALIBRATION

	A	B	C	D
READING	100.4	100.6	100.2	100.2
AGAF	0.994	0.992	0.997	0.997

TIP RUNS RECOMMENDED

STRINGS: NONE

UNIT 1, PAGE 1 OF 1

**Final
Positions**

OD-7, CONTROL ROD NOTCH POSITIONS, NEW SCAN
OPTION 2

Job Performance Measure (JPM)

49			48	48	48	48	48	48	48	48	48		
45		48	48	48	48	48	48	48	48	48	48	48	
41	48	48	48	48	48	48	48	48	48	48	48	48	48
37	48	48	48	48	18	48	4	48	18	48	48	48	48
33	48	48	48	48	48	48	48	48	48	48	48	48	48
29	48	48	48	48	4	48	48	48	6	48	48	48	48
25	48	48	48	48	48	48	48	48	48	48	48	48	48
21	48	48	48	48	18	48	4	48	18	48	48	48	48
17	48	48	48	48	48	48	48	48	48	48	48	48	48
13		48	48	48	48	48	48	48	48	48	48	48	
9			48	48	48	48	48	48	48	48	48		
5				48	48	48	48	48	48	48			
	4	8	12	16	20	24	28	32	36	40	44	48	52

UNIT 1, PAGE 1 OF 1

**Final
Positions**OD-7, CONTROL ROD NOTCH POSITIONS, NEW SCAN
OPTION 4

53													
49													
45													
41													
37					18		4		18				
33													
29					4				6				

Job Performance Measure (JPM)

25

21

18

4

18

17

13

9

5

4

8

12

16

20

24

28

32

36

40

44

48

52

CONTROL ROD SEQUENCE

SCOPE OF REVISION:

- Administrative Title Changes NE to RE.
- Designate as Routine Usage

ROUTINE USE

ORIGINATOR *Paul Nauyalis*

$$\vdots$$

CLASS CODE: *NNNN2*

**APPROVAL
DATE:**

MAY 28 1997

CHANGE NO.

DATE

PAGES

E

Ž

CONTROL ROD SEQUENCE A2 Date Implemented XX/XX/XX

STEP GROUP/ARRAY

RODS

FROM TO

NOTES

51

10

36-29

06

04

CONTROL ROD MANIPULATION LOG SHEET

SCOPE OF REVISION:

- Added OP-AB-103-104-1001, BWR Control Rod Movement Requirements reference (ROG NER LS-03-012RED [CR 148413]).

CONTINUOUS USE

ORIGINATOR *Thomas J. Landin*

:

CLASS CODE: *SNNN1***SQR:** *Edward J. Kennedy***APPROVAL** *04/07/03***DATE:**

CURRENT CHANGES TO GENERAL REVISION

	<i>Change #</i>	<i>Date</i>	<i>List of Affected Pages</i>
❶	_____	_____	_____
❷	_____	_____	_____
❸	_____	_____	_____
❹	_____	_____	_____
❺	_____	_____	_____

CONTROL ROD MANIPULATION LOG SHEET**0**

☞ General peer check guidance found in OP-AB-103-104-1001.

8.1.2: DATE/TIME: _____ / _____ 8.1.3: SEQUENCE (PROCEDURE) # _____

8.1.4: Rx POWER _____ 8.1.5: OPERABLE Control Rods comply with BPWS _____
(N/A when > 16.7% RTP, or MODEs 3/4/5) (Initial)

Column: 1 Comments	2 Step	3 Group/ Array	4 Rod Movement			5 Position From/To/ (Back)	6 Verification [†]	7 Init	8 Coupling Check Init
			Gang	Ind	Rod #				
							/		
							/		
							/		
							/		
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							/		
							/		
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							/		
							/		

[†] Verification initials signify:

- a) Previous step complete.
- b) Correct control rod is selected.
- c) Movement of control rod(s) in compliance with approved sequence for specified test.
- d) **When > 70% RTP:** Verify that the HI POWER SET PT light remains ON.
If the light is OFF, the verifier shall prevent control rod withdrawal.
- e) **When > 29.2% RTP and ≤ HPSP:** Verify LO POWER SET PT or the LO POWER ALM PT light is ON. If both lights are OFF, the verifier shall prevent control rod withdrawal.

8.2 Completion Time _____ Date _____

CONTROL ROD MANIPULATION LOG SHEET**SUPPLEMENTAL REVIEW SHEET****Corrective Action Taken**

Operability Requirements:

ITS LCOs: 3.1.3 3.1.6 3.10.7 3.10.8 3.3.2.1ORM ORs: NoneODCM ORs: None

As applicable:

Initiated Condition Report No. _____

Initiated Work Document No. _____

Comments/Deficiencies

Review and ApprovalSurveillance Coordinator: _____
(Signature) (Date)

CLINTON POWER STATION

Job Performance Measure

Review a completed SRV actuation report

JPM Number: 3821.0102

Revision Number: 01

Date: 12/11/03

Developed By:	<u>T. Pickley</u>	<u>12/11/03</u>
	Instructor	Date

Validated By:	<u>T. Coe</u>	<u>12/15/03</u>
	SME or Instructor	Date

Review By:	<u>P. Ryan</u>	<u>12/15/03</u>
	Operations Representative	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3832.0102

REVISION: 01

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor Date

SME/Instructor Date

SME/Instructor Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0102

REVISION: 01

Revision Record (Summary)

1. **Revision 00,** This is a new JPM
2. **Revision 01,** Incorporate NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3831.0102

REVISION: 01

Operator's Name: _____ SSN: _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title/Number: 3831.0101, Review a completed SRV actuation report

Revision Number: 01

Task Number and Title: 383101.01, Complete Control Room actions to document data on failures and actuation's of the Safety Relief Valves in the Main Steam System and to generate reports required by the Nuclear Regulatory Commission

Suggested Testing Environment: Any

Actual Testing Environment: ☒ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Faulted: ☐ Yes
Alternate Path: ☐ No

Time Critical: ☐ No

Estimated Time to Complete: 16 minutes **Actual Time Used:** _____ minutes

References:

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3821.0102

REVISION: 01

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

None

TASK STANDARDS:

The SRV has been identified as leaking and the failure mode is coded incorrectly.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST
CPS 3831.01, SAFETY RELIEF VALVE REPORT

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

Provide the operator with the following:

- CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST
- CPS 9056.02C001, SAFETY/RELIEF VALVE MANUAL ACTUATION CHECKLIST
- CPS 3831.01, SAFETY RELIEF VALVE REPORT
- CPS 3831.01D002, ACTUATION LOG
- DCS Display 6D-04
- DCS Display D05AD1
- DCS Display DD5BD3
- SRV Tailpipe temperature graph

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3821.0102

REVISION: 01

INITIAL CONDITIONS:

CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST was completed during steady state operations at 80% power.

CPS 3831.01, SAFETY RELIEF VALVE REPORT has been completed.

AND INITIATING CUE:

As the CRS, you are to review and approve CPS 3831.01, SAFETY RELIEF VALVE REPORT.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3821.0102

REVISION: 01

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

***1** **Reviews through block 305 of CPS 3831.01, SAFETY RELIEF VALVE REPORT**

Standard **Determines that block 305 is incorrect, Type of actuation should be “B”.**

CUE

Comments

SAT UNSAT Comment Number

***2** **Reviews block 306 of CPS 3831.01, SAFETY RELIEF VALVE REPORT**

Standard **Determines that block 306 is incorrect, Type of actuation should be “C”.**

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3821.0102

REVISION: 01

***2** **Reviews through block 309 of CPS 3831.01, SAFETY RELIEF VALVE REPORT**

Standard **Determines that block 309 is incorrect, the tail pipe has not returned to normal and that the SRV is leaking.**

CUE

Comments

SAT UNSAT Comment Number

STOP TIME: _____

TERMINATING CUES:

The SRV actuation log has been reviewed.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3821.0102

REVISION: 01

K/A REFERENCE NUMBERS

Importance Rating

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
2.1.32		3.4	3.8

Ability to explain and apply system limits and precautions.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 3821.0102

REVISION: 01

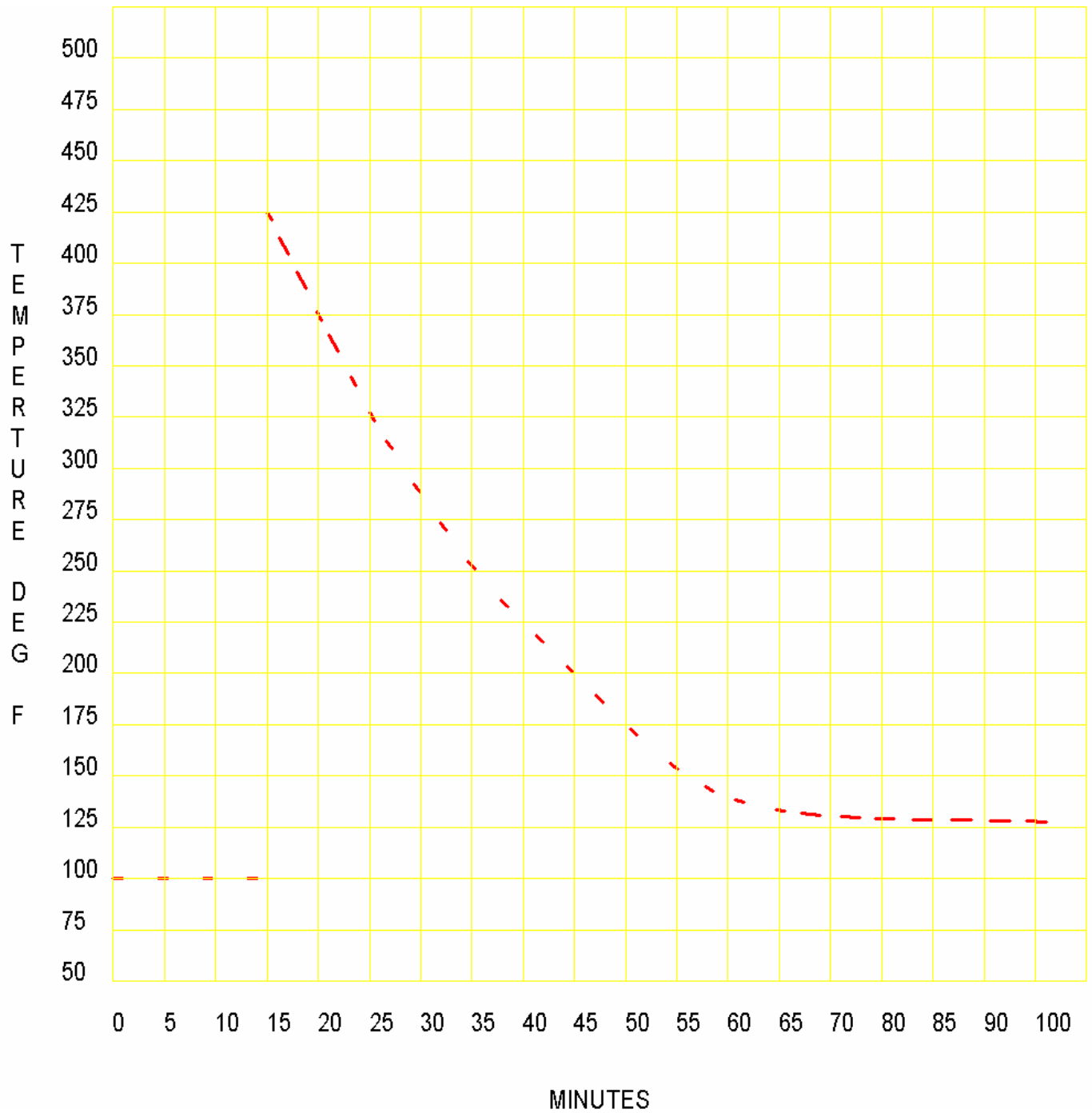
INITIAL CONDITIONS:

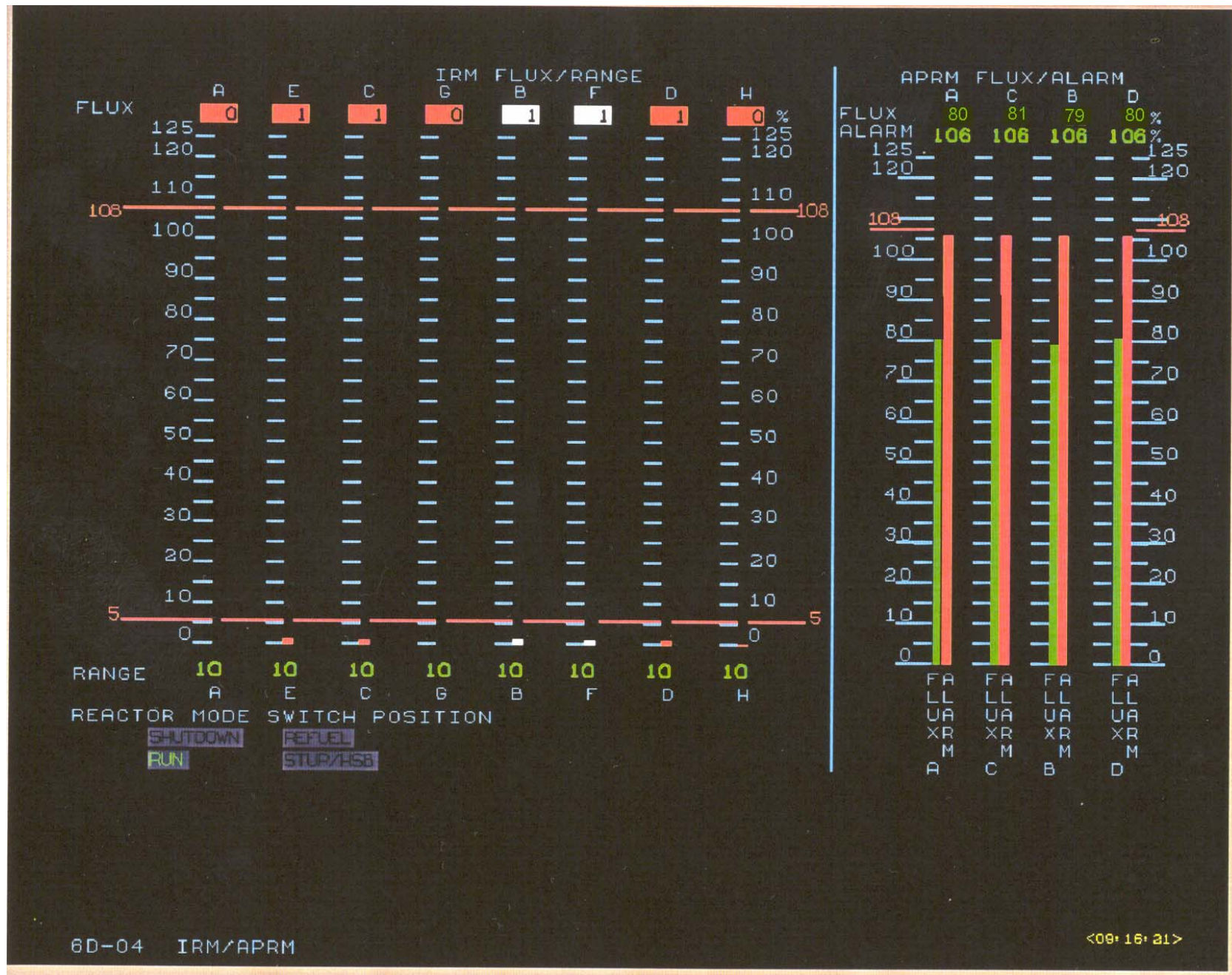
CPS 9056.02, SAFETY/RELIEF VALVE ACTUATION TEST was completed during steady state operations at 80% power.

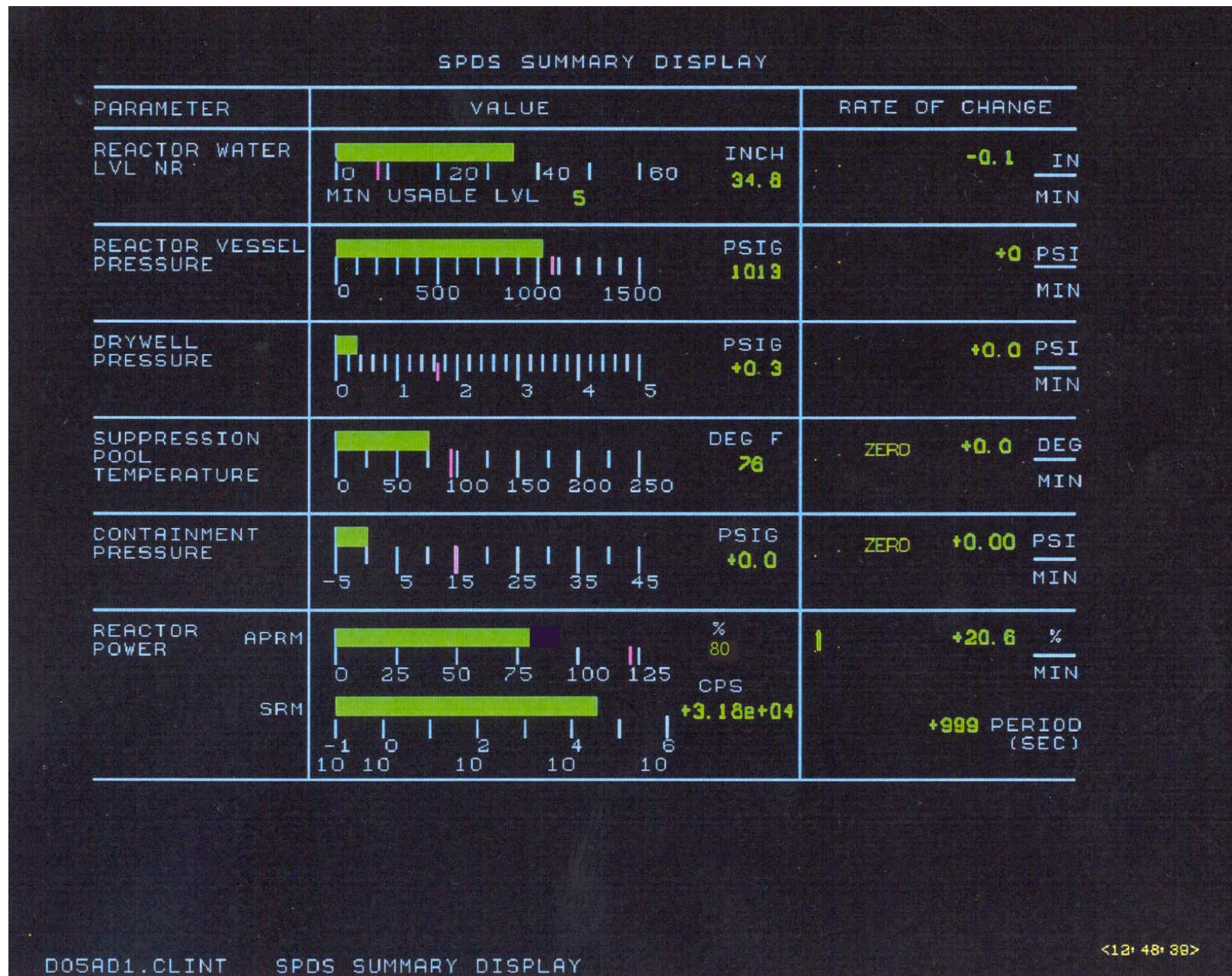
CPS 3831.01, SAFETY RELIEF VALVE REPORT has been completed.

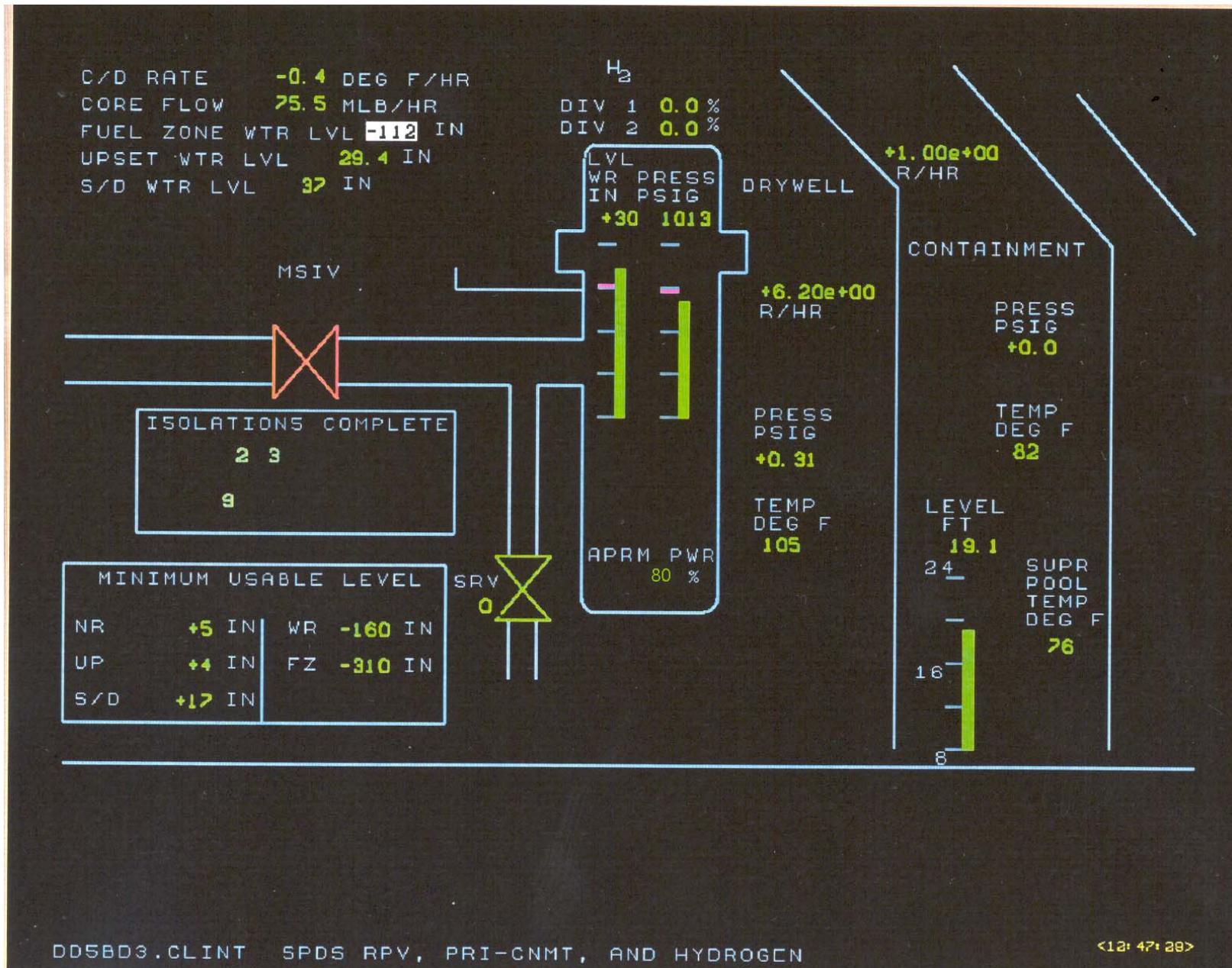
AND INITIATING CUE:

As the CRS, you are to review and approve CPS 3831.01, SAFETY RELIEF VALVE REPORT.









CLINTON POWER STATION

Job Performance Measure

Determine actions required for a security threat

JPM Number: 4305.0101

Revision Number: 01

Date: 12/15/03

Developed By:	<u>T. Pickley</u>	<u>12/11/03</u>
	Instructor	Date

Validated By:	<u></u>	<u>12/15/03</u>
	SME or Instructor	Date

Review By:	<u>P. K. Ryan</u>	<u>12/15/03</u>
	Operations Representative	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor Date

SME/Instructor Date

SME/Instructor Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

Revision Record (Summary)

1. **Revision 00,** This is a new JPM
2. **Revision 01,** Incorporate NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

Operator's Name: _____ SSN: _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title/Number: 4305.0101, Determine actions required for a security threat

Revision Number: 01

Task Number and Title: 430501.01, Complete Control Room actions to respond to a
Security Threat or Intrusion

Suggested Testing Environment: Any

Actual Testing Environment: ☒ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Faulted: ☐ No
Alternate Path: ☐ No

Time Critical: ☐ No

Estimated Time to Complete: 8 minutes **Actual Time Used:** _____ minutes

References:

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM,
and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

None

TASK STANDARDS:

The threat is identified as credible and it is determined that a plant shutdown and cooldown is required.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

SY-AA-101-132 THREAT ASSESSMENT
CPS 4305.01 SECURITY THREAT/INTRUSION

EVALUATOR INSTRUCTIONS:

Provide the operator with attached copies of SY-AA-101-132 THREAT ASSESSMENT and CPS 4305.01 SECURITY THREAT/INTRUSION.
Amplifying cues are provided within the JPM steps.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

INITIAL CONDITIONS:

You are the CRS.

The plant is operating at rated conditions.

Security was notified earlier in the day that the Department of Homeland Security has elevated the national security risk level to ORANGE.

The Security Shift Leader just notified the Shift Manager that Security received a threatening phone call stating that an explosive device has been placed in the Screen House that will detonate in 2.5 hours.

INITIATING CUE:

The Shift Manager has assigned you to Peer Check Security by performing a Threat Assessment per SY-AA-101-132 to determine if the threat is a Non-credible, Credible/Possible or an Actual Threat.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

*1	Assess the threat.
Standard	Assess threat as CREDIBLE/POSSIBLE per SY-AA-101-132 section 4.4.
CUE	When the threat has been assessed tell the examinee that, "It is 45 minutes later and Security notifies you that a bomb has been located in the Screen house.
	The Shift Manager directs you to continue your peer check of Security and determine what plant manipulations, if any, need to be performed."
Comments	SAT UNSAT Comment Number

*2	Reassess the threat.
Standard	Assess threat as ACTUAL per SY-AA-101-132 section 4.4.
CUE	
Comments	SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

***3** **Determine the required plant manipulations.**

Standard **Place the mode switch in Shutdown.**
CUE **Cooldown the Reactor.**

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

STOP TIME: _____

TERMINATING CUES:

The threat is identified as Actual and it is determined that a plant shutdown and cooldown is required.

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
Generic	2.1.6	2.1	4.3.

Ability to supervise and assume a management role during plant transients and upset conditions.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 4305.0101

REVISION: 01

INITIAL CONDITIONS:

You are the CRS.

The plant is operating at rated conditions.

Security was notified earlier in the day that the Department of Homeland Security has elevated the national security risk level to ORANGE.

The Security Shift Leader just notified the Shift Manager that Security received a threatening phone call stating that an explosive device has been placed in the Screen House that will detonate in 2.5 hours.

INITIATING CUE:

The Shift Manager has assigned you to Peer Check Security by performing a Threat Assessment per SY-AA-101-132 to determine if the threat is a Non-credible, Credible/Possible or an Actual Threat.

CLINTON POWER STATION

Job Performance Measure

Review a Completed Control Rod / Position Indication Operability Surveillance
and Identify Discrepancies (Faulted)

JPM Number: 901101.0101

Revision Number: 03

Date: 12/11/03

Developed By:	<u>T. Pickley</u>	<u>12/11/03</u>
	Instructor	Date
Validated By:	<u>T. Coe</u>	<u>12/15/03</u>
	SME or Instructor	Date
Review By:	<u>P. K. Ryan</u>	<u>12/15/03</u>
	Operations Representative	Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

Revision Record (Summary)

1. **Revision 00,** This is a new SRO Administrative JPM
2. **Revision 01,** Incorporating NRC validation comments
3. **Revision 02,** New procedure revision
4. **Revision 03,** Incorporate NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 901101.0101

Revision 03

Operator's Name: _____

Job Title: ☒ SRO

JPM Title: Review a Completed Control Rod / Position Indication Operability Surveillance and Identify Discrepancies (Faulted)

JPM Number: 901101.0101

Task Number and Title: 999999.19, Review the results of surveillance tests

K/A Number: 2.2.12 Importance: 3.4

Suggested Testing Environment: Any

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate **Alternate Path / Faulted:** ☒ Yes
☒ Perform

Time Critical: ☐ No

Estimated Time to Complete: 17 minutes **Actual Time Used:** _____ minutes

References: CPS No. 9011.01, CONTROL ROD/POSITION INDICATION OPERABILITY,
Revision 27d

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 901101.0101

Revision 03

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

Not Applicable

TASK STANDARDS:

Review of CPS 9011.01 Control Rod / Position Indication Operability surveillance has been completed.

Misaligned control rod has been identified.

Final Conditions of CPS 9011.01 not met has been determined.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

Marked up copy of CPS 9011.01, signing off all steps as satisfactory (procedure attached).

Copy of an OD-7 Option 2, OD-7 Option 4 and an Official 3D Case.

PROCEDURAL/REFERENCES:

CPS 9011.01, CONTROL ROD/POSITION INDICATION OPERABILITY, Revision 27d

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

Provide CPS 9011.01, initial 3D, and OD-7 and surveillance after reading the initiating cue.

INITIAL CONDITIONS:

You are the CRS.

The plant is operating at 90% power.

The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability surveillance for all fully and partially withdrawn control rods.

INITIATING CUE:

Review the completed surveillance for approval. Report when the task is complete.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 901101.0101

Revision 03

=====

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

=====

PERFORMANCE STEPS

1. Review completed CPS 9011.01

Standard Examinee begins review of 9011.01.
CUE

Comments

SAT UNSAT Comment Number

***2. Review the initial and final Control Rod Position printouts to verify proper rod positions.**

Standard Examinee performs review and identifies that rod 36-29 is at position 6
CUE instead of position 4.

Comments

SAT UNSAT Comment Number

***3. Enter into Inadvertent Rod Movement CPS 4007.02**

Standard Notify Shift Manager
Obtain a 3D case and verify thermal limits.
Contact the Reactor Engineer

CUE Hand examinee the "FINAL" 3D case

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 901101.0101

Revision 03

***5. Direct the RO to return Control Rod 36-29 back to position 04**

Standard Control Rod repositioning is directed

CUE As the Reactor Engineer, recommend the CRS to move control rod 36-29 from 06 to 04. Hand the examinee the move sheet.

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

Terminating Cue:

Review of 9011.01 has been completed and the discrepancy identified.

Inadvertent Rod Movement CPS 4007.02 has been entered and step taken to reposition the control rod.

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 901101.0101

Revision 03

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	Importance Rating	
		<u>RO</u>	<u>SRO</u>
GENERIC	2.2.12	3.0	3.4

Knowledge of surveillance procedures.

SYSTEM JPM

JPM NUMBER 901101.0101

Revision 03

INITIAL CONDITIONS:

You are the CRS.

The plant is operating at 90% power.

The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability surveillance for all fully and partially withdrawn control rods.

INITIATING CUE:

Review the completed surveillance for approval. Report when the task is complete.

CONTROL ROD/POSITION INDICATION OPERABILITY

SCOPE OF REVISION:

- Incorporated PAC 0407-97: Editorial typo. Rev marks not retained.
- Format/Organizational title updates, placekeeping aid enhancements, section 5.1 updated to include annunciator impact per 1005.01.
- CR1-98-02-110 (MLSR Project):
Incorporated performance criteria and credit for
ITS SR 3.9.5.1 MODE 5 control rod position checks.
- Documentation content of canceled CPS 9011.01C001, Control Rod Operability Checklist incorporated into body of this procedure.
- ① Incorporated PAC 0502-99, PDRs 99-0906 and 00-0298.
- ② Added flags for critical steps.
- ③ Updates format, revised to make consistent with Limitations in CPS 3304.01, Control Rod Hydraulic & Control (RD).
- ④ Specific rev 27d [Sheffield]: CR 130905:
Added to review control rod database prior to movement of a single rod at elevated drive water pressure to establish what seal conditions are.

CONTAINS CRITICAL STEPS

CONTINUOUS USE

ORIGINATOR *Thomas J. Landin*

CLASS CODE: *SNNN*

:

ITR: *K. Zipprich*

APPROVAL *SEP 16 1998*
DATE:

CURRENT CHANGES TO GENERAL REVISION

	Change #	Date	List of Affected Pages
①	27a	02/21/01	1, 4, 6, 7
②	27b	08/13/01	1, 3, 6
③	27c	01/02/02	1, 4
④	27d	02/05/03	1 and 7
⑤			

c 1.0

PURPOSE

Provide instructions for verifying control rod insertion capability by inserting each applicable PARTIALLY or FULLY withdrawn control rod one notch and observing that the control rod moves, thereby ensuring the control rod is not stuck and is free to insert on a SCRAM.

Instructions are also provided to return the control rods to their original positions to verify each applicable control rod is operable and that the position indication for each applicable control rod is operable.

This surveillance satisfies ITS SR requirements:

3.1.3.2, Insert each FULLY withdrawn control rod one notch (7 days)

3.1.3.3, Insert each PARTIALLY withdrawn control rod one notch (31 days)

①

3.9.5.1, Insert each withdrawn control rod one notch (7 days - MODE 5)

2.0

DISCUSSION/DEFINITIONS

2.1

FREQUENCY «LBD-1»

2.1.1

Normal Frequency (MODEs 1, 2):

7 Days - for FULLY withdrawn control rods with
THERMAL POWER > LPSP of the RPCS

31 Days - for PARTIALLY withdrawn control rods with
THERMAL POWER > LPSP of the RPCS

2.1.2

Other Triggers:

a) Within 24 hours from discovery of any withdrawn control rod that is stuck (will not insert by either CRD drive water or scram pressure) - for all control rods either PARTIALLY or FULLY withdrawn, concurrent with THERMAL Power > the LPSP of the RPCS.

①

b) MODE 5 when control rod withdrawn triggered via
CPS 9000.01D002, Control Room Operator Surveillance Log - MODE 4,5 DATA SHEET (7 day frequency).

2.2

Individual sections or an individual step or individual steps within a section of this procedure may be performed independently for PMT or other maintenance activities. Those steps within a section that are not performed should be marked N/A. When only parts of a section are performed, it is the responsibility of the SMngt and the performer to ensure that all necessary prerequisites, precautions and limitations are met for those steps that will be performed. Additionally, the impact of NOT performing the remaining steps must also be understood.

2.0 DISCUSSION/DEFINITIONS (cont'd)

2.3 All applicable control rods (control rods not required to have their directional control valves disarmed electrically or hydraulically) will be moved at least one notch to verify proper rod motion and position indication response. Control rod exercising should be performed by a single notch insertion and single notch withdrawal, in as short a time as possible.

3.0 **RESPONSIBILITY**

Operations Department Head is responsible for the implementation of this procedure.

4.0 **PRECAUTIONS**

4.1 Plant evolutions which may result in reactivity changes should be avoided during performance of this surveillance.

4.2 Document control rod movement per
CPS 9000.09, CPS Control Rod Manipulation Logs.

5.0 PREREQUISITES

INITIAL

- ② 5.1 This procedure contains critical steps. A **Critical Step** is "Any action that, when performed improperly, will lead to an unintentional change that adversely impacts plant, system, or personnel". Performance of this procedure requires screening for a **High Risk/High Production Risk/Risk Sensitive** activity IAW WC-AA-104 and any existing requirements for Command and Control Standards. Critical steps are indicated by a **{CS}** in the left margin."

- 5.2 In conjunction with the SMngt,
review the following impact statements to determine required plant status to perform this test:

OPERABILITY IMPACT:

ITS LCO 3.1.3 - Control Rod Operability

SYSTEMS AFFECTED:

- ①** AFFECTED ANNUNCIATORS AND COMPUTER POINTS: None

RPS TRIP: N/A

CRVICS ISOLATION: N/A

REQUIRED OPERABLE CHANNELS: N/A

- ## ① PLANT/SYSTEM CONDITIONS REQUIRED TO CONDUCT TEST

When in MODEs 1, 2: Power > low power set point (LPSP) of the Rod Pattern Control System (RPCS).

When in MODEs 1, 2: For control rods not FULLY withdrawn,
 MAPRAT ≤ 0.96 . If MAPRAT > 0.96 a power reduction will be required prior to testing control rods
 that are not FULLY withdrawn.

COINCIDENT CHANNELS TO PREVENT ACTUATION: N/A

\mathcal{SM}	/	\mathcal{DL}
SMngt		Test Performer

- | | | | | |
|----------|-----|---|-------------|-----------|
| 0 | 5.3 | MODE 1, 2: Reactor power (> LPSP).
[N/A when in MODE 5.] | <u>90</u> % | <u>DL</u> |
|----------|-----|---|-------------|-----------|

- 5.4 SM/CRS permission to perform this surveillance. SM
SMngt

XX:XX / XX/XX/XX
Time/Date

6.0 **LIMITATIONS**

6.1 **IF** a control rod (or gang) is found out of sequence, **THEN** enter CPS 4007.02, Inadvertent Rod Movement.

6.2 In the event of accidental insertion of more than one notch, withdrawal should be by single notch to avoid any possible over-notching on the withdrawal.

① 6.3 MODEs 1, 2: MAPRAT shall be ≤ 0.96 when exercising PARTIALLY withdrawn control rods. This limitation does not apply to FULLY withdrawn control rods.

① ③ 6.4 The Rod Withdraw Limiter (RWL) function of the Rod Control and Information system establishes a 4 notch withdraw limit when reactor power is between the Low Power Set Point (LPSP) and the High Power Set Point (HPSP), and a 2 notch withdraw limit when power is above the HPSP. The purpose of the RWL is to prevent fuel damage, caused by rod withdrawal which would uncover fuel that has been operating at a relatively low power level. The limit is set at 2 or 4 notches (as applicable) from the position of the control rod, the first time a Withdraw signal is applied after the rod is selected.

IF a control rod is inserted with the intent of leaving the rod at the new inserted position, **OR** power condition have changed significantly (RR flow changes or Xenon transient) since the control rod was inserted, **THEN** prior to withdrawing that control rod, deselect and reselect the control rod, to establish the RWL notch limits.

IF a control rod is inserted with the intent of returning the control rod to its original position for notch testing, **THEN** withdrawing the control rod to its original position in the continuous withdraw mode is permitted, **AND** is within the design basis of the RWL as long as power condition have not changed significantly.

Control rods should be deselected, any time that MCR personnel are **NOT** actively engaged in control rod movement activities. «CM-1»

7.0 **MATERIALS/TEST EQUIPMENT** - None

8.0	<u>PROCEDURE</u>	<u>Initial</u>
❶ 8.1	Obtain a Plant Monitoring System (PMS) Control Rod Position printout, using either: OD-7 Option 2, OD-7 Option 4, or Official 3D Case.	<u>DL</u>
❶ 8.1.1	From the OD-7 edit or Official 3D Case, determine which control rods are not required to be tested because they are not withdrawn.	<u>DL</u>
8.1.2	Identify any control rods which are disarmed.	<u>DL</u>
8.1.3	Identify any control rods which are PARTIALLY withdrawn.	<u>DL</u>

NOTE

When exercising PARTIALLY withdrawn rods during the monthly test, a “P/” should be used before initials to differentiate between partially withdrawn and fully withdrawn rods.

In this manner, the MODE 1, 2 requirement to limit MAPRAT ≤ 0.96 can be more readily determined.

8.1.4 On the CORE MAP (page 7):

- Mark disarmed control rods with “DA”. DL
- Mark FULLY inserted control rods with “N/A”. DL
- Mark partially withdrawn control rods with “P/” (if exercising PARTIALLY inserted rods). DL
- Mark partially withdrawn control rods with “N/A” (if not exercising PARTIALLY inserted rods). N/A

NOTE

Drives with new seals should not be moved per single notch with elevated drive water pressure, due to increase potential for double-notching. Consult control rod database for seal condition

MODE 1 or 2:

Individual and/or ganged rod movement may be used to perform this surveillance.

FULLY withdrawn control rods are not required to be performed until 8 days 18 hours after the control rod is fully withdrawn and THERMAL POWER is > LPSP of the RPCS.

Rods at position 46 for cooling shall be considered FULLY withdrawn and subject to the 7 day frequency. These rods may be required to be returned to position 48 first to perform the surveillance.

PARTIALLY withdrawn control rods are not required to be performed until 38 days 18 hours after the control rod is withdrawn and THERMAL POWER > LPSP of the RPCS.

MODE 5:

Individual rod movement shall be used to perform this surveillance.

Withdrawn control rods are not required to be performed until 7 days after the control rod is withdrawn.

8.2 **Exercise of FULLY (PARTIALLY)
Withdrawn Control Rods**

Initial

- | | | | |
|-------|-------|---|-------------------------------|
| 0 | 8.2.1 | MODEs 1, 2 PARTIALLY withdrawn rods only
(N/A for FULLY withdrawn rods or MODE 5):

Verify $\text{MAPRAT} \leq 0.96$. <u>0.821</u> MAPRAT

If MAPRAT > 0.96, then a power reduction shall
be required to achieve $\text{MAPRAT} \leq 0.96$ prior
to testing any PARTIALLY withdrawn control rods. | <u>DL</u> |
| 2{CS} | 8.2.2 | Select and insert the desired rod(s) one notch,
noting proper position indication tracking. | <u>X</u>
Place Keeping Aid |
| 2{CS} | 8.2.3 | Withdraw the selected rod(s) one notch to
original position. | <u>X</u>
Place Keeping Aid |
| | a) | Observe proper rod position indication
tracking to the original rod position. | <u>X</u>
Place Keeping Aid |
| | b) | Check off the selected rod(s) after the
rod(s) is tested by initialing the rod(s).
[Document on CORE MAP] | <u>X</u>
Place Keeping Aid |

- 8.2.4 Repeat steps 8.2.2 and 8.2.3 for each
FULLY (PARTIALLY) withdrawn control rod.

___X___
Place Keeping Aid

8.3 **RESTORATION**

Initial

- ❶ 8.3.1 Obtain a PMS Control Rod Position printout:
OD-7 Option 2, OD-7 Option 4, or
Official 3D Case. ___DL___
- 8.3.2 Compare the initial and final Control Rod Position printouts to verify proper rod
positions. ___DL___
- ❶ 8.3.3 Notify the SMngt of the completion of this test. ___DL___

TODAY / NOW
Time/Date

9.0 **ACCEPTANCE CRITERIA**

- 9.1 Operability Requirements - Failure to meet the Acceptance Criteria shall constitute a failure to comply with the applicable LCO. ITS should be immediately reviewed to identify Action Statements needed for implementation. Refer to Supplemental Review Sheet for applicable LCOs.
- 9.1.1 All withdrawn control rods not required to have their directional control valves disarmed electrically or hydraulically are inserted at least 1 notch.
- 9.1.2 The indicated control rod position changes during movement of the Control Rod Drive.
- 9.2 Other Requirements - None

10.0 **FINAL CONDITIONS**

The control rods are returned to their original positions.

11.0 **REFERENCES**

- 11.1 CPS 4007.02, Inadvertent Rod Movement
- 11.2 CPS 9000.01D002, Control Room Operator Surveillance
 Log - MODE 4,5 Data Sheet
- 11.3 CPS 9000.09, CPS Control Rod Manipulation Logs
- 11.4 LBD-1: ITS SR 3.1.3.2, SR 3.1.3.3, SR 3.9.5.1
- 11.5 USAR 3.1.2.3.2.1, 4.6.3.1.1.5
- 11.6 GE Control Rod Drive Design Spec Data Sheet 22A5395 AE
- 11.7 GE Letter GGJ-88-100 dated 7-29-88
- ❶ 11.8 CM-1: CR 1-99-04-097

12.0 **APPENDICES** - None❷ 13.0 **DOCUMENTS** - None

CORE MAP

			<u>DL</u> 16-53	<u>DL</u> 20-53	<u>DL</u> 24-53	<u>DL</u> 28-53	<u>DL</u> 32-53	<u>DL</u> 36-53	<u>DL</u> 40-53			
		<u>DL</u> 12-49	<u>DL</u> 16-49	<u>DL</u> 20-49	<u>DL</u> 24-49	<u>DL</u> 28-49	<u>DL</u> 32-49	<u>DL</u> 36-49	<u>DL</u> 40-49	<u>DL</u> 44-49		
	<u>DL</u> 08-45	<u>DL</u> 12-45	<u>DL</u> 16-45	<u>DL</u> 20-45	<u>DL</u> 24-45	<u>DL</u> 28-45	<u>DL</u> 32-45	<u>DL</u> 36-45	<u>DL</u> 40-45	<u>DL</u> 44-45	<u>DL</u> 48-45	
<u>DL</u> 04-41	<u>DL</u> 08-41	<u>DL</u> 12-41	<u>DL</u> 16-41	<u>DL</u> 20-41	<u>DL</u> 24-41	<u>DL</u> 28-41	<u>DL</u> 32-41	<u>DL</u> 36-41	<u>DL</u> 40-41	<u>DL</u> 44-41	<u>DL</u> 48-41	<u>DL</u> 52-41
<u>DL</u> 04-37	<u>DL</u> 08-37	<u>DL</u> 12-37	<u>DL</u> 16-37	<u>P/ DL</u> 20-37	<u>DL</u> 24-37	<u>P/ DL</u> 28-37	<u>DL</u> 32-37	<u>P/ DL</u> 36-37	<u>DL</u> 40-37	<u>DL</u> 44-37	<u>DL</u> 48-37	<u>DL</u> 52-37
<u>DL</u> 04-33	<u>DL</u> 08-33	<u>DL</u> 12-33	<u>DL</u> 16-33	<u>DL</u> 20-33	<u>DL</u> 24-33	<u>DL</u> 28-33	<u>DL</u> 32-33	<u>DL</u> 36-33	<u>DL</u> 40-33	<u>DL</u> 44-33	<u>DL</u> 48-33	<u>DL</u> 52-33
<u>DL</u> 04-29	<u>DL</u> 08-29	<u>DL</u> 12-29	<u>DL</u> 16-29	<u>P/ DL</u> 20-29	<u>DL</u> 24-29	<u>DL</u> 28-29	<u>DL</u> 32-29	<u>P/ DL</u> 36-29	<u>DL</u> 40-29	<u>DL</u> 44-29	<u>DL</u> 48-29	<u>DL</u> 52-29
<u>DL</u> 04-25	<u>DL</u> 08-25	<u>DL</u> 12-25	<u>DL</u> 16-25	<u>DL</u> 20-25	<u>DL</u> 24-25	<u>DL</u> 28-25	<u>DL</u> 32-25	<u>DL</u> 36-25	<u>DL</u> 40-25	<u>DL</u> 44-25	<u>DL</u> 48-25	<u>DL</u> 52-25
<u>DL</u> 04-21	<u>DL</u> 08-21	<u>DL</u> 12-21	<u>DL</u> 16-21	<u>P/ DL</u> 20-21	<u>DL</u> 24-21	<u>P/ DL</u> 28-21	<u>DL</u> 32-21	<u>P/ DL</u> 36-21	<u>DL</u> 40-21	<u>DL</u> 44-21	<u>DL</u> 48-21	<u>DL</u> 52-21
<u>DL</u> 04-17	<u>DL</u> 08-17	<u>DL</u> 12-17	<u>DL</u> 16-17	<u>DL</u> 20-17	<u>DL</u> 24-17	<u>DL</u> 28-17	<u>DL</u> 32-17	<u>DL</u> 36-17	<u>DL</u> 40-17	<u>DL</u> 44-17	<u>DL</u> 48-17	<u>DL</u> 52-17
	<u>DL</u> 08-13	<u>DL</u> 12-13	<u>DL</u> 16-13	<u>DL</u> 20-13	<u>DL</u> 24-13	<u>DL</u> 28-13	<u>DL</u> 32-13	<u>DL</u> 36-13	<u>DL</u> 40-13	<u>DL</u> 44-13	<u>DL</u> 48-13	
		<u>DL</u> 12-09	<u>DL</u> 16-09	<u>DL</u> 20-09	<u>DL</u> 24-09	<u>DL</u> 28-09	<u>DL</u> 32-09	<u>DL</u> 36-09	<u>DL</u> 40-09	<u>DL</u> 44-09		
			<u>DL</u> 16-05	<u>DL</u> 20-05	<u>DL</u> 24-05	<u>DL</u> 28-05	<u>DL</u> 32-05	<u>DL</u> 36-05	<u>DL</u> 40-05			

CONTROL ROD OPERABILITY CHECKLISTCORRECTIVE ACTION TAKEN9.1 ACCEPTANCE CRITERIAITS LCOs: 3.1.3 3.9.5ORM ORs: NoneODCM ORs: None

As applicable:

Initiated Condition Report _____
(yes/no)

Initiated Maintenance Request (MR) No. _____

9.2 ACCEPTANCE CRITERIA

As applicable:

Initiated Condition Report _____
(yes/no)

Initiated Maintenance Request (MR) No. _____

COMMENTS/DEFICIENCIES

REVIEW AND APPROVALSurveillance Coordinator _____
(Signature) (Date)

Job Performance Measure (JPM)PAGE 1, **INITIAL**

CORE PARAMETERS		CLINTON CYCLE 6	SEQUENCE NO 23
POWER	MWT	3125	3D MONICORE today-2xxx xx:xx CALCULATED
POWER	MWE	1062	PERIODIC LOG today-2xxx xx:xx PRINTED
FLOW	MLB/HR	75.844	CASE ID FMLD1950708205855
FPAPDR		0.824	RESTART FMLD1950708195845
SUBC	BTU/LB	23.49	LPRM SHAPE - FULL CORE
PR	PSIa	1027.9	
CORE	MWD/sT	20850.8	LOAD LINE SUMMARY
CYCLE	MWD/sT	8741.6	CORE POWER 89.9%
MCPR		1.268	CORE FLOW 89.8%
			LOAD LINE 100.0%

CORRECTION FACTOR: MFLCPR= 1.000 MFLPD= 1.000 MAPRAT= 0.999
 OPTION: ARTS DUAL LOOP MANUAL FLOW MCPRLIM= 1.240

MOST LIMITING LOCATIONS (NON-SYMMETRIC)

MFLCPR	LOC	MFLPD	LOC	MAPRAT	LOC	PCRAT	LOC
0.978	37-28	0.912	17-22-18	0.821	7-28- 5	0.798	41-28-16
0.976	39-26	0.912	7-28- 5	0.817	15-30-16	0.798	19-28-16
0.975	41-28	0.912	41-28-16	0.817	11-22-13	0.797	7-28- 5
0.973	11-28	0.902	19-28-16	0.816	19-26-16	0.791	39-22-20
0.940	13-32	0.896	15-38-18	0.813	19-30-15	0.782	9-22-13
0.939	9-26	0.895	21-26-16	0.803	7-26-12	0.779	11-20-13
0.937	11-20	0.893	17-26-16	0.802	9-36-13	0.779	17-26-16
0.930	39-22	0.889	9-22-13	0.798	11-30-11	0.777	11-28-15
0.927	7-28	0.889	11-20-13	0.796	9-26- 5	0.776	13-32-16
0.923	9-22	0.888	13-32-16	0.795	39-22-20	0.774	47-26-12

SEQ. B-2 C=MFLCPR D=MFLPD M=MAPRAT P=PCRAT *=MULTIPLE CORE AVE AXIAL

						NOTCH	REL PW	LOC
53						00	0.238	25
49						02	0.446	24
L						04	0.804	23
45						06	0.963	22
						08	1.056	21
41			P			10	1.158	20
L						12	1.191	19
37		18	C4	18		14	1.163	18
						16	1.182	17
33						18	1.220	16
L						20	1.215	15
29		4		4		22	1.187	14
						24	1.212	13
25						26	1.207	12
L						28	1.181	11
21		18	4	18		30	1.170	10
						32	1.166	09
17			D			34	1.131	08
L						36	1.085	07
13						38	1.072	06
						40	1.050	05
09						42	0.998	04
L			M			44	0.920	03
05	L	L	L	L	L	46	0.749	02
	04	08	12	16	20	48	0.237	01
			24	28	32			
				36	40			
					44			
						48		

CORE AVERAGE RADIAL POWER DISTRIBUTION

RING #	1	2	3	4	5	6	7
REL PW	0.890	1.084	1.113	1.102	1.155	1.145	0.727

PAGE 2

CLINTON CYCLE 6 INSTRUMENT READINGS/STATUS SEQUENCE NO 23

Job Performance Measure (JPM)

CALIBRATED LPRM READINGS						today-2xxx xx:xx CALCULATED
						today-2xxx xx:xx PRINTED
47D	40.1	49.8	55.7	45.9	30.2	CASE ID FMLD1950708205855
C	57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL CORE
B	61.2	63.6	60.9	69.2	41.9	
A	51.1	54.9	49.5	63.0	27.7	# OF TIPS REJECTED: 1
39D	35.4	51.3	58.4	61.1	57.5	FAILED SENSORS:
C	55.8	62.7	60.3	59.6	66.5	LPRM (2 SIGNAL FAILED)
B	60.0	65.2	60.7	57.0	66.7	615A 3815D
A	52.7	61.1	50.4	44.4	54.7	LPRM (0 PANACEA REJECTED)
						OTHER SENSORS (0 TOTAL)
31D	39.9	51.6	55.8	56.0C	55.7	SUB RODS
C	63.7	71.1	68.3	63.1	72.6P	NONE
B	69.6	71.2	66.7	59.2	72.9	
A	67.6M	69.0	61.1	45.4	71.1	T = TIP RUN RECOMMENDED
						C = MFLCPR LOCATION
23D	40.0	54.3	58.1	57.9	59.5	M = MAPRAT LOCATION
C	62.2	67.3D	63.7	59.2	66.8	D = MFLPD LOCATION
B	67.1	67.1	61.4	56.9	66.6	P = PCRAT LOCATION
A	66.5	58.6	48.7	44.2	55.6	* = MULTIPLE LIMIT
15D	28.5	46.2	55.5	57.2	0.0	
C	42.4	63.6	62.8	59.1	65.4	
B	43.2	68.6	61.9	57.4	67.6	
A	0.0	61.7	49.9	44.3	64.3	
07D	29.1	39.3	40.7	36.6		
C	41.4	58.6	56.6	54.5		
B	42.3	64.8	61.8	58.3		
A	31.2	57.2	55.6	48.4		
	06	14	22	30	38	46

CORE SUMMARY

CORE POWER	89.9%	CALC SUB FLOW	91.3%	DP MEAS PSI	15.52
CORE FLOW	89.8%	OPER SUB FLOW	-1.2%	DP CALC PSI	20.52
LOAD LINE	100.0%	FLOW BASIS	MEAS	FEEDWTR FLOW MLB/HR	13.5

APRM CALIBRATION

	A	B	C	D
READING	100.4	100.6	100.2	100.2
AGAF	0.994	0.992	0.997	0.997

TIP RUNS RECOMMENDED

STRINGS: NONE

Job Performance Measure (JPM)

UNIT 1, PAGE 1 OF 1

**INITIAL
Positions**

OD-7, CONTROL ROD NOTCH POSITIONS, NEW SCAN
OPTION 2

53				48	48	48	48	48	48	48			
49			48	48	48	48	48	48	48	48	48		
45		48	48	48	48	48	48	48	48	48	48	48	
41	48	48	48	48	48	48	48	48	48	48	48	48	48
37	48	48	48	48	18	48	4	48	18	48	48	48	48
33	48	48	48	48	48	48	48	48	48	48	48	48	48
29	48	48	48	48	4	48	48	48	4	48	48	48	48
25	48	48	48	48	48	48	48	48	48	48	48	48	48
21	48	48	48	48	18	48	4	48	18	48	48	48	48
17	48	48	48	48	48	48	48	48	48	48	48	48	48
13		48	48	48	48	48	48	48	48	48	48	48	
9			48	48	48	48	48	48	48	48	48		
5				48	48	48	48	48	48	48			
	4	8	12	16	20	24	28	32	36	40	44	48	52

Job Performance Measure (JPM)PAGE 1, **FINAL**

CORE PARAMETERS			CLINTON CYCLE 6	SEQUENCE NO 23
POWER	MWT	3125	3D MONICORE	today-2xxx xx:xx CALCULATED
POWER	MWE	1062	PERIODIC LOG	today-2xxx xx:xx PRINTED
FLOW	MLB/HR	75.844	CALC RESULTS	CASE ID FMLD1950708205855
FPAPDR		0.824		RESTART FMLD1950708195845
SUBC	BTU/LB	23.49	Keff	1.0000
PR	PSIa	1027.9	XE WORTH %	-2.52
CORE	MWD/sT	20850.8	XE/RATED	1.00
CYCLE	MWD/sT	8741.6		
MCPR		1.268		

LOAD LINE SUMMARY	
CORE POWER	89.9%
CORE FLOW	89.8%
LOAD LINE	100.0%

CORRECTION FACTOR: MFLCPR= 1.000 MFLPD= 1.000 MAPRAT= 0.999
 OPTION: ARTS DUAL LOOP MANUAL FLOW MCPRLIM= 1.240

MOST LIMITING LOCATIONS (NON-SYMMETRIC)

MFLCPR	LOC	MFLPD	LOC	MAPRAT	LOC	PCRAT	LOC
0.978	37-28	0.912	17-22-18	0.821	7-28- 5	0.798	41-28-16
0.976	39-26	0.912	7-28- 5	0.817	15-30-16	0.798	19-28-16
0.975	41-28	0.912	41-28-16	0.817	11-22-13	0.797	7-28- 5
0.973	11-28	0.902	19-28-16	0.816	19-26-16	0.791	39-22-20
0.940	13-32	0.896	15-38-18	0.813	19-30-15	0.782	9-22-13
0.939	9-26	0.895	21-26-16	0.803	7-26-12	0.779	11-20-13
0.937	11-20	0.893	17-26-16	0.802	9-36-13	0.779	17-26-16
0.930	39-22	0.889	9-22-13	0.798	11-30-11	0.777	11-28-15
0.927	7-28	0.889	11-20-13	0.796	9-26- 5	0.776	13-32-16
0.923	9-22	0.888	13-32-16	0.795	39-22-20	0.774	47-26-12

SEQ. B-2 C=MFLCPR D=MFLPD M=MAPRAT P=PCRAT *=MULTIPLE CORE AVE AXIAL

53	NOTCH	REL PW	LOC
	00	0.238	25
49	02	0.446	24
L	04	0.804	23
45	06	0.963	22
	08	1.056	21
41	10	1.158	20
L	12	1.191	19
37	14	1.163	18
	16	1.182	17
33	18	1.220	16
L	20	1.215	15
29	22	1.187	14
	24	1.212	13
25	26	1.207	12
L	28	1.181	11
21	30	1.170	10
	32	1.166	09
17	34	1.131	08
L	36	1.085	07
13	38	1.072	06
	40	1.050	05
09	42	0.998	04
L	44	0.920	03
05	46	0.749	02
04	48	0.237	01

CORE AVERAGE RADIAL POWER DISTRIBUTION

RING #	1	2	3	4	5	6	7
REL PW	0.890	1.084	1.113	1.102	1.155	1.145	0.727

Job Performance Measure (JPM)

CLINTON CYCLE 6	INSTRUMENT READINGS/STATUS					SEQUENCE NO 23
	CALIBRATED LPRM READINGS					today-2xxx xx:xx CALCULATED
						today-2xxx xx:xx PRINTED
47D	40.1	49.8	55.7	45.9	30.2	CASE ID FMLD1950708205855
C	57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL CORE
B	61.2	63.6	60.9	69.2	41.9	
A	51.1	54.9	49.5	63.0	27.7	# OF TIPS REJECTED: 1
39D	35.4	51.3	58.4	61.1	57.5	46.0
C	55.8	62.7	60.3	59.6	66.5	67.9
B	60.0	65.2	60.7	57.0	66.7	70.2
A	52.7	61.1	50.4	44.4	54.7	63.8
31D	39.9	51.6	55.8	56.0C	55.7	48.5
C	63.7	71.1	68.3	63.1	72.6P	70.4
B	69.6	71.2	66.7	59.2	72.9	73.4
A	67.6M	69.0	61.1	45.4	71.1	71.8
23D	40.0	54.3	58.1	57.9	59.5	48.0
C	62.2	67.3D	63.7	59.2	66.8	69.0
B	67.1	67.1	61.4	56.9	66.6	71.1
A	66.5	58.6	48.7	44.2	55.6	66.1
15D	28.5	46.2	55.5	57.2	0.0	39.4
C	42.4	63.6	62.8	59.1	65.4	59.1
B	43.2	68.6	61.9	57.4	67.6	62.2
A	0.0	61.7	49.9	44.3	64.3	50.4
07D	29.1	39.3	40.7	36.6		
C	41.4	58.6	56.6	54.5		
B	42.3	64.8	61.8	58.3		
A	31.2	57.2	55.6	48.4		
06	14	22	30	38	46	

CORE SUMMARY

CORE POWER	89.9%	CALC SUB FLOW	91.3%	DP MEAS PSI	15.52
CORE FLOW	89.8%	OPER SUB FLOW	-1.2%	DP CALC PSI	20.52
LOAD LINE	100.0%	FLOW BASIS	MEAS	FEEDWTR FLOW MLB/HR	13.5

APRM CALIBRATION

	A	B	C	D
READING	100.4	100.6	100.2	100.2
AGAF	0.994	0.992	0.997	0.997

TIP RUNS RECOMMENDED

STRINGS: NONE

UNIT 1, PAGE 1 OF 1

**Final
Positions**

OD-7, CONTROL ROD NOTCH POSITIONS, NEW SCAN
OPTION 2

53

48 48 48 48 48 48 48

Job Performance Measure (JPM)

49			48	48	48	48	48	48	48	48	48		
45		48	48	48	48	48	48	48	48	48	48	48	
41	48	48	48	48	48	48	48	48	48	48	48	48	48
37	48	48	48	48	18	48	4	48	18	48	48	48	48
33	48	48	48	48	48	48	48	48	48	48	48	48	48
29	48	48	48	48	4	48	48	48	6	48	48	48	48
25	48	48	48	48	48	48	48	48	48	48	48	48	48
21	48	48	48	48	18	48	4	48	18	48	48	48	48
17	48	48	48	48	48	48	48	48	48	48	48	48	48
13		48	48	48	48	48	48	48	48	48	48	48	
9			48	48	48	48	48	48	48	48	48		
5				48	48	48	48	48	48	48			
	4	8	12	16	20	24	28	32	36	40	44	48	52

CLINTON POWER STATION

Job Performance Measure

Authorize an emergency dose for a life saving operation

JPM Number: 997777.0301

Revision Number: 01

Date: 12/11/03

Developed By:	<u>T. Pickley</u>	<u>12/11/03</u>
	Instructor	Date
Validated By:	<u>T. Coe</u>	<u>12/12/03</u>
	SME or Instructor	Date
Review By:	<u>P. Ryan</u>	<u>12/15/03</u>
	Operations Representative	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

Revision Record (Summary)

1. **Revision 00,** This is a new JPM
2. **Revision 01,** Incorporate NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

Operator's Name: _____ SSN: _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title/Number: 997777.0301, Authorize an emergency dose for a life saving operation

Revision Number: 01

Task Number and Title: 997777.03, Complete Emergency Plan Activities performed by an SRO

Suggested Testing Environment: Any

Actual Testing Environment: ☒ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate **Faulted:** ☐ Yes
☒ Perform **Alternate Path:** ☐ No

Time Critical: ☐ No

Estimated Time to Complete: 6 minutes **Actual Time Used:** _____ minutes

References:

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

SIMULATOR SET-UP CONDITIONS:

None

TASK STANDARDS:

The life saving operation is authorized.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

EP-AA-113r4 Personnel Protective Actions

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

Supply the operator the partially filled out EP-AA-113 Attachment 2 as the volunteer.

INITIAL CONDITIONS

An emergency life saving operation must be performed. The operation will take 10 minutes in a 180 Rem/hr field. A volunteer, age 45, comes for your approval to perform the life saving operation.

INITIATING CUE:

As the Station Emergency Director take the actions needed to authorize the life saving operation.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

***1. Determines checked dose for the operation is incorrect**

Standard Dose of 25 Rem should be checked

CUE Hand the partially filled out EP-AA-113 Attachment 2 to the examinee as the volunteer

Comments

SAT UNSAT Comment Number

2. Determines volunteer has not signed form for briefing

Standard Determines volunteer has not been briefed

CUE I was told you would perform the brief

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

***3. Briefs volunteer on Health effects**

Standard 50 rad will result in 2% of population affected by prodromal effects

CUE

Comments

SAT UNSAT Comment Number

***4. Briefs volunteer on Cancer risk**

Standard At 45 years old, 5.3 per 1000 persons exposed to 25 rem, risk premature death with an average of 15 years of life lost

CUE

Comments

SAT UNSAT Comment Number

5. Determines that Rad. Protection Management (Review) signature is not required for authorization

Standard

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

***6. Authorizes the exposure**

Standard Signs for approval

CUE

Comments

SAT

UNSAT

Comment Number

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

TERMINATING CUES:

The life saving operation is authorized.

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
Generic	2.3.4	2.5	3.1

Knowledge of radiation exposure limits and contamination control / including permissible levels in excess of those authorized.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 997777.0301

REVISION: 01

INITIAL CONDITIONS

An emergency life saving operation must be performed. The operation will take 10 minutes in a 180 Rem/hr field. A volunteer comes for your approval to perform the life saving operation.

INITIATING CUE:

As the Station Emergency Director take the actions needed to authorize the life saving operation.

CLINTON POWER STATION

Job Performance Measure

Complete a NARS Form and make the required notifications

JPM Number: 999999.24

Revision Number: 03

Date: 12/09/03

Developed By: T. Pickley 12/09/03
Instructor Date

Validated By: T. Coe 12/12/03
SME or Instructor Date

Review By: P. K. Ryan 12/15/03
Operations Representative Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, or simulator)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating and terminating cues are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:
Procedure Rev. _____ Date _____
- _____ 9. Pilot test the JPM:
 - a. verify cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- _____ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

Revision Record (Summary)

1. **Revision 01,** This is a new JPM. Revision 0 previously used.
2. **Revision 02,** Updated for new procedure
3. **Revision 03,** Incorporate NRC comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Complete a NARS Form and make the required notifications.

JPM Number: 999999.24

Revision Number: 03

Task Number and Title: 999999.24: Preparation of Notification Form.

Suggested Testing Environment: Control Room

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☐ Perform

Faulted: ☐ No
Alternate Path: ☐ No

Time Critical: ☐ Yes

Estimated Time to Complete: 15 minutes **Actual Time Used:** _____ minutes

References: EP-AA-1003r4, RADIOLOGICAL EMERGENCY PLAN ANNEX FOR CLINTON STATION, EP-AA-111r7 EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

EVALUATOR INSTRUCTIONS:

Provide NARS form and the Initial Conditions (Attachment A)

INITIAL CONDITIONS:

You are the Shift Manager.

A LOCA has occurred in the plant.

Level is less than -187 in.

Containment pressure is 15 psig.

The inboard and outboard MSIVs on the D Main Steam Line have failed to shut.

Wind direction is varying between 280 and 284 degrees.

Wind speed is 10 mph.

No release of radioactive materials has occurred.

An EAL initial classification of General Emergency as EAL FG1, has just been declared.

INITIATING CUE:

You are to complete the NARS Form and make the required notifications. Report when the task is complete.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLDED** letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

1.

UTILITY MESSAGE NO. _____

STANDARD: 1

CUE:

COMMENTS: **START TIME FOR NEXT SECTION:** _____ (Time Critical)

SAT _____ UNSAT _____

2.

STATE MESSAGE NO. _____

STANDARD: N/A

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

3.

1. STATUS

[A] ACTUAL

[B] DRILL/EXERCISE

STANDARD: Either

CUE:

COMMENTS:

SAT _____ UNSAT _____

***4.**

2. STATION

[A] BRAIDWOOD

[C] CLINTON

[E] LASALLE

[G] ZION

[B] BYRON

[D] DRESDEN

[F] QUAD CITIES

STANDARD: [C] CLINTON

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

*5.

3. ONSITE CONDITION

[A] UNUSUAL EVENT
[B] ALERT
[C] SITE AREA EMERGENCY
[D] GENERAL EMERGENCY
[E] RECOVERY
[F] TERMINATED

STANDARD: [D] GENERAL EMERGENCY

CUE:

COMMENTS:

SAT _____ UNSAT _____

*6.

4. ACCIDENT CLASSIFIED

TIME (3[A-E]): _____
DATE(3[A-E]): _____
EAL#: _____

ACCIDENT TERMINATED

TIME: _____
DATE: _____

STANDARD: **ACCIDENT CLASSIFIED**
Present Date and Time when Cue was acknowledged.
EAL#: FG1

ACCIDENT TERMINATED

Time and Date: N/A

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

*7.

5. RELEASE STATUS 6.

[A] NONE 
[B] OCCURRING 
[C] TERMINATED 

STANDARD: [A] NONE

CUE:

COMMENTS:

SAT _____ UNSAT _____

*8.

TYPE OF RELEASE

[A] NOT APPLICABLE
[B] GASEOUS
[C] LIQUID

STANDARD: [A] NOT APPLICABLE

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

*9.

7. WIND DIR

(DEGREES FROM)

STANDARD: 280-284
(DEGREES FROM)

CUE:

COMMENTS: May just indicate 280

SAT _____ UNSAT _____

*9.

8. WIND SPEED

[A] METERS/SEC.: _____

[B] MILES/HR.: _____

STANDARD: 8. WIND SPEED
[A] METERS/SEC.: _____
[B] MILES/HR.: 10

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

*10.

9. RECOMMENDED ACTIONS

UTILITY RECOMMENDATION

[A] NONE

[B] EVACUATE SUB-AREAS (ILLINOIS): _____

[C] EVACUATE SUB-AREAS (IOWA): _____

STANDARD: Determines Protective Action Recommendation using EP-AA-111 & Attachment 7
Writes in SUB-AREAS (ILLINOIS): 1, 3, 4

[B] EVACUATE SUB-AREAS (ILLINOIS): 1, 3, 4

CUE:

COMMENTS:

SAT _____ UNSAT _____

11.

10. ADDITIONAL INFORMATION

STANDARD: None

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

***12. MAKE THE NOTIFICATIONS**

STANDARD: Dial NARS Code 36

CUE: You receive a “beep” and the following agencies respond as on line:
Illinois EMA
DeWitt Co. Sheriff
Illinois REAC
DeWitt Co. EOC

COMMENTS:

SAT _____ UNSAT _____

***13. CONDUCT A ROLL CALL**

STANDARD: Checks off each agency as they respond.

CUE: Acknowledge each agency on line

COMMENTS:

SAT _____ UNSAT _____

***14. FILL IN TIME AND DATE OF ROLL CALL**

STANDARD: Time and Date of Roll Call filled in on page 2 of the NARS form

CUE: When recommendation has been made, report as the communicator that a wind shift occurred. Provide NARS Form. (Attachment B)

COMMENTS: **STOP TIME FOR TIME CRITICAL PORTION OF JPM:** _____
(**< 15 Minutes**)

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

***15. READ THE NARS MESSAGE**

STANDARD:

CUE: Acknowledge the message

COMMENTS: Check with answer key

SAT _____ UNSAT _____

16.

11. TRANSMITTED BY:

STANDARD:	<u>NAME</u>	<u>PHONE NUMBER</u>	<u>TIME/DATE</u>
[X] EXELON:	<u>Examinees name</u>	<u>1-217-937-XXX</u>	<u>XX:XX XX/XX/XX</u>

CUE:

COMMENTS:

SAT _____ UNSAT _____

17.

12. RECEIVED BY:

STANDARD: Asks for name of the IEMA representative and enter information on the NARS form

CUE: Give the examinee a name

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

18. REPEAT THE ROLL CALL

STANDARD: Checks off each agency as they respond.

CUE: Acknowledge each agency on line

COMMENTS:

SAT _____ UNSAT _____

19. ASK if there are any questions and ends the communication

STANDARD: Answers any questions

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
GENERIC	2.4.44	2.1	4.0

Knowledge of emergency plan protective action recommendations.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 999999.24

REVISION: 03

INITIAL CONDITIONS:

You are the Shift Manager.
A LOCA has occurred in the plant.
Level is less than -187 in.
Containment pressure is 15 psig.
The inboard and outboard MSIVs on the D Main Steam Line have failed to shut.
Wind direction is varying between 280 and 284 degrees.
Wind speed is 10 mph.
No release of radioactive materials has occurred.
An EAL initial classification of General Emergency as EAL FG1, has just been declared.

INITIATING CUE:

You are to complete the NARS Form and make the required notifications. Report when the task is complete.

ATTACHMENT 1
NUCLEAR ACCIDENT REPORTING SYSTEM (NARS)
Page 1 of 2

UTILITY MESSAGE NO. _____

STATE MESSAGE NO. _____

1. STATUS

[A] ACTUAL
[B] DRILL/EXERCISE

2. STATION

[A] BRAIDWOOD [C] CLINTON [E] LASALLE [G] ZION
[B] BYRON [D] DRESDEN [F] QUAD CITIES

3. ONSITE CONDITION

[A] UNUSUAL EVENT
[B] ALERT
[C] SITE AREA EMERGENCY
[D] GENERAL EMERGENCY
[E] RECOVERY
[F] TERMINATED

4. ACCIDENT CLASSIFIED

TIME (3[A-E]): _____
DATE (3[A-E]): _____
EAL#: _____

ACCIDENT TERMINATED

TIME: _____
DATE: _____

5. RELEASE STATUS

[A] NONE
[B] OCCURRING
[C] TERMINATED

6. TYPE OF RELEASE

[A] NOT APPLICABLE
[B] GASEOUS
[C] LIQUID

7. WIND DIR

(DEGREES FROM)

8. WIND SPEED

[A] METERS/SEC.: _____
[B] MILES/HR.: _____

9. RECOMMENDED ACTIONS**UTILITY RECOMMENDATION**

[A] NONE (UE, Alert and SAE Only)
[B] EVACUATE ILLINOIS SUB-AREAS (GE Only): _____
[C] EVACUATE IOWA SUB-AREAS (GE Only): _____

STATE RECOMMENDATION

[D] NONE
[E] SHELTER SUB-AREAS: _____
[F] EVACUATE SUB-AREAS: _____
[G] RECOMMEND POTASSIUM IODIDE (KI) PER PROCEDURES
[H] COMMENCE RETURN OF PUBLIC
[I] OTHER: _____

10. ADDITIONAL INFORMATION _____

_____**11. TRANSMITTED BY:**NAMEPHONE NUMBERTIME/DATE

[A] EXELON: _____
[B] STATE: _____
[C] COUNTY: _____

12. RECEIVED BY:NAMEORGANIZATIONTIME/DATE

Approved By: _____
Verified With: _____

NAME ORGANIZATION

ANSWER KEY

EP-MW-114-100

Revision 3

Page 12 of 16

ATTACHMENT 1
NUCLEAR ACCIDENT REPORTING SYSTEM (NARS)
Page 1 of 2UTILITY MESSAGE NO. 1STATE MESSAGE NO. N/A**1. STATUS**

[A] ACTUAL
[X] DRILL/EXERCISE

2. STATION

[A] BRAIDWOOD [X] CLINTON
[B] BYRON [D] DRESDEN

[E] LASALLE [G] ZION
[F] QUAD CITIES

3. ONSITE CONDITION

[A] UNUSUAL EVENT
[B] ALERT
[C] SITE AREA EMERGENCY
[X] GENERAL EMERGENCY
[E] RECOVERY
[F] TERMINATED

4. ACCIDENT CLASSIFIED

TIME (3[A-E]): XX:XX
DATE (3[A-E]): XX / XX / XX
EAL#: FG1

ACCIDENT TERMINATED

TIME: N/A
DATE: N/A

5. RELEASE STATUS

[X] NONE
[B] OCCURRING
[C] TERMINATED

6. TYPE OF RELEASE

[X] NOT APPLICABLE
[B] GASEOUS
[C] LIQUID

7. WIND DIR

280-284
(DEGREES FROM)

8. WIND SPEED

[A] METERS/SEC.: N/A
[B] MILES/HR.: 10

9. RECOMMENDED ACTIONS**UTILITY RECOMMENDATION**

[A] NONE (UE, Alert and SAE Only)
[B] EVACUATE ILLINOIS SUB-AREAS (GE Only): 1, 3, 4
[C] EVACUATE IOWA SUB-AREAS (GE Only): _____

STATE RECOMMENDATION

[D] NONE
[E] SHELTER SUB-AREAS: _____
[F] EVACUATE SUB-AREAS: _____
[G] RECOMMEND POTASSIUM IODIDE (KI) PER PROCEDURES
[H] COMMENCE RETURN OF PUBLIC
[I] OTHER _____

10. ADDITIONAL INFORMATION None

11. TRANSMITTED BY: NAME PHONE NUMBER TIME/DATE
[A] EXELON: _____
[B] STATE: _____
[C] COUNTY: _____

12. RECEIVED BY: NAME ORGANIZATION TIME/DATE

NAME ORGANIZATION
Approved By: _____
Verified With: _____