

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1
(Form ES-401-6 comparable)

RO only

A.1a. SRO only

Both

Proposed Question

The scheduled Unit 2 PCO for day shift reports to you prior to shift relief that he has failed his eye exam. He needs to start wearing glasses, but cannot get the required corrective lenses until tomorrow.

- a. Can the PCO assume licensed duties?

- b. What administrative actions must you take concerning this operator?

Proposed Answer

Reference(s)

OP-AD-010

a. No, the PCO can not assume the shift

6.2.2.e

b. (1)Complete Attachment A of OP-AD-10,
(2)Notify immediate supervisor, (3)Send
completed form OP-AD-10-3 to
Operations Training Coordinator

K&A Statement 2.1.1 - Knowledge of conduct of operations requirements 3.7/3.8

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET
 Attachment 1
 (Form ES-401-6 comparable)

RO only

A.1.b SRO only

Both

Note: This ADMIN Question should be done on the same day as the RO A.1.b

Proposed Question

A Unit 1 reactor startup is in progress with power at 14% RTP. You are the Unit Supervisor when the PCOM is instructed to move a rod from position 08 to position 12 in accordance with the pull sheet. The PCOM reports that the rod is at position 10 not 08.

What notifications must be made based on this discovery by the PCOM?

Proposed Answer

Reference(s)

OP-AD-002

a. Prompt verbal notification to Operations Line Management (Nuclear Operations Supervisor-Shift Operations and/or Manager Nuclear Operations) must be made. (.2)

step 7.5.3.b.(3) and 7.6.2

NDAP-QA-0338

ON-155-001 (3.6)

b. Shift Supervision/Supervisor (.4)

c. Reactor Engineer (.4)

K&A Statement 2.1.20 - Ability to execute procedural steps 4.3/4.2

SSES Cross-Reference
 Learning Objective(s) #

_____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1
(Form ES-401-6 comparable)

RO only

A.1c. SRO only

Both

Proposed Question

During the first half of the night shift the STA is involved in an accident and is transported to the hospital. He is not contaminated, and is not expected to return to the plant.

- a. As the Shift Supervisor, what action(s) must you take regarding shift staffing requirements?
- b. Include any notifications if required.

Proposed Answer

Reference(s)

NDAP-QA-0300 6.2.1
Attachment B
TS 5.2.2

- a. (1) Determine shift compliment not met for STA IAW Attachment B (.5)
(2) Attempt to fill position within 2 hours.
(.25)
- b. Notify: (1)On call STA by pager to supplement shift. (2) notify Manager-Nuclear Operations or Nuclear Operations Supervisor- Shift Operations, (3)General Manager-SSES (4) and Supervisor-Emergency Planning or Emergency Plan Duty Planner. (5) Utilize 'on call' duty manager via the duty pager for assistance to fill the vacant position (6)Comply with T.S. 5.2.2 and TR 4.1.2. (7) provide courtesy call to NRC resident as soon as practical after determination that less than full staffing will exist. (8)Generate a CR (.25)

K&A Statement 2.1.4 - Knowledge of shift staffing requirements 2.3/3.4

SSES Cross-Reference Learning Objective(s) # _____

ADMIN EXAMINATION QUESTION WORKSHEET
Attachment 1
(Form ES-401-6 comparable)

RO only

A.1d. SRO only

Both

Proposed Question

The following events have occurred:

- You have just completed day shift as the US after 2 days off
- You then attended scheduled Just In Time simulator training from 1830 to 2130 hours
- At 0000 you received a call-out to relieve the night shift US as soon as possible
- The call-out is not critical in nature

- a. What is the earliest time you can relieve the night shift US?
- b. What is the latest time you must be relieved as the day shift US (without using an Overtime Limit Deviation Request)?

Proposed Answer

- a. 0530
- b. 1430

Reference(s)

OP-AD-002 13.0

Day shift = 12 hours + training = 3 hours +
minimum 8 hour break = 0530
12 + 3 + 9 = Maximum 24 worked in 48 hour
period

K&A Statement 2.1.1 - Knowledge of conduct of operations requirements 3.7/3.8

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____

**PENNSYLVANIA POWER & LIGHT COMPANY
JOB PERFORMANCE MEASURE
APPROVAL AND ADMINISTRATIVE DATA SHEET**

SRO SROA.2 0 05/06/02 2.2.24 3.8
 Appl To JPM Number Rev No. Date NUREG 1123 Sys. No. K/A

Task Title: Review Failed Surveillance Test and Determine Action

Completed By: Bruce Hennigan Date: 05/06/02 Reviews: [Signature] Date: 6/13/02
 Writer Date Instructor/Writer Date

Approval: [Signature]
Rec 7-30-02 HA Date: 7/30/02 [Signature] Date: 6/13/02
 Requesting Supv./C.A. Head Date Nuclear Training Supv. Date

Date of Performance: _____ 20 Min _____
 Allowed Time (Min) Time Taken (Min)

JPM Performed By: _____
 Last First M.I. Employee #/S.S. #

Performance Evaluation: () Satisfactory () Unsatisfactory

Evaluator Name: _____
 Signature Typed or Printed

Comments:

**REQUIRED TASK INFORMATION
JOB PERFORMANCE MEASURE
SRO A.2**

I. SAFETY CONSIDERATIONS

- A. All Operations personnel are responsible for maintaining their radiation exposure As Low As Reasonably Achievable in accordance with OP-AD-002, Standards for Shift Operations.
- B. All-applicable safety precautions shall be taken in accordance with established PP&L safety policies and the Safety Rule Book, for example:
 - 1. Whenever any electrical panel is opened for inspection during JPM performance.
 - 2. Whenever entering any plant area where specific safety equipment; such as hearing or eye protection, safety shoes, hardhats, etc; is required and/or posted as being necessary.

II. REFERENCES

- A. SO-150-004, RCIC QUARTERLY RCIC VALVE EXERCISING
- B. NDAP-QA-0722, SURVEILLANCE TESTING PROGRAM

III. REACTIVITY MANIPULATIONS

This JPM satisfies the requirements of Operational Activity(s):

None

IV. TASK CONDITIONS

- A. Unit 1 is in MODE 1 at 100% reactor power.
- B. SO-150-004, RCIC Quarterly Valve Exercising has been performed.

V. INITIATING CUE

Review the surveillance for completion and determine what actions, if any are required.

PERFORMANCE CHECKLIST

Appl. To/JPM No.: SRO A.2

Student Name: _____

Step	Action	Standard	Eval	Comments
	<p>Evaluator</p> <ul style="list-style-type: none"> • This JPM should be performed in the Simulator following completion of the scenario as Unit Supervisor. • Give the student a few minutes to read the Task Conditions/Cue Sheet. • Give the student a copy of S0-150-004. 			
1.	Reviews the surveillance package.			
*2.	Identifies the stroke time is fast for HV-149-F060.	States Acceptance Criteria is failed for HV-149-F060.		
3.	Identifies actions based upon failed acceptance criteria.	Identifies Part VI of the green Surveillance Authorization coversheet should have the box marked 'INOPERABLE' or Acceptance Criteria failed.		
*3.a		Identifies a surveillance authorization retest form can be initiated and the valve re-tested.		
		OR		

*Critical Step

#Critical Sequence

PERFORMANCE CHECKLIST

Appl. To/JPM No.: SRO A.2

Student Name: _____

Step	Action	Standard	Eval	Comments
*3.b		The valve can be declared Inoperable and RCIC declared inoperable. The Conditions and required actions of TS 3.5.3 are applicable.		

*Critical Step

#Critical Sequence

TASK CONDITIONS

- A. Unit 1 is in MODE 1 at 100% reactor power.
- B. SO-150-004, RCIC Quarterly Valve Exercising has been performed.

INITIATING CUE

Review the surveillance for completion and determine what actions, if any are required.

TASK CONDITIONS

- A. Unit 1 is in MODE 1 at 100% reactor power.
- B. SO-150-004, RCIC Quarterly Valve Exercising has been performed.

INITIATING CUE

Review the surveillance for completion and determine what actions, if any are required.

SURVEILLANCE AUTHORIZATION

PART I. GENERAL INFORMATION

PROCEDURE NUMBER: 50-150-004
PROCEDURE TITLE: RCIC QUARTERLY VALVE EXERCISING
WO Number:
Activity Number:
Due Date: TODAY
Violation Date:

UNIT
1

PART II. REASON FOR PERFORMANCE

- Routine
- LCO Action Statements
- Event or Condition Initiated (Described in Remarks)
- TRO Action Statements
- Post Maint/Mod Test (Described in Remarks)
- Other (Described in Remarks)

PART III. EXTENT OF TESTING

- Complete
- Partial
- Delete

PART IV. AUTHORIZATION TO COMMENCE

Shift Supervision Signature: Unit Supervisor Date: TODAY Time: 3 HRS AGO
(Reference any LCO or TRO Actions Entered in Remarks)

Surveillance was: Supervisor/Foreman Signature: _____ Date: _____
 Out of Service Out of Mode

PART V. REMARKS

PART VI. AS-FOUND OPERABILITY (Systems/Components were found:)

- OPERABLE and Acceptance Criteria passed
- INOPERABLE or Acceptance Criteria failed (Notify Shift Supervision)

PART VII. AS-LEFT OPERABILITY

- OPERABLE
- RETEST ATTACHED: YES N/A

PART VIII. COMPLETION

ACTUAL COMPLETION DATE: _____ TIME: _____

PART IX. CLOSURE

Shift Supervision Notified
Responsible Individual: _____ A Complete Retest was Performed
Supervisor Signature: _____ Commencement Date: _____

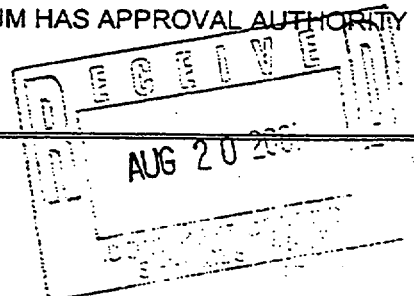
PART X. FINAL CLOSURE

_____ Work Group closure in computer schedule complete. "N/A" when extent of testing is not "COMPLETE." (Forward to Admin-Work Management)

_____ Admin-Work Management final closure in computer schedule complete. "N/A" when extent of testing is not "COMPLETE." (Forward to DCS)

PROCEDURE CHANGE PROCESS FORM

1. PCAF NO. <u>2001- 1671</u>	2. PAGE 1 OF <u>3</u>	3. PROC. NO. <u>SO-150-004</u> REV. <u>18</u>
4. FORMS REVISED - <u> </u> R <u> </u> - <u> </u> R <u> </u> - <u> </u> R <u> </u> - <u> </u> R <u> </u> - <u> </u> R <u> </u> - <u> </u> R <u> </u>		
5. PROCEDURE TITLE <u>QUARTERLY RCIC VALVE EXERCISING</u>		
6. REQUESTED CHANGE PERIODIC REVIEW <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES INCORPORATE PCAFS <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES # <u> </u> # <u> </u> # <u> </u> # <u> </u> REVISION <input type="checkbox"/> PCAF <input checked="" type="checkbox"/> DELETION <input type="checkbox"/> (CHECK ONE ONLY)		
7. SUMMARY OF / REASON FOR CHANGE Administrative correction/enhancement to make wording in step 6.11.8 consistent between the Units (both Unit's procedures being changed). Valve position is still the same (closed). Change is in response to comments from 'E' Shift.		
8. DETERMINE COMMITTEE REVIEW REQUIREMENTS (Refer to Section 6.1.4) PORC REVIEW REQ'D? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		9. PORC MTG# <u>N/A</u>
BLOCKS 11 THRU 16 ARE ON PAGE 2 OF FORM		
17. <u>Gary D. Burns</u> / <u>X3902</u> / <u>08/13/2001</u> PREPARER ETN DATE (Print or Type)	18. COMMUNICATION OF CHANGE REQUIRED? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (TYPE) <u>N/A</u>	
19. <u>[Signature]</u> RESPONSIBLE SUPERVISOR <u>8/14/01</u> DATE	SIGNATURE ATTESTS THAT RESPONSIBLE SUPERVISOR HAS CONDUCTED QADR AND TECHNICAL REVIEW UNLESS OTHERWISE DOCUMENTED IN BLOCK 16 OR ATTACHED REVIEW FORMS. CROSS DISCIPLINE REVIEW (IF REQUIRED) HAS BEEN COMPLETED BY SIGNATURE IN BLOCK 16 OR ATTACHED REVIEW FORMS.	
20. <u>N/A</u> FUM APPROVAL DATE		
21. RESPONSIBLE APPROVER <u>N/A</u> INITIALS DATE	ENTER N/A IF FUM HAS APPROVAL AUTHORITY	



PROCEDURE CHANGE PROCESS FORM

1. PCAF NO. 2001-1671 2. PAGE 2 OF 3 3. PROC. NO. SO-150-004 REV. 18

11. This question documents the outcome of the 50.59 and 72.48 Review required by NDAP-QA-0726. Either 11a, b, c or d must be checked "YES" and the appropriate form attached or referenced.
- a. This change is an Administrative Correction for which 50.59 and 72.48 are not applicable. YES N/A
- b. This change is a change to any surveillance, maintenance or administrative procedure for which 50.59 and 72.48 are not applicable. YES N/A
- c. This change is bounded by a 50.59/72.48 Screen/Evaluation, therefore, no new 50.59/72.48 Evaluation is required. YES N/A
 Screen/Evaluation No. N/A
- d. 50.59 and/or 72.48 are applicable to this change and a 50.59/72.48 Screen/Evaluation is attached. YES N/A
12. This change is consistent with the FSAR or an FSAR change is required. YES
 Change Request No. N/A
13. Should this change be reviewed for potential effects on Training Needs or Material? If YES, enter an Action Item @ NIMS/Action/Gen Work Mech/PICN YES NO
14. Is a Surveillance Procedure Review Checklist required per NDAP-QA-0722? YES NO
15. Is a Special, Infrequent or Complex Test/Evolution Analysis Form required per NDAP-QA-0320? (SICT/E form does not need to be attached.) YES NO

16. Reviews may be documented below or by attaching Document Review Forms NDAP-QA-0101-1.

REVIEW	REVIEWED BY WITH NO COMMENTS	DATE
QADR	_____	_____
TECHNICAL REVIEW	_____	_____
REACTOR ENGINEERING/NUCLEAR FUELS *	_____	_____
IST **	_____	_____
OPERATIONS	_____	_____
NUCLEAR SYSTEMS ENGINEERING	_____	_____
NUCLEAR MODIFICATIONS	_____	_____
MAINTENANCE	_____	_____
HEALTH PHYSICS	_____	_____
NUCLEAR TECHNOLOGY	_____	_____
CHEMISTRY	_____	_____
OTHER _____	_____	_____

* Required for changes that affect, or have potential for affecting core reactivity, nuclear fuel, core power level indication or impact the thermal power heat balance. ⁽⁵⁸⁾

** Required for changes to Section XI Inservice Test Acceptance Criteria.

PROCEDURE COVER SHEET

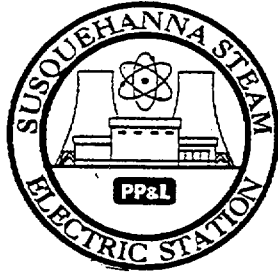
	NUCLEAR DEPARTMENT PROCEDURE	SO-150-004 Revision 18 Page 1 of 33
	QUARTERLY RCIC VALVE EXERCISING	
QUALITY CLASSIFICATION: (X) QA Program () Non-QA Program		APPROVAL CLASSIFICATION: (X) Plant () Non-Plant () Instruction
EFFECTIVE DATE: <u>04/14/00</u> PERIODIC REVIEW FREQUENCY: <u>N/A</u> PERIODIC REVIEW DUE DATE: <u>- N/A</u>		
RECOMMENDED REVIEWS:		
Procedure Owner: <u>Shift Technical Advisor - "F" Shift</u> Responsible Supervisor: <u>Shift Supervisor - 'F' Shift</u> Responsible FUM: <u>Manager-Nuclear Operations</u> Responsible Approver: <u>General Manager-SSES</u>		

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1. PURPOSE/SCOPE

Perform Quarterly valve exercising requirements of Station Inservice Inspection (ISI) Program Plan on Reactor Core Isolation Cooling System Category A and B valves.

2. REFERENCES

- 2.1 FSAR 6.2-12
- 2.2 TS 3.6.1.3
- 2.3 TS 5.5.6
- 2.4 NDAP-QA-0722 Surveillance Testing Program
- 2.5 NDAP-QA-0423 Station Pump and Valve Testing Program
- 2.6 P&ID M-149 "Reactor Core Isolation Cooling"
- 2.7 M1-E51-90 "RCIC System Elem. Diagrams"
- 2.8 OP-150-001 "Reactor Core Isolation Cooling"
- (1) 2.9 CR 96-493 LCO Action Statements Not Entered

3. SPECIAL TOOLS/EQUIPMENT

Stopwatch (2)

4. PRECAUTIONS

None

5. PREREQUISITES/LIMITATIONS

- 5.1 No maintenance or other testing being performed on RCIC system that would interfere with the valve strokes being performed.

W L
CONFIRM

5.2 No RCIC isolation signals are present except low steam supply pressure if desired to perform this test on valves not affected by this isolation.

WL
CONFIRM

5.3 If in operational Mode 1, 2, or 3 with reactor pressure >150 psig RCIC should be aligned for automatic response in accordance with OP-150-001.

WL
CONFIRM

5.4 Electrical Maintenance available to support this test if RCIC steam supply pressure is below 60 psig in Mode 1,2, or 3 or Reactor Plant is in Mode 4 or 5 for testing those valves affected by low steam supply pressure isolation.

NA
CONFIRM

5.5 MAINTAIN RCIC Pump discharge piping filled, vented, and pressurized anytime pump is operable to prevent possible water hammer on pump starts.

WL
CONFIRM

5.6 Following 250 Volt DC Battery Chargers in Float.

5.6.1 1D653A

WL
CONFIRM

5.6.2 1D653B

WL
CONFIRM

5.6.3 1D663

WL
CONFIRM

6. PROCEDURE

NOTE (1): Steps of procedure designated by an asterisk (*) immediately to left of step number require entries to be recorded on Data Form.

NOTE (2): All Operations are performed at Reactor Core Cooling Benchboard 1C601, unless otherwise indicated.

(1) 6.1 COMPLY with TS 3.5.3 and TR 3.8.2.1 for RCIC.

WL
CONFIRM

6.2 PLACE RCIC DIV 2 MOV OL BYPS HS-E51-1S34 in TEST.

WL
CONFIRM

6.3 CONFIRM RCIC DIV 2 MOV IN TEST status light ILLUMINATES.

WL
CONFIRM

6.4 If RCIC steam supply pressure above 60 psig TEST RCIC STM SUPPLY IB ISO HV-149-F007 as follows:

6.4.1 OPEN or CONFIRM HV-149-F007 OPEN.

WL
CONFIRM

6.4.2 SIMULTANEOUSLY CLOSE HV-149-F007 and COMMENCE stroke timing.

WL
CONFIRM

6.4.3 STOP timing HV-149-F007 when FULL CLOSE indication observed.

WL
CONFIRM

6.4.4 RECORD HV-149-F007 closure stroke time.

6.4.5 OPEN HV-149-F007.

WL
CONFIRM

6.5 If RCIC steam supply pressure below 60 psig TEST RCIC STM SUPPLY IB ISO HV-149-F007 as follows:

6.5.1 CONFIRM Electrical Maintenance at Panel 1C038 (reference M1-E51-90(4)) OPENED States Link AA-5 in Terminal Box TB1C038-A1.

NA
CONFIRM

6.5.2 RESET isolation signal by placing RCIC AUTO ISO SIG B RESET HS-E51-1S26 to RESET position.

NA
CONFIRM

6.5.3 OBSERVE RCIC AUTO ISO SIG B RESET HS-E51-1S26 green light CLEARS.

NA
CONFIRM

6.5.4 OPEN HV-149-F007.

WL
CONFIRM

6.5.5 SIMULTANEOUSLY CLOSE HV-149-F007 and COMMENCE stroke timing.

WL
CONFIRM

6.5.6 STOP timing HV-149-F007 when FULL CLOSE indication observed.

WL
CONFIRM

6.5.7 RECORD HV-149-F007 closure stroke time.

- 6.5.8 CONFIRM HV-149-F007 CLOSED.
WL
CONFIRM
- 6.5.9 PLACE RCIC AUTO ISO SIG B RESET HS-E51-1S26 to NORM position.
NA
CONFIRM
- 6.5.10 CONFIRM Electrical Maintenance at Panel 1C038 (reference M1-E51-90(4)) CLOSED States Link AA-5 in Terminal Box TB1C038-A1.
NA NA
CONFIRM IND VFD
- 6.5.11 OBSERVE RCIC AUTO ISO SIG B RESET HS-E51-1S26 green light ON.
NA
CONFIRM
- 6.6 TEST RCIC TURB EXH IB VAC BKR HV-149-F084 as follows:
- 6.6.1 CONFIRM HV-149-F084 OPEN.
WL
CONFIRM
- 6.6.2 SIMULTANEOUSLY CLOSE HV-149-F084 and COMMENCE stroke timing.
WL
CONFIRM
- 6.6.3 STOP timing HV-149-F084 when FULL CLOSE indication observed.
WL
CONFIRM
- 6.6.4 RECORD HV-149-F084 closure stroke time.

6.6.5 OPEN HV-149-F084.

WL
CONFIRM

6.7 WAIT 2 minutes then PLACE RCIC DIV 2 MOV OL BYPS HS-E51-1S34 in NORM.

WL
CONFIRM

6.8 CONFIRM RCIC DIV 2 MOV IN TEST status light CLEARS.

WL
CONFIRM

6.9 PLACE RCIC DIV 1 MOV OL BYPS HS-E51-1S33 in TEST.

WL
CONFIRM

6.10 CONFIRM RCIC DIV 1 MOV IN TEST status light ILLUMINATES.

WL
CONFIRM

6.11 TEST RCIC STM SUPPLY OB ISO HV-149-F008 and STEAM TO RCIC TURBINE HV-150-F045 as follows:

NOTE: HV-149-F008 requires low steam supply isolation signal cleared prior to testing.

6.11.1 If RCIC steam supply pressure BELOW 60 psig or Reactor Plant in Mode 4 or 5 CONFIRM following:

- a. CONFIRM Electrical Maintenance OPEN States Link AA-6 in Terminal Box TB1C035-A1 at Panel 1C035 (reference M1-E51-90(3)).

NA
CONFIRM

- b. RESET isolation signal by placing RCIC AUTO ISO SIG A RESET HS-E51-1S16 to RESET position.

NA
CONFIRM

- c. OBSERVE RCIC AUTO ISO SIG A RESET HS-E51-1S16 green light CLEARS.

NA
CONFIRM

- 6.11.2 CONFIRM RCIC STM SUPPLY OB ISO HV-149-F008 OPEN.

WL
CONFIRM

- 6.11.3 SIMULTANEOUSLY CLOSE HV-149-F008 and COMMENCE stroke timing.

WL
CONFIRM

- 6.11.4 STOP timing HV-149-F008 when FULL CLOSE indication observed.

WL
CONFIRM

- 6.11.5 RECORD HV-149-F008 closure stroke time.

- 6.11.6 OPEN HV-149-F008.

WL
CONFIRM

- 6.11.7 CONFIRM RCIC TURB EXH TO SUPP POOL HV-149-F059 OPEN.

WL
CONFIRM

- 6.11.8 ~~CLOSE~~ ^{ENSURE} RCIC TURBINE TRIP AND THROTTLING HV-15012. ~~CLOSED~~ |
WL
CONFIRM
- 6.11.9 CONFIRM STEAM TO RCIC TURBINE HV-150-F045 CLOSED.
WL
CONFIRM
- 6.11.10 PERFORM the following steps if in Mode 4 or 5 with RPV Level
>+54":
- a. OPEN States Link CC-12 in terminal box TB1C004-A2
RPS DIV A1, on rack 1C004 (reference E51-90(3)).
NA
CONFIRM
- b. DEPRESS RCIC HI WTR LVL TRIP RESET
HS-E51-1S19.
NA
CONFIRM
- c. CONFIRM RCIC HI WTR LVL TRIP RESET HS-E51-1S19
green light CLEARS.
NA
CONFIRM
- 6.11.11 SIMULTANEOUSLY OPEN HV-150-F045 and COMMENCE
stroke timing.
WL
CONFIRM
- 6.11.12 STOP timing HV-150-F045 when FULL OPEN indication
observed.
WL
CONFIRM
- 6.11.13 RECORD HV-150-F045 opening stroke time.

6.11.14 SIMULTANEOUSLY CLOSE HV-150-F045 and COMMENCE stroke timing.

WL
CONFIRM

6.11.15 STOP timing HV-150-F045 when FULL CLOSE indication observed.

WL
CONFIRM

6.11.16 RECORD HV-150-F045 closure stroke time.

6.11.17 CONFIRM HV-150-F045 CLOSED.

WL
CONFIRM

6.11.18 OPEN RCIC TURBINE TRIP AND THROTTLING HV-15012.

WL
CONFIRM

6.11.19 If step 6.11.1 completed, CONFIRM following:

a. PLACE RCIC AUTO ISO SIG A RESET HS-E51-1S16 to NORM position.

NA
CONFIRM

b. CONFIRM Electrical Maintenance CLOSE States Link AA-6 in Terminal Box TB1C035-A1 at Panel 1C035 (reference M1-E51-90 (3)).

NA
CONFIRM

NA
IND VFD

c. OBSERVE RCIC AUTO ISO SIG A RESET HS-E51-1S16 green light ON.

NA
CONFIRM

6.11.20 If Step 6.11.10 completed, PERFORM the following:

- a. CLOSE (opened in 6.11.10.a) States Link CC-12 in terminal box TB1C004-A2, RPS DIV A1, on rack 1C004.

NA
CONFIRM

NA
IND VFD

- b. OBSERVE RCIC HI WTR LVL TRIP RESET HS-E51-1S19 green light ILLUMINATES.

NA
CONFIRM

- c. OBSERVE RCIC REAC HIGH WTR LEVEL TRIP (A-1) annunciator ALARMS.

NA
CONFIRM

6.12 TEST RCIC TURB EXH OB VAC BKR HV-149-F062 as follows:

- 6.12.1 CONFIRM HV-149-F062 OPEN.

WJ
CONFIRM

- 6.12.2 SIMULTANEOUSLY CLOSE HV-149-F062 and COMMENCE stroke timing.

WJ
CONFIRM

- 6.12.3 STOP timing HV-149-F062 when FULL CLOSE indication observed.

WJ
CONFIRM

- * 6.12.4 RECORD HV-149-F062 closure stroke time.

6.12.5 OPEN HV-149-F062.

WL
CONFIRM

6.13 TEST RCIC VAC PP DSCH TO SUPP POOL HV-149-F060 as follows:

6.13.1 CONFIRM HV-149-F060 OPEN.

WL
CONFIRM

6.13.2 SIMULTANEOUSLY CLOSE HV-149-F060 and COMMENCE stroke timing.

WL
CONFIRM

6.13.3 STOP timing HV-149-F060 when FULL CLOSE indication observed.

WL
CONFIRM

6.13.4 RECORD HV-149-F060 closure stroke time.

6.13.5 OPEN HV-149-F060.

WL
CONFIRM

6.14 TEST RCIC TURB EXH TO SUPP POOL HV-149-F059 as follows:

6.14.1 CONFIRM HV-149-F059 OPEN.

WL
CONFIRM

6.14.2 SIMULTANEOUSLY CLOSE HV-149-F059 and COMMENCE stroke timing.

WL
CONFIRM

6.14.3 STOP timing HV-149-F059 when FULL CLOSE indication observed.

WJ
CONFIRM

* 6.14.4 RECORD HV-149-F059 closure stroke time.

6.14.5 OPEN HV-149-F059.

WJ
CONFIRM

6.15 TEST RCIC MIN FLOW TO SUPP POOL FV-149-F019 as follows:

NOTE: FV-149-F019 will close immediately upon reaching full open position. This will require two stopwatches to time opening and closing stroke.

6.15.1 CONFIRM FV-149-F019 CLOSED.

WJ
CONFIRM

6.15.2 SIMULTANEOUSLY OPEN FV-149-F019 and COMMENCE stroke timing.

WJ
CONFIRM

6.15.3 SIMULTANEOUSLY STOP timing FV-149-F019 when FULL OPEN indication observed and COMMENCE closure stroke timing.

WJ
CONFIRM

6.15.4 STOP timing FV-149-F019 when FULL CLOSE indication observed.

WJ
CONFIRM

* 6.15.5 RECORD FV-149-F019 opening stroke time.

* 6.15.6 RECORD FV-149-F019 closing stroke time.

6.15.7 CONFIRM FV-149-F019 CLOSED.

WJ
CONFIRM

6.16 TEST RCIC INJECTION HV-149-F013 AND RCIC PUMP DSCH HV-149-F012 as follows:

6.16.1 CONFIRM HV-149-F012 OPEN.

WJ
CONFIRM

6.16.2 SIMULTANEOUSLY CLOSE HV-149-F012 and COMMENCE stroke timing.

WJ
CONFIRM

6.16.3 STOP timing HV-149-F012 when FULL CLOSE indication observed.

WJ
CONFIRM

* 6.16.4 RECORD HV-149-F012 closure stroke time.

6.16.5 CONFIRM RCIC TEST LINE ISO TO CST HV-149-F022 CLOSED.

WJ
CONFIRM

6.16.6 CONFIRM RCIC INJECTION HV-149-F013 CLOSED.

WJ
CONFIRM

NOTE: HV-149-F013 will close immediately upon reaching full open position. This will require two stopwatches to time opening and closing strokes.

6.16.7 INFORM STA that opening RCIC INJECTION HV-149-F013 initiates TRA Sentinel Trip.

WJ
CONFIRM

NOTE: Be prepared to perform steps 6.16.9 and 6.16.10 in close succession.

6.16.8 SIMULTANEOUSLY OPEN HV-149-F013 and COMMENCE stroke timing.

WJ
CONFIRM

6.16.9 STOP timing HV-149-F013 when FULL OPEN indication observed.

WJ
CONFIRM

6.16.10 COMMENCE closure stroke timing HV-149-F013 when INTERMEDIATE indication observed.

WJ
CONFIRM

6.16.11 STOP timing HV-149-F013 when FULL CLOSED indication observed.

WJ
CONFIRM

* 6.16.12 RECORD HV-149-F013 opening stroke time.

* 6.16.13 RECORD HV-149-F013 closing stroke time.

6.16.14 CONFIRM HV-149-F013 CLOSED.

WZ
CONFIRM

6.16.15 SIMULTANEOUSLY OPEN HV-149-F012 and COMMENCE stroke timing.

WZ
CONFIRM

6.16.16 STOP timing HV-149-F012 when FULL OPEN indication observed.

WZ
CONFIRM

6.16.17 RECORD HV-149-F012 opening stroke time.

6.16.18 CONFIRM HV-149-F012 OPEN.

WZ
CONFIRM

6.17 TEST RCIC TEST LINE TO CST ISO HV-149-F022 as follows:

6.17.1 CONFIRM RCIC INJECTION HV-149-F013 CLOSED.

WZ
CONFIRM

6.17.2 CONFIRM HPCI TEST LINE TO CST ISO HV-155-F011 CLOSED.

WZ
CONFIRM

6.17.3 CONFIRM HV-149-F022 CLOSED.

WZ
CONFIRM

6.17.4 SIMULTANEOUSLY OPEN HV-149-F022 and COMMENCE stroke timing.

WJ
CONFIRM

6.17.5 STOP HV-149-F022 when FULL OPEN indication observed.

WJ
CONFIRM

6.17.6 RECORD HV-149-F022 opening stroke time.

6.17.7 SIMULTANEOUSLY CLOSE HV-149-F022 and COMMENCE stroke timing.

WJ
CONFIRM

6.17.8 STOP timing HV-149-F022 when FULL CLOSE indication observed.

WJ
CONFIRM

6.17.9 RECORD HV-149-F022 closure stroke time.

6.17.10 CONFIRM HV-149-F013 CLOSED.

WJ
CONFIRM

6.17.11 CONFIRM HV-149-F022 CLOSED.

WJ
CONFIRM

6.18 TEST RCIC PUMP SUCTION FROM SUPP POOL HV-149-F031 and RCIC PUMP SUCTION FROM CST HV-149-F010 as follows:

NOTE: HV-149-F010 will close immediately upon HV-149-F031 reaching full open position. This will require two stop watches to time both valves.

6.18.1 CONFIRM HV-149-F031 CLOSED.

WJ
CONFIRM

6.18.2 CONFIRM HV-149-F010 OPEN.

WJ
CONFIRM

6.18.3 SIMULTANEOUSLY OPEN HV-149-F031 and COMMENCE stroke timing.

WJ
CONFIRM

6.18.4 STOP timing HV-149-F031 when FULL OPEN indication observed AND

WJ
CONFIRM

6.18.5 COMMENCE closure timing of HV-149-F010.

WJ
CONFIRM

6.18.6 STOP timing HV-149-F010 when FULL CLOSE indication observed.

WJ
CONFIRM

6.18.7 RECORD HV-149-F031 opening stroke time.

* 6.18.8 RECORD HV-149-F010 closure stroke time.

NOTE (1): HV-149-F010 will open immediately upon HV-149-F031 leaving full open position. This will require two people with stop watches to time both valves.

NOTE (2): HV-149-F031 switch must be held in close position until dual indication received for HV-149-F031 to allow logic to make up.

6.18.9 SIMULTANEOUSLY CLOSE HV-149-F031 and COMMENCE stroke timing HV-149-F031 closed AND HV-149-F010 open.

WJ
CONFIRM

6.18.10 STOP timing HV-149-F031 when FULL CLOSE indication observed.

WJ
CONFIRM

6.18.11 STOP timing HV-149-F010 when FULL OPEN indication observed.

WJ
CONFIRM

* 6.18.12 RECORD HV-149-F031 closure stroke time.

* 6.18.13 RECORD HV-149-F010 opening stroke time.

6.18.14 CONFIRM HV-149-F031 CLOSED.

WJ
CONFIRM

6.18.15 CONFIRM HV-149-F010 OPEN.

WJ
CONFIRM

6.19 WAIT 2 minutes then PLACE RCIC DIV 1 MOV OL BYPS HS-E51-1S33 in NORM.

WJ
CONFIRM

6.20 CONFIRM RCIC DIV 1 MOV IN TEST status light CLEARS.

WJ
CONFIRM

6.21 If RCIC steam supply pressure is above 60 psig TEST RCIC WARM UP LINE ISO HV-149-F088 as follows:

6.21.1 CONFIRM HV-149-F088 CLOSED.

WJ
CONFIRM

6.21.2 SIMULTANEOUSLY OPEN HV-149-F088 and COMMENCE stroke timing.

WJ
CONFIRM

6.21.3 STOP timing HV-149-F088 when FULL OPEN indication observed.

WJ
CONFIRM

6.21.4 RECORD HV-149-F088 opening stroke time.

6.21.5 SIMULTANEOUSLY CLOSE HV-149-F088 and COMMENCE stroke timing.

WJ
CONFIRM

6.21.6 STOP timing HV-149-F088 when FULL CLOSE indication observed.

WJ
CONFIRM

6.21.7 RECORD HV-149-F088 closure stroke time.

6.21.8 CONFIRM RCIC WARM UP LINE ISO HV-149-F088 CLOSED.

WJ
CONFIRM

6.22 If RCIC steam supply pressure is below 60 psig TEST RCIC WARM UP LINE ISO HV-149-F088 as follows:

6.22.1 CONFIRM Electrical Maintenance at Panel 1C038 (reference M1-E51-90(4)) OPENED States Link AA-5 in Terminal Box TB1C038-A1.

NA
CONFIRM

6.22.2 RESET isolation signal by placing RCIC AUTO ISO SIG B RESET HS-E51-1S26 to RESET position.

NA
CONFIRM

6.22.3 OBSERVE RCIC AUTO ISO SIG B RESET HS-E51-1S26 green light CLEARS.

NA
CONFIRM

6.22.4 CONFIRM HV-149-F088 CLOSED.

NA
CONFIRM

6.22.5 SIMULTANEOUSLY OPEN HV-149-F088 and COMMENCE stroke timing.

NA
CONFIRM

- 6.22.6 STOP timing HV-149-F088 when FULL OPEN indication observed.
- NA
CONFIRM
- 6.22.7 RECORD HV-149-F088 opening stroke time.
- 6.22.8 SIMULTANEOUSLY CLOSE HV-149-F088 and COMMENCE stroke timing.
- NA
CONFIRM
- 6.22.9 STOP timing HV-149-F088 when FULL CLOSE indication observed.
- NA
CONFIRM
- 6.22.10 RECORD HV-149-F088 closure stroke time.
- 6.22.11 CONFIRM RCIC WARM UP LINE ISO HV-149-F088 CLOSED.
- NA
CONFIRM
- 6.22.12 PLACE RCIC AUTO ISO SIG B RESET HS-E51-1S26 to NORM position.
- NA
CONFIRM
- 6.22.13 CONFIRM Electrical Maintenance at Panel 1C038 (reference M1-E51-90(4)) CLOSED States Link AA-5 in Terminal Box TB1C038-A1.

NA
CONFIRM

NA
IND VFD

6.22.14 OBSERVE RCIC AUTO ISO SIG B RESET HS-E51-1S26 green light ON.

NA
CONFIRM

6.23 TEST RCIC STEAM LINE DRAIN IB ISO HV-149-F025:

6.23.1 SIMULTANEOUSLY CLOSE HV-149-F025 and COMMENCE stroke timing.

WJ
CONFIRM

6.23.2 STOP timing HV-149-F025 when FULL CLOSED indication is observed.

WJ
CONFIRM

6.23.3 RECORD HV-149-F025 closure stroke time.

6.23.4 SIMULTANEOUSLY OPEN HV-149-F025 and COMMENCE stroke timing.

WJ
CONFIRM

6.23.5 STOP timing HV-149-F025 when FULL OPEN indication is observed.

WJ
CONFIRM

6.23.6 RECORD HV-149-F025 opening stroke time.

6.23.7 CONFIRM HV-149-F025 OPEN.

WJ
CONFIRM

6.24 TEST RCIC STEAM LINE DRAIN OB ISO HV-149-F026:

6.24.1 SIMULTANEOUSLY CLOSE HV-149-F026 and COMMENCE stroke timing.

WJ
CONFIRM

6.24.2 STOP timing HV-149-F026 when FULL CLOSED indication is observed.

WJ
CONFIRM

6.24.3 RECORD HV-149-F026 closure stroke time.

6.24.4 SIMULTANEOUSLY OPEN HV-149-F026 and COMMENCE stroke timing.

WJ
CONFIRM

6.24.5 STOP timing HV-149-F026 when FULL OPEN indication is observed.

WJ
CONFIRM

6.24.6 RECORD HV-149-F026 opening stroke time.

6.24.7 CONFIRM HV-149-F026 OPEN.

WJ
CONFIRM

6.25 TEST RCIC BARO CDSR PUMP DSCH DRAIN VALVES HV-150-F004 and HV-150-F005

6.25.1 SIMULTANEOUSLY CLOSE HV-150-F005 and COMMENCE stroke timing.

WJ
CONFIRM

- 6.25.2 STOP timing HV-150-F005 when FULL CLOSED indication is observed.
- WJ
CONFIRM
- 6.25.3 RECORD HV-150-F005 closure stroke time.
- 6.25.4 SIMULTANEOUSLY OPEN HV-150-F004 and COMMENCE stroke timing.
- WJ
CONFIRM
- 6.25.5 STOP timing HV-150-F004 when FULL OPEN indication is observed.
- WJ
CONFIRM
- 6.25.6 RECORD HV-150-F004 opening stroke time.
- 6.25.7 SIMULTANEOUSLY CLOSE HV-150-F004 and COMMENCE stroke timing.
- WJ
CONFIRM
- 6.25.8 STOP timing HV-150-F004 when FULL CLOSED indication is observed.
- WJ
CONFIRM
- 6.25.9 RECORD HV-150-F004 closure stroke time.
- 6.25.10 CONFIRM HV-150-F004 CLOSED.
- WJ
CONFIRM

6.25.11 SIMULTANEOUSLY OPEN HV-150-F005 and COMMENCE stroke timing.

WJ
CONFIRM

6.25.12 STOP timing HV-150-F005 when FULL OPEN indication is observed.

WJ
CONFIRM

* 6.25.13 RECORD HV-150-F005 opening stroke time.

6.25.14 CONFIRM HV-150-F005 OPEN.

WJ
CONFIRM

6.26 CLEAR TS 3.5.3 for RCIC.

WJ
CONFIRM

6.27 If Reactor Plant in Mode 1,2, or 3 CONFIRM RCIC system is in normal setup for automatic response in accordance with OP-150-001.

WJ
CONFIRM

* 6.28 If Acceptance Criteria not met, COMPLETE "Required Actions" Section on Attachment A.

7. RECORDS

7.1 SURVEILLANCE AUTHORIZATION cover sheet and Data Package shall be forwarded to Shift Supervision who will initiate review process in accordance with NDAP-QA-0722.

7.2 Upon completion of review process, completed record shall be stored by DCS according to surveillance procedure number.

DATA FORM
 SO-150-004
QUARTERLY RCIC VALVE EXERCISING

TEST CRITERIA	ACCEPTANCE CRITERIA		AS FOUND	ACCEPTANCE CRITERIA MET	CONFIRM
	ACCEPTABLE	LIMIT			
1. TS SR 3.6.1.3.5 5.5.6 5.5.6 <hr/> HV-149-F007 closure stroke time (step 6.4.4 or 6.5.7)	≥ 13 sec ≤ 18 sec	≤ 20 sec	<u>14</u> sec	<input checked="" type="radio"/> YES/NO	<u>WZ</u>
2. TS SR 3.6.1.3.5 5.5.6 5.5.6 <hr/> HV-149-F084 closure stroke time (step 6.6.4)	≥ 4 sec ≤ 8 sec	≤ 10 sec	<u>7</u> sec	<input checked="" type="radio"/> YES/NO	<u>WZ</u>
3. TS SR 3.6.1.3.5 5.5.6 5.5.6 <hr/> HV-149-F008 closure stroke time (step 6.11.5)	≥ 12 sec ≤ 16 sec	≤ 20 sec	<u>14</u> sec	<input checked="" type="radio"/> YES/NO	<u>WZ</u>
4. TS 5.5.6 5.5.6 <hr/> HV-150-F045 opening stroke time (step 6.11.13) [6 to 10 sec stroke + 7 sec timer delay]	≥ 11 sec	≤ 17 sec	<u>12</u> sec	<input checked="" type="radio"/> YES/NO	<u>WZ</u>
5. TS 5.5.6 5.5.6 <hr/> HV-150-F045 closure stroke time (step 6.11.16)	≥ 6 sec	≤ 10 sec	<u>9</u> sec	<input checked="" type="radio"/> YES/NO	<u>WZ</u>

	<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
		<u>ACCEPTABLE</u>	<u>LIMIT</u>			
6.	TS SR 3.6.1.3.5 5.5.6 5.5.6 HV-149-F062 closure stroke time (step 6.12.4)	≥ 6 sec ≤ 10 sec	≤ 10 sec	<u>9</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
7.	TS 5.5.6 5.5.6 HV-149-F060 closure stroke time (step 6.13.4)	≥ 21 sec	≤ 32 sec	<u>19</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
8.	TS 5.5.6 5.5.6 HV-149-F059 closure stroke time (step 6.14.4)	≥ 36 sec	≤ 52 sec	<u>46</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
9.	TS 5.5.6 5.5.6 FV-149-F019 opening stroke time (step 6.15.5)	≥ 3 sec	≤ 5 sec	<u>4</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
10.	TS 5.5.6 5.5.6 FV-149-F019 closure stroke time (step 6.15.6)	≥ 3 sec	≤ 5 sec	<u>4</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
11.	TS 5.5.6 5.5.6 5.5.6 HV-149-F012 closure stroke time (step 6.16.4)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>11</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>

	<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
		<u>ACCEPTABLE</u>	<u>LIMIT</u>			
12.	TS 5.5.6 5.5.6 5.5.6 HV-149-F013 opening stroke time (step 6.16.12)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>11</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
13.	TS 5.5.6 5.5.6 5.5.6 HV-149-F013 closure stroke time (step 6.16.13)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>9</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
14.	TS 5.5.6 5.5.6 5.5.6 HV-149-F012 opening stroke time (step 6.16.17)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>10</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
15.	TS 5.5.6 5.5.6 HV-149-F022 opening stroke time (step 6.17.6)	≥ 17 sec	≤ 26 sec	<u>23</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
16.	TS 5.5.6 5.5.6 HV-149-F022 closure stroke time (step 6.17.9)	≥ 17 sec	≤ 26 sec	<u>20</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>
17.	TS 5.5.6 5.5.6 HV-149-F031 opening stroke time (step 6.18.7)	≥ 27 sec	≤ 35 sec	<u>33</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WL</u>

	<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
		<u>ACCEPTABLE</u>	<u>LIMIT</u>			
18.	TS 5.5.6 <u>5.5.6</u> HV-149-F010 closure stroke time (step 6.18.8)	≥ 26 sec	≤ 38 sec	<u>31</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WJ</u>
19.	TS 5.5.6 <u>5.5.6</u> HV-149-F031 closure stroke time (step 6.18.12)	≥ 27 sec	≤ 35 sec	<u>29</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WJ</u>
20.	TS 5.5.6 <u>5.5.6</u> HV-149-F010 opening stroke time (step 6.18.13)	≥ 26 sec	≤ 38 sec	<u>31</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WJ</u>
21.	TS 5.5.6 5.5.6 <u>5.5.6</u> HV-149-F088 opening stroke time (step 6.21.4 or 6.22.7)	≤ 8 sec ≥ 2 sec	≤ 12 sec	<u>6</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WJ</u>
22.	TS 5.5.6 5.5.6 <u>5.5.6</u> HV-149-F088 closure stroke time (step 6.21.7 or 6.22.10)	≤ 8 sec ≥ 2 sec	≤ 12 sec	<u>6</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WJ</u>
23.	TS 5.5.6 <u>5.5.6</u> HV-149-F025 closure stroke time (step 6.23.3)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	<input checked="" type="radio"/> YES <input type="radio"/> NO	<u>WJ</u>

TEST CRITERIA	ACCEPTANCE CRITERIA		AS FOUND	ACCEPTANCE CRITERIA MET	CONFIRM
	ACCEPTABLE	LIMIT			
24. TS 5.5.6 5.5.6 HV-149-F025 opening stroke time (step 6.23.6)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL
25. TS 5.5.6 5.5.6 HV-149-F026 closure stroke time (step 6.24.3)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL
26. TS 5.5.6 5.5.6 HV-149-F026 opening stroke time (step 6.24.6)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL
27. TS 5.5.6 5.5.6 HV-150-F005 closure stroke time (step 6.25.3)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL
28. TS 5.5.6 5.5.6 HV-150-F004 opening stroke time (step 6.25.6)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL
29. TS 5.5.6 5.5.6 HV-150-F004 closure stroke time (step 6.25.9)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL
30. TS 5.5.6 5.5.6 HV-150-F005 opening stroke time (step 6.25.13)	≥ 0 sec	≤ 2 sec	1 sec	YES/NO	WL

REQUIRED ACTION

	<u>APPLICABLE</u>	<u>CONFIRM</u>
I. If Acceptance Criteria has not been met, NOTIFY Shift Supervision that SO-150-004 has failed. (Step 6.28)		_____
II. For each Acceptance Criteria failure:		
A. If measured stroke time for any valve fails to meet the "Limiting Value For Full Stroke Time" acceptance criteria listed in the right hand (LIMIT) column, DECLARE that valve INOPERABLE.	YES/NO	_____
B. If measured stroke time for any valve fails to meet the acceptance criteria listed in the left-hand (ACCEPTABLE) column:		
1. On Surveillance Authorization Form, Part VI check that acceptance criteria failed.		
2. DECLARE that valve INOPERABLE; or RETEST that valve, if able, using a Surveillance Authorization Retest Form.	YES/NO	_____
3. For each retested valve:		
a. If measured stroke time for a retested valve fails to meet TS 5.5.6 Acceptance Criteria listed in the left-hand (ACCEPTABLE) column, ANALYZE the data within 96 hours to verify that the new stroke time represents acceptable valve operation, or DECLARE the valve INOPERABLE. (Analysis performed by System Engineer and the 96 hours tracked by US on Surveillance Authorization cover sheet and US Turnover Sheet.)	YES/NO	_____
b. If measured stroke time for a retested valve is within the TS 5.5.6 Acceptance Criteria listed in the left-hand (ACCEPTABLE) column, the test has been successfully completed. Additionally, CONTACT System Engineer for analysis of the cause of the initial deviation.	YES/NO	_____
III. Shift Supervision has confirmed that the following REQUIRED ACTIONS are in effect as applicable:	<u>APPLICABLE</u>	<u>CONFIRM</u>
1. TS 3.6.1.3 Condition A Actions	YES/NO	_____
2. TS 3.6.1.3 Condition C Actions	YES/NO	_____
3. TS 3.5.3 Condition A Actions	YES/NO	_____



ADMIN EXAMINATION QUESTION WORKSHEET
Attachment 1
(Form ES-401-6 comparable)

RO only

A.3.a SRO only

Both

Proposed Question

An individual on your shift is 28 years old and has a TEDE lifetime dose equivalent of 30 Rem.

- a. What is the SSES station maximum dose control guideline for this radiation worker?
- b. Can a dose extension be authorized for this individual? Explain.

Proposed Answer

Reference(s)

NDAP-QA-0625 6.2.2

- a. 1,000 mRem per year
- b. Yes, a valid lifetime dose extension per section 6.3 is required

K&A Statement 2.3.4 – Knowledge of radiation exposure limits and contamination control/including permissible levels in excess of those authorized 2.5/3.1

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1

(Form ES-401-6 comparable)

RO only

A.3.b SRO only

Both

NOTE: PERFORM ON SAME DATE AS A.3.b RO

Proposed Question

A radiation worker unexpectedly receives a dose of 110 millirem in six (6) minutes while performing work in a penetration room.

SRO: What Technical Specification requirements (if any) exist for control of this door?

Proposed Answer

Reference(s)

TS 5.7.2

Determine this is a High Rad Area > 1 R/hr.

Per TS 5.7.2:

(1) Keys to area be maintained under control of the SS, Radiation Protection Manager or his designee.

(2) Door shall remain locked except during periods of personnel or equipment entry or exit

K&A Statement 2.3.10 – Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure 2.9/3.3

SSES Cross-Reference

Learning Objective(s) # _____ , _____ , _____ , _____

**PENNSYLVANIA POWER & LIGHT COMPANY
JOB PERFORMANCE MEASURE
APPROVAL AND ADMINISTRATIVE DATA SHEET**

SRO SRO A.4 0 05/06/02 2.4.40 4.0
 Appl To JPM Number Rev No. Date NUREG 1123 Sys. No. K/A

Task Title: Complete Emergency Notification Report for a Site Area Emergency Declaration

Completed By:

Bruce Hennigan
 Writer


05/06/02
 Date

Reviews:

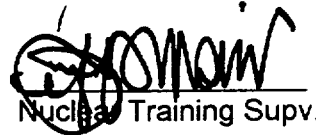

 Instructor/Writer

6/13/02
 Date

Approval:


HA rec 7-30-02
 Requesting Supv./C.A. Head

7/30/02
 Date


 Nuclear Training Supv.

6/13/02
 Date

Date of Performance:

_____ <15 Min
 Allowed Time (Min)

_____ Time Taken (Min)

JPM Performed By:

_____ _____ _____
 Last First M.I.

_____ Employee #/S.S. #

Performance Evaluation: () Satisfactory () Unsatisfactory

Evaluator Name:

 Signature

 Typed or Printed

Comments:

**REQUIRED TASK INFORMATION
JOB PERFORMANCE MEASURE
SRO.A.4**

I. SAFETY CONSIDERATIONS

- A. All Operations personnel are responsible for maintaining their radiation exposure As Low As Reasonably Achievable in accordance with OP-AD-002, Standards for Shift Operations.
- B. All applicable safety precautions shall be taken in accordance with established PP&L safety policies and the Safety Rule Book, for example:
 - 1. Whenever any electrical panel is opened for inspection during JPM performance.
 - 2. Whenever entering any plant area where specific safety equipment; such as hearing or eye protection, safety shoes, hardhats, etc; is required and/or posted as being necessary.

II. REFERENCES

- A. EP-PS-100, Emergency Director, Control Room: Emergency-Plan-Position Specific Instruction

III. REACTIVITY MANIPULATIONS

This JPM satisfies the requirements of Operational Activity(s):

None

IV. TASK CONDITIONS

- A. While operating at 100% RTP on Unit 1, an event occurs at 1530 requiring classification.
- B. Site Area Emergency 16.3 applicability is determined and the initial declaration announced at 1542.
- C. It is now 1545.
- D. Both Units continue to operate normally awaiting a determination to continue to operate or shutdown the units.

V. INITIATING CUE

Complete and approve the Emergency Notification Report for this event declaration.

PERFORMANCE CHECKLIST

Appl. To/JPM No.: SRO A.4

Student Name: _____

Step	Action	Standard	Eval	Comments
	<p>Evaluator</p> <ul style="list-style-type: none"> • This JPM may be performed in the Simulator following completion of the scenario as Unit Supervisor. • Give the student a few minutes to read the Task Conditions/Cue Sheet. • Include PICSY printout for met data • INFORM CANDIDATE THAT THIS IS A TIME CRITICAL JPM 			
1.	Obtain Emergency Notification Report form (EP-PS-100 TAB 9)	ENR form obtained		
2.	Enter Control Number	Enter 1		
3.	Mark the "THIS IS NOT A DRILL" box	Box marked		
*4.	Mark SITE AREA EMERGENCY box	SITE AREA EMERGENCY box marked		
5	Mark UNIT ONE box	UNIT ONE Box marked		

*Critical Step

#Critical Sequence

PERFORMANCE CHECKLIST

Appl. To/JPM No.: SRO A.4

Student Name: _____

Step	Action	Standard	Eval	Comments
*6.	Enter 1542 on Time Classification Declared line	1542 entered as time		
7.	Enter current date on Date Classification Declared line	Current date entered		
8.	Circle AN and Mark Initial Declaration box	"AN"circled and Initial Declaration box marked		
9.	Enter Declaration number on Brief Non-Technical Description of the Event line	16.3 number entered (does not require description)		
10.	Mark NO box for non-routine radiological release in progress	NO box marked		
11.	Leave line 5 empty	N/A Line 5		
12.	Enter WIND DIRECTION and WIND SPEED from PICSY printout	Entered Picsy Met Data		

*Critical Step

#Critical Sequence

PERFORMANCE CHECKLIST

Appl. To/JPM No.: SRO A.4

Student Name: _____

Step	Action	Standard	Eval	Comments
13.	Mark THIS IS NOT A DRILL box	THIS IS NOT A DRILL box marked		
*14.	Approves form	Sign and date form.		

*Critical Step

#Critical Sequence

TASK CONDITIONS

- A. While operating at 100% RTP on Unit 1, an event occurs at 1530 requiring classification.
- B. Site Area Emergency 16.3 applicability is determined and the initial declaration announced at 1542
- C. It is now 1545.
- D. Both Units continue to operate normally awaiting a determination to continue to operate or shutdown the units

INITIATING CUE

Complete and approve the Emergency Notification Report for this event declaration.

TASK CONDITIONS

- B. While operating at 100% RTP on Unit 1, an event occurs at 1530 requiring classification.
- B. Site Area Emergency 16.3 applicability is determined and the initial declaration announced at 1542
- C. It is now 1545.
- D. Both Units continue to operate normally awaiting a determination to continue to operate or shutdown the units

INITIATING CUE

Complete and approve the Emergency Notification Report for this event declaration

KEY

Control # CR#1

EMERGENCY NOTIFICATION REPORT

THIS IS A DRILL

THIS IS NOT A DRILL

1. This is: _____ at Susquehanna Steam Electric Station.
(Communicator's name)
My telephone number is: _____ the time is: _____
(Callback telephone number) (Time notification initiated)

2. EMERGENCY CLASSIFICATION:

- UNUSUAL EVENT
- ALERT
- The event has been terminated
- SITE AREA EMERGENCY
- GENERAL EMERGENCY

UNIT: ONE TIME: 1542 DATE: TODAY
 TWO (Time classification/termination declared) (Date classification/termination declared)
 ONE & TWO

THIS REPRESENTS A AN

- Initial Declaration
- Escalation
- No Change

IN CLASSIFICATION STATUS

BRIEF NON-TECHNICAL DESCRIPTION OF THE EVENT:

(Limited declaration or escalation, current EAL number only) or (status report and significant event, brief description) or (when your directed by the ED, RM or EOFSS) or (termination of the emergency)

EAL 16.3

4. THERE IS NO
- AN AIRBORNE
 - A LIQUID

NON-ROUTINE RADIOLOGICAL RELEASE IN PROGRESS
(Above Technical Requirement limits)

5. WHEN GENERAL EMERGENCY IS THE INITIAL EVENT, PROVIDE PROTECTIVE ACTION RECOMMENDATIONS BELOW: (Control Room use only, TSC and EOF mark NA)

N/A

6. WIND DIRECTION IS FROM: 247 Wind speed is: 7 mph
(Data from 10 meter meteorological tower, available on PICSY)

THIS IS A DRILL

THIS IS NOT A DRILL

APPROVED: Applicant's NAME TIME: Now DATE: TODAY
(ED, RM OR EOFSS) (Time form was approved) (Date form was approved)

EMERGENCY PLAN MET/VENT DATA DISPLAY

DATA (15 MINUTE AVERAGES)

EXPLAN
MENU

PAGE
FORWARD

STA
OVERVIEW

UNIT	NOBLE GAS	O ₂	PARTICULATE
REACTOR 1	6.55E-000	2.04E-000	1.15E+001
TURBINE 1	1.35E-000	2.67E-000	5.88E+000
REACTOR 2	7.00E-000	1.87E-000	8.50E+001
TURBINE 2	9.55E-000	0.42E-000	1.44E+000
COTE	1.47E-001	5.31E-001	8.01E-000
COTE TOTAL	3.71E-003	8.76E-000	1.50E+001

POINT ID	PARAMETER	UNITS	VALUE
W408	10 METER WIND SPEED	MPH	7
W409	10 METER WIND DIRECTION	DEG FROM	047
W401	DELTA T	C/DOF	0.55
W402	PRECIPITATION RATE	IN/HR	0.00

F1= CLEAR
F2= MENU

F3= F4= F5= F6=
TERM= [] CONSOLE= [] MODE= []

F5= F6=
APPLY= []

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1

(Form ES-401-6 comparable)

A.1.a RO only

SRO only

Both

Proposed Question

Listed below is the on-shift time for a Reactor Operator since receiving an RO License on June 15th of this year:

<u>DATE</u>	<u>HOURS WORKED/DUTIES</u>
June 21	12 hours as Unit 1 PCOP
June 28	12 hours as Unit 2 PCOP
July 04	12 hours as Unit 1 PCOM
August 15	12 hours as Unit 2 PCOP
August 16	08 hours as Unit 2 PCOP
September 01	08 hours as Unit 1 PCOM
September 25	12 hours as Unit 2 PCOP

Today's date is October 20th.

- a. What is the status of this RO License today, October 20th?
- b. Can the RO assume the shift as the PCOP today on Unit 1?
- c. Briefly explain your answer to answer b.

Proposed Answer

Reference(s)

OP-AD-010

a. Inactive

Attachment B

b. No

c. Requirements for maintaining active are not met because the RO must perform RO duties for seven 8 hour shifts or five 12 hour shifts per calendar quarter

K&A Statement 2.1.1 - Knowledge of conduct of operations requirements 3.7/3.8

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET
Attachment 1
(Form ES-401-6 comparable)

A.1.b RO only

SRO only

Both

NOTE: TO BE PERFORMED ON SAME DATE AS SRO A.1.b

Proposed Question

Unit 1 is at 100% RTP when you notice a control rod at position 44 that should be at position 48 in accordance with the pull sheet.

What action is required based on this condition?

Proposed Answer

(1) Promptly insert rod to position 00. (If INSERT Blocked from RSCS, bypass rod in RSCS per OP-156-002 and NDAP-QA-0338-9). (2) Inform Shift Supervision. (3) Initiate an AR. (4) Document in Unit Log Book. (5) Notify Reactor Engineering. (6) Perform notifications per OP-AD-001

Reference(s)

ON-155-001 (3.6)

K&A Statement 2.1.20 - Ability to execute procedural steps 4.3/4.2

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET
Attachment 1
(Form ES-401-6 comparable)

A.1c RO only

SRO only

Both

Proposed Question

During day shift as the Unit 1 PCOP you require a relief to report to the APF for a random drug screening.

What turnover requirements must be satisfied to allow you to report to the APF for drug screening?

Proposed Answer

Reference(s)

OP-AD-002 7.4.5.b

(1) A verbal turnover covering all applicable turnover requirements of OP-AD-002 section 7.4 except documentation of Turnover Sheets

(2) A panel walkdown and review of current plant status

K&A Statement 2.1.3 - Knowledge of shift turnover practices 3.0/3.4

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1

(Form ES-401-6 comparable)

A.1d RO only

SRO only

Both

Proposed Question

Unit 1 is shutting down for the purpose of entering a Refueling and Inspection Outage. You are directed to perform SO-131-003 RWM OPERABILITY DEMONSTRATION DURING DECREASING POWER. The Unit Supervisor is in the process of completing the Surveillance Authorization form.

- a. State two methods of obtaining a controlled copy of this procedure?
- b. Determine whether the attached procedure meets the requirements for successful implementation. Justify your answer.

Proposed Answer

Reference(s)

OP-AD-002 8.2.3

- a. A controlled copy can be obtained from any of the following locations:

OP-AD-004 9.3

(NDAP-QA-0002)

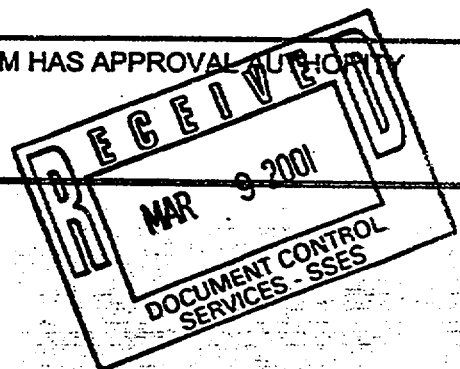
- NIMS
- Controlled Files (i.e. Control Room copies)
- b. The copy provided to the candidate does not meet the requirements because:
 - It is missing page 3 of 4 of the PCAF
 - It requires USER CONTROLLED (red stamp) and the information filled out on the appropriate lines.

K&A Statement 2.1.21 – Ability to obtain and verify controlled procedure copy
3.1/3.2

SSES Cross-Reference
Learning Objective(s) # _____ , _____ , _____ , _____

PROCEDURE CHANGE PROCESS FORM

1. PCAF NO. <u>2001-3082</u>	2. PAGE 1 OF <u>4</u>	3. PROC. NO. <u>SO-131-003</u> REV. <u>9</u>
4. FORMS REVISED - <u> </u> R <u> </u> , - <u> </u> R <u> </u> , - <u> </u> R <u> </u> , - <u> </u> R <u> </u> , - <u> </u> R <u> </u> , - <u> </u> R <u> </u>		
5. PROCEDURE TITLE RWM OPERABILITY DEMONSTRATION DURING DECREASING POWER		
6. REQUESTED CHANGE PERIODIC REVIEW <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES INCORPORATE PCAFS <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES # <u> </u> # <u> </u> # <u> </u> # <u> </u> REVISION <input type="checkbox"/> PCAF <input checked="" type="checkbox"/> DELETION <input type="checkbox"/> (CHECK ONE ONLY)		
7. SUMMARY OF / REASON FOR CHANGE Administrative change to place steps in a more correct order. A confirmation step was shifted from step 6.12.2 to step 6.10.1 to place the confirmation in the order of its occurrence.		
Continued <input type="checkbox"/>		
8. DETERMINE COMMITTEE REVIEW REQUIREMENTS (Refer to Section 6.1.4) PORC REVIEW REQ'D? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES ERC REVIEW REQ'D? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		9. PORC MTG# <u> N/A </u> 10. ERC MTG# <u> N/A </u>
BLOCKS 11 THRU 14 ARE ON PAGE 2 OF FORM		
15. <u>D. F. Sitter</u> <u>3902</u> / <u>3/8/01</u> PREPARER ETN DATE (Print or Type)	16. COMMUNICATION OF CHANGE REQUIRED? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (TYPE) <u> </u>	
17. <u><i>Robert D. Sitter</i></u> <u>3/8/01</u> RESPONSIBLE SUPERVISOR DATE <small>SIGNATURE ATTESTS THAT RESPONSIBLE SUPERVISOR HAS CONDUCTED QADR AND TECHNICAL REVIEW UNLESS OTHERWISE DOCUMENTED IN BLOCK 14 OR ATTACHED REVIEW FORMS. CROSS DISCIPLINE REVIEW (IF REQUIRED) HAS BEEN COMPLETED BY SIGNATURE IN BLOCK 14 OR ATTACHED REVIEW FORMS.</small>		
18. <u>N/A</u> FUM APPROVAL DATE		
19. RESPONSIBLE APPROVER <u>N/A</u> INITIALS DATE	ENTER N/A IF FUM HAS APPROVAL	



PROCEDURE CHANGE PROCESS FORM

1. PCAF NO. 2001-3082 2. PAGE 2 OF 4 3. PROC. NO. SO-131-003 REV. 9

11. A 50.59 and 72.48 Evaluation per NDAP-QA-0726 is required to be attached or referenced for all procedure changes except Expedited Reviews and Administrative Corrections. Either 11a, b, or c must be checked "YES" and the appropriate form attached or referenced.
- a. 50.59 and 72.48 Screening Determination (Form NDAP-QA-0726-5) YES N/A
- b. 50.59 or 72.48 Safety Evaluation (Note: 50.59 Safety Evaluations prepared on Form NDAP-QA-0726-1 Rev. 5 or earlier also require a 50.59 & 72.48 Screening Determination) YES N/A
- Safety Evaluation No. _____
- c. Expedited Review/Administrative Correction- 50.59 and 72.48 Evaluation not Required YES N/A
12. Is a Surveillance Procedure Review Checklist required per NDAP-QA-0722? YES NO
13. Is a Special, Infrequent or Complex Test/Evolution Analysis Form required per NDAP-QA-0320? (SICT/E form does not need to be attached.) YES NO

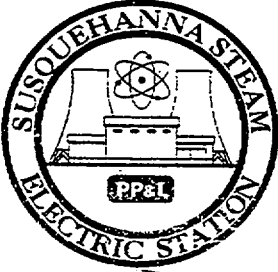
14. Reviews may be documented below or by attaching Document Review Forms NDAP-QA-0101-1.

REVIEW	REVIEWED BY WITH NO COMMENTS	DATE
QADR	_____	_____
TECHNICAL REVIEW	_____	_____
REACTOR ENGINEERING/NUCLEAR FUELS *	_____	_____
IST **	_____	_____
OPERATIONS	_____	_____
NUCLEAR SYSTEMS ENGINEERING	_____	_____
NUCLEAR MODIFICATIONS	_____	_____
MAINTENANCE	_____	_____
HEALTH PHYSICS	_____	_____
NUCLEAR TECHNOLOGY	_____	_____
CHEMISTRY	_____	_____
OTHER _____	_____	_____

* Required for changes that affect, or have potential for affecting core reactivity, nuclear fuel, core power level indication or impact the thermal power heat balance. ⁽⁵⁸⁾

** Required for changes to Section XI Inservice Test Acceptance Criteria.

PROCEDURE COVER SHEET

	<p>NUCLEAR DEPARTMENT PROCEDURE</p>	<p>SO-131-003 Revision 9 Page 1 of 9</p>
	<p>RWM OPERABILITY DEMONSTRATION DURING DECREASING POWER</p>	
<p><u>QUALITY CLASSIFICATION:</u> <input checked="" type="checkbox"/> QA Program <input type="checkbox"/> Non-QA Program</p>	<p><u>APPROVAL CLASSIFICATION:</u> <input checked="" type="checkbox"/> Plant <input type="checkbox"/> Non-Plant <input type="checkbox"/> Instruction</p>	
<p>EFFECTIVE DATE: <u>12/14/98</u></p> <p>PERIODIC REVIEW FREQUENCY: <u>N/A</u></p> <p>PERIODIC REVIEW DUE DATE: <u>N/A</u></p>		
<p><u>RECOMMENDED REVIEWS:</u></p> 		
<p>Procedure Owner: <u>Jay Barnes</u></p> <p>Responsible Supervisor: <u>Dave Walsh</u></p> <p>Responsible FUM: <u>Manager-Nuclear Operations</u></p> <p>Responsible Approver: <u>General Manger-SSES</u></p>		

1. PURPOSE/SCOPE

Demonstrate ability of Rod Worth Minimizer to block rod withdrawal of an out-of-sequence control rod and verifying proper indication of a Control Rod error within 1 hour after THERMAL POWER is reduced to $\leq 10\%$ RTP in mode 1.

2. REFERENCES

- 2.1 TS 3.3.2.1
- 2.2 NDAP-QA-0722 Surveillance Testing Program
- 2.3 OP-131-001 Rod Worth Minimizer (RWM)
- 2.4 OP-155-001 CRD Hydraulic System
- 2.5 OP-156-001 Reactor Manual Control System (RMCS)
- 2.6 OP-156-002 Rod Sequence Control System (RSCS)
- 2.7 IOM 443 (GEK-73596B)

3. SPECIAL TOOLS/EQUIPMENT

None

4. PRECAUTIONS

- 4.1 When selecting a control rod the following may indicate a fault in the Rod Select Module. Control rod movement should not be attempted.
 - 4.1.1 Selected control rod pushbuttons do not illuminate.
 - 4.1.2 Selected control rod pushbuttons dimly illuminated.
 - 4.1.3 Wrong set of control rod pushbuttons illuminate.
 - 4.1.4 More than one set of control rod pushbuttons illuminate.

5. PREREQUISITES AND LIMITATIONS

- 5.1 Plant in Mode 1 at or below Low Power setpoint (approximately 10%) for less than 1 hour.

CONFIRM

- 5.2 CRD Hydraulic System IN OPERATION in accordance with OP-155-001.

CONFIRM

- 5.3 Reactor Manual Control System OPERATIONAL in accordance with OP-156-001.

CONFIRM

- 5.4 Rod Worth Minimizer INITIALIZED in accordance with OP-131-001.

CONFIRM

- 5.5 All WITHDRAW ERRORS CLEARED and insert/withdrawal Permissives Indication are Yellow on RWM display.

CONFIRM

- 5.6 TWO OR LESS INSERT ERRORS indicated on RWM display.

CONFIRM

NOTE: The RWM group indicated on the RWM display may indicate the group of a rod with an insert error if a rod with an insert error is selected by the operator. To insure the RWM group that the RWM program is latched into is displayed by the RWM, the next rod to be moved in the sequence must be selected.

5.7 Latched RWM Group INDICATED on RWM display.

CONFIRM

6. PROCEDURE

NOTE (1): All Operations are performed at Panel 1C651 unless otherwise specified.

NOTE (2): Steps of test designated by an asterisk (*) immediately to left of step number require entry(ies) to be recorded on Data Form.

NOTE (3): This surveillance is not required when reducing THERMAL POWER to $\leq 10\%$ RTP if performed in the previous 92 days.

6.1 RECORD present latched RWM Group.

RWM GROUP CONFIRM

6.2 CONFIRM BELOW LPSP indication Red on RWM display.

CONFIRM

6.3 RECORD Date/Time power level dropped to Low Power Setpoint.

DATE / TIME CONFIRM

- 6.4 SELECT a control rod to be withdrawn that is not in RWM latched group or the same RSCS group as the rods in the RWM latched group.

x y POSITION CONFIRM VERIFY

NOTE: If the RWM latches to a different RWM group when this selection is made, a different rod in an RWM group further from the latched group must be selected for the RWM system to successfully satisfy the objectives of this procedure.

- 6.4.1 ENSURE the SELECT ERROR box turns red.

CONFIRM

NOTE: Following step is necessary to demonstrate that RWM, not Rod Sequence Control System, is blocking rod withdrawal.

- 6.5 BYPASS control rod selected in step 6.4 at Rod Sequence Control System in accordance with OP-156-002.

CONFIRM

- 6.6 CONFIRM control rod selected in step 6.4 is Bypassed at RSCS section as follows:

- 6.6.1 DEPRESS ROD BYPASS pushbutton.

CONFIRM

- 6.6.2 OBSERVE red LED is ON at control rod location.

CONFIRM

- 6.7 CONFIRM following lights are ON for Rod selected in step 6.4:

- 6.7.1 ROD SELECTION pushbuttons.

CONFIRM

6.12.2 ROD OUT BLOCK annunciator ALARMS.

CONFIRM

6.13 INSERT rod selected to original position as recorded in step 6.4.

<u>x</u>	<u>y</u>	<u>ORIGINAL POS</u>	<u>CONFIRM</u>	<u>VERIFY</u>
----------	----------	---------------------	----------------	---------------

6.14 CONFIRM ROD OUT BLOCK annunciator CLEARS.

CONFIRM

6.15 CONFIRM WITHDRAWAL Permissive Yellow on RWM display.

CONFIRM

6.16 SELECT a control rod in latched group.

CONFIRM

6.17 CONFIRM SELECT Permissive Yellow on RWM display.

CONFIRM

6.18 Return control rod bypassed in step 6.5 to NORMAL in accordance with OP-156-002.

CONFIRM

6.19 CONFIRM control rod selected in step 6.4 is returned to NORMAL as follows:

6.19.1 DEPRESS ROD BYPASS pushbutton.

CONFIRM

6.19.2 OBSERVE red LED is OFF at Control Rod location.

CONFIRM

6.20 RECORD Date/Time above steps were completed.

DATE / TIME CONFIRM

* 6.21 If Acceptance Criteria has not been met complete Required Actions Section on Attachment A.

7. RECORDS

7.1 SURVEILLANCE AUTHORIZATION cover sheet and data package shall be forwarded to Shift Supervision to initiate review process, in accordance with NDAP-QA-0722.

7.2 Upon completion of review process, completed record shall be stored by DCS according to surveillance procedure number.

DATA FORM
 SO-131-003
 RWM OPERABILITY DEMONSTRATION
 (WITHIN ONE HOUR AFTER DECREASING POWER TO/BELOW LPSP)

ACCEPTANCE CRITERIA

ACCEPTABLE

CONFIRM

1. Unit 1 SR 3.3.2.1.2

Proper indication of Selection Error of an out-of-sequence control rod received. (step 6.8)

YES/NO

2. Unit 1 SR 3.3.2.1.2

Rod block prevents withdrawal of out-of-sequence rod beyond one notch. (step 6.12.1)

YES/NO

REQUIRED ACTION

If Acceptance Criteria has not been met, NOTIFY Shift Supervision SO-131-003 has failed. (Step 6.21)

CONFIRM

Shift Supervision has confirmed following REQUIRED ACTIONS are in effect as applicable.

APPLICABLE

CONFIRM

1. TS 3.3.2.1 Condition D actions

YES/NO

Remarks:

- 6.20.2 When verbatim compliance is required for procedure implementation, and the procedure in use contains errors or conflicts with other procedures, prior to further implementation, the system/component shall be placed in a stable and safe configuration, and the responsible supervisor notified of the problem. The responsible supervisor shall resolve the discrepancy in the procedure by either of the following:
- a. Determining the methods by which the activity can be performed by using the procedure as written and conveying this to the individual performing the activity.
 - b. Submitting a procedure change.

NOTE: The following step only applies to Operations personnel when directed by the Shift Supervisor.

- (6) 6.20.3 In the event of an emergency not covered by an approved procedure, or an emergency not following the path upon which the approved procedure is based, Operations personnel shall take action so as to protect health and safety, and minimize personnel injury and damage to the facility. The appropriate follow-up actions are then performed (e.g., NRC notification).

(6) (15) (17) 6.21 - Controlled Procedures-Satellite Files
(31)

- ANSWER a.*
- 6.21.1 Satellite files containing controlled copies of necessary procedures are set up at strategic locations.
 - 6.21.2 Distribution lists of controlled copies are maintained by DCS in NIMS.
 - 6.21.3 Copies of procedures controlled by DCS are printed with a "CONTROLLED" banner across the top of the page. Other copies which may be issued for training or information may be stamped or otherwise marked "INFORMATION."

(6) (15) (17) 6.22 Controlled Procedures-Requested by Users
(31)

- ANSWER a.*
- 6.22.1 Controlled Procedures - Request via NIMS
 - a. Procedure users may request controlled copies directly from NIMS.

- b. A controlled procedure is requested from NIMS. (Refer to the appropriate NIMS Users Manual for detailed instructions. The users manual can be found on the PPLWeb, Nuclear Department Home Page, under NIMS, Users Manual, Operations.) The requestor must provide:
- (1) The name of the person to whom the controlled copy will be assigned (i.e., the procedure user).
 - (2) The date the control is to expire (i.e., expiration date). This date should be commensurate with the work activity and should not be confused with the procedures' periodic review due date.
 - (3) The copy is printed with a "CONTROLLED" banner across the top of the page along with the users name and the expiration date.
 - (4) The user is responsible to page insert any PCAF's attached to the procedure.
- c. The procedure user will automatically be notified via NIMS of all procedure changes as they are issued. It is the users responsibility to print the changes and update the hard copy accordingly.

6.22.2 Controlled Procedures - Request via DCS

NOTE: This process should be used by personnel that do not have a valid NIMS account.

- a. A controlled procedure is requested from DCS. The requestor must provide:
- (1) The name of the person to whom the controlled copy will be assigned (i.e., the procedure user).
 - (2) The date the control is to expire (i.e., expiration date). This date should be commensurate with the work activity and should not be confused with the procedures' periodic review due date.
 - (3) DCS will signout a CONTROLLED copy of the procedure from NIMS using the procedure users name.

- (4) The copy is printed with a "CONTROLLED" banner across the top of each page along with the users name and the expiration date.
 - (5) The user is responsible to page insert any PCAF's attached to the procedure.
- b. The procedure user will automatically be notified via NIMS of all procedure changes as they are issued. It is the users responsibility to print the changes and update the hard copy accordingly.
- c. When the task or evolution requiring a controlled procedure is complete:
- (1) Either retain the copy of the procedure for records or destroy it.
 - (2) The individual to whom the procedure is signed out can terminate the control directly in NIMS.

OR

The individual to whom the procedure is signed out should notify DCS when use of the controlled procedure has been terminated prior to the expiration date.

- d. Whenever a controlled procedure is transferred to a user group other than the group assigned the copy by DCS:
- (1) The individual transferring the procedure can update NIMS directly.
- OR
- (2) The transferring group notifies DCS per telecon of the transfer. DCS then updates NIMS to reflect the individual now responsible for the controlled procedure.

answer
b.

6.22.3

User Controlled Procedures Issued by other Work Groups

NOTE: This section applies to work groups whose procedures are not controlled by NIMS.

- a. If a work group has procedures or instructions controlling the issuance of User Controlled procedures, then they may issue User Controlled Procedures provided:
 - (1) A copy of the procedure is made from a controlled satellite file.
 - (2) The copy is stamped with the following information:
 - (a) User Controlled
 - (b) Name or position title of the individual to whom the procedure is assigned.
 - (c) Expiration Date
 - (3) The functional unit then enters the above information in some type of tracking program to ensure User Controlled copies of the procedure receive the necessary updates.

6.22.4

User Controlled Procedures - Extenuating Circumstances

- a. If a controlled copy of a procedure is required and NIMS is unavailable, User Controlled copies may be issued as follows:
 - (1) A copy of the procedure is made from a controlled satellite file.
 - (2) The copy is stamped with the following information:
 - (a) User Controlled
 - (b) Name or position title of the individual to whom the procedure is assigned.
 - (c) Expiration Date
 - (d) Expiration Time

- (3) The Expiration Date and Time entered must be \leq 24 hours from the time the procedure copy was made.
- (4) If procedure use is required beyond the expiration date/time,
 - (a) The user must check NIMS (if available) or a controlled satellite file and confirm no procedure changes have been issued.
 - (b) The procedure is then re-stamped for an additional 24 hours.

NOTE: This process can be repeated as often as necessary; however, the user should request controlled copies in accordance with Section 6.22.1 or 6.22.2 if the procedure will remain open for an extended period.

- b. If a controlled copy of a procedure is actively in use and its control will expire prior to completion of the procedure:
 - (1) The expiration date may be extended in NIMS to permit procedure completion.
 - (2) Note the new expiration date on the procedure coversheet, initial, and date.
- c. If a controlled copy of a procedure is actively in use and it is discovered that its control has expired:
 - (1) Use of the procedure shall stop. It can be used up to a point to place the plant, equipment, etc. in a safe configuration.
 - (2) NIMS must be consulted to identify any changes that may have been issued. All changes shall be printed from NIMS and placed in the original controlled copy.
 - (3) The copy is stamped with the following information:
 - (a) User Controlled

- (b) Name or position title of the individual to whom the procedure is assigned.
 - (c) Expiration Date
 - (d) Expiration Time
- (4) The Expiration Date and Time entered must be \leq 24 hours from the time the procedure copy was made.

NOTE: This process can be repeated as often as necessary; however, the user should request controlled copies in accordance with Section 6.22.1 or 6.22.2 if the procedure will remain open for an extended period.

⁽⁶⁾ ⁽¹⁵⁾ ⁽¹⁷⁾ 6.23 Controlled Forms
⁽³¹⁾

- 6.23.1 Satellite files containing controlled copies of requested forms are set up at strategic locations.
- 6.23.2 DCS provides notification of status changes to each controlled form via the NIMS electronic transmittal process.
- 6.23.3 Electronic forms are controlled at X:\Forms\Nuclear on PPLNET and in NIMS.

⁽⁷¹⁾ 6.24 Vendor Originated Procedures

- 6.24.1 Procedures within the scope of TS 5.4 or TRM 4.4 which are originated by vendor organizations shall be incorporated into the Department Procedure Program as follows:
 - a. A FUM agrees to sponsor the procedure.
 - b. A preparer is assigned to assemble the procedure review and approval packages.
 - c. A Procedure Coversheet is attached to the procedure.
 - d. The words "VENDOR ORIGINATED PROCEDURE" are contained within the Title Block of the Coversheet.
 - e. The procedure is controlled per this procedure.

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Revision 4
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- c. Keeps Operations Management informed of potential problems and issues related to the emergency plan.

8.1.2 Unit Supervisor

- a. Is responsible for control of the assigned unit.
- b. Coordinates activities that affect system operability and unit availability.
- c. Controls access and conduct of personnel in the Control Room.

9. PROCEDURES

- (4.5) 9.1 Individual operators are responsible for controlling the plant and maintaining it within allowable limits at all times. Procedures represent Management's expectations and bounds of authorization to operate plant systems and equipment. Procedures form the basis for which individual operator actions will be evaluated and judged for adequacy. Procedure compliance is our standard to operate the plant safely and efficiently.
- (5) 9.2 If an existing procedure addresses the evolution to be performed and the current circumstances, the procedure shall be used.
- (5) 9.3 If the existing procedure is wrong, it shall be corrected prior to use.
- 9.4 The level of procedure compliance for that group of procedures shall be adhered to.
- 9.5 Immediate Operator Actions, procedural steps performed from memory, are delineated in OP-AD-002.
- 9.6 Placekeeping shall be used for step-by-step procedures. Operations is in the process of adding placekeeping checkblocks to procedures. Operators may use their own placekeeping methods (such as lining out the step number) until the checkblocks are available in all procedures.
- 9.7 Operations procedures use a format like A(B)(C) to allow one procedure section to operate different trains of equipment. Operators should use a pen or highlighter to indicate the proper components to be operated, as an error reduction technique.
- 9.79.8 Placekeeping for EOPs shall be as follows:
 - 9.7.19.8.1 Circle entry condition on chart.

b. Attributes of Judgment:

- (1) Judgment can take into account the current circumstance; procedures cannot.
- (2) Judgment can find and correct deficiencies in procedures.
- (3) Judgment requires time to think about the effects of what you're doing. Without time, judgment is hampered.

8.2.3 General Procedure Compliance:

(5)

- a. If an existing procedure addresses the evolution to be performed and the current circumstances, the procedure shall be used.
- b. The level of procedure compliance specified in the procedure or for that group of procedures shall be adhered to.
- c. Placekeeping or equivalent shall be used for step by step procedures.

(5)

- d. If the existing procedure is wrong, it shall be corrected prior to use. If the existing procedure step or steps do not work or produce the expected result, then the activity should be stopped and resolved with supervision. If the function or reason for a step is not understood, then the activity should stop and address the question to supervision.

(5)

- e. A significant consideration in selecting the proper procedure to control an evolution is whether all the precautions and prerequisites can be adequately met. If not, the procedure shall be changed prior to use or not used.
- f. If no procedure exists which addresses the evolution and the current circumstances, the following courses of action should be evaluated:

- (1) Write a procedure to perform the evolution.

- (2) Find another means of accomplishing the same thing that is covered by a procedure. This could mean using another component, another system, or another line-up.
- (3) When considering performing an evolution without a procedure, the following criteria must be met:
 - (a) There is a driving need to accomplish the task prior to preparing a procedure.
 - (b) Consult with Shift Supervision and evaluate to ensure the following:
 - 1) It can be safely done.
 - 2) It is simple.
 - 3) The people involved have the knowledge and skill to do it.
 - 4) Verbal communication is adequate.
 - 5) The plant is stable, no other evolutions which would interfere are happening.
 - 6) It does not bypass or disable any automatic plant function.
 - 7) Status control is maintained.
- (4) To perform the evolution without a procedure, the status control of the evolution to be performed shall be maintained by one of the following authorities:
 - (a) Clearance Order
 - (b) Status Control Tag
 - (c) Bypass Tag
 - (d) Check Off (CL) List
 - (e) Switching order
 - (f) PM Worklist activity

Review and Validation Comments

**PENNSYLVANIA POWER & LIGHT COMPANY
JOB PERFORMANCE MEASURE
APPROVAL AND ADMINISTRATIVE DATA SHEET**

RO ROA.2 0 05/06/02 2.2.24 2.6
Appl To JPM Number Rev No. Date NUREG 1123 Sys. No. K/A

Task Title: Review Failed Surveillance Test and Determine Action

Completed By:

Bruce Hennigan
Writer


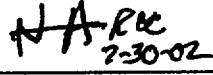
05/06/02
Date

Reviews:


Instructor/Writer

6/13/02
Date

Approval:

 
Requesting Supv./C.A. Head

7/30/02
Date


Nuclear Training Supv.

6/13/02
Date

Date of Performance:

 20 Min
Allowed Time (Min)

Time Taken (Min)

JPM Performed By:

Last First M.I.

Employee #/S.S. #

Performance Evaluation: () Satisfactory () Unsatisfactory

Evaluator Name:

Signature

Typed or Printed

Comments:

**REQUIRED TASK INFORMATION
JOB PERFORMANCE MEASURE
RO A.2**

I. SAFETY CONSIDERATIONS

- A. All Operations personnel are responsible for maintaining their radiation exposure As Low As Reasonably Achievable in accordance with OP-AD-002, Standards for Shift Operations.
- B. All applicable safety precautions shall be taken in accordance with established PP&L safety policies and the Safety Rule Book, for example:
 - 1. Whenever any electrical panel is opened for inspection during JPM performance.
 - 2. Whenever entering any plant area where specific safety equipment; such as hearing or e protection, safety shoes, hardhats, etc; is required and/or posted as being necessary.

II. REFERENCES

- A. SO-150-004, RCIC QUARTERLY RCIC VALVE EXERCISING
- B. NDAP-QA-0722, SURVEILLANC TESTING PROGRAM

III. REACTIVITY MANIPULATIONS

This JPM satisfies the requirements of Operational Activity(s):

None

IV. TASK CONDITIONS

- A. Unit 1 is in MODE 1 at 100% reactor power.
- B. Data for SO-150-004, RCIC Quarterly Valve Exercising has been recorded on Attachment A.

V. INITIATING CUE

Review the date and complete confirmation for SO-150-004 Attachment A.

PERFORMANCE CHECKLIST

Appl. To/JPM No.: RO A.2

Student Name: _____

Step	Action	Standard	Eval	Comments
	<p>Evaluator</p> <ul style="list-style-type: none"> • This JPM should be performed in the Simulator following completion of the scenario as PCO. • Give the student a few minutes to read the Task Conditions/Cue Sheet. • Give the student a copy of SO-150-004 Attachment A. 			
1.	Reviews As Found column data on Attachment 'A'.			
*2.	Identifies stroke time is fast for HV-149-F060.	Identifies HV-149-F060 closure time is outside the 'Acceptable' value.		
		Notifies SS that Acceptance Criteria failed and circles 'NO' under ACCEPTANCE CRITERIA MET column.		
*3.	Identifies stroke time is too slow for HV-149-F012.	Identifies HV-149-F012 opening time is outside the 'Limit' value.		
		Notifies SS that Acceptance Criteria failed and circles 'NO' under ACCEPTANCE CRITERIA MET column.		

*Critical Step

#Critical Sequence

TASK CONDITIONS

- A. Unit 1 is in MODE 1 at 100% reactor power.
- B. Data for SO-150-004, RCIC Quarterly Valve Exercising has been recorded on Attachment A.

INITIATING CUE

Review the data and complete confirmation for SO-150-004 Attachment A.

TASK CONDITIONS

- A. Unit 1 is in MODE 1 at 100% reactor power.
- B. Data for SO-150-004, RCIC Quarterly Valve Exercising has been recorded on Attachment A.

INITIATING CUE

Review the date and complete confirmation for SO-150-004 Attachment A.

DATA FORM
 SO-150-004
QUARTERLY RCIC VALVE EXERCISING

<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
	<u>ACCEPTABLE</u>	<u>LIMIT</u>			
1. TS SR 3.6.1.3.5 5.5.6 5.5.6 <hr/> HV-149-F007 closure stroke time (step 6.4.4 or 6.5.7)	≥ 13 sec ≤ 18 sec	≤ 20 sec	<u>14</u> sec	YES/NO	_____
2. TS SR 3.6.1.3.5 5.5.6 5.5.6 <hr/> HV-149-F084 closure stroke time (step 6.6.4)	≥ 4 sec ≤ 8 sec	≤ 10 sec	<u>7</u> sec	YES/NO	_____
3. TS SR 3.6.1.3.5 5.5.6 5.5.6 <hr/> HV-149-F008 closure stroke time (step 6.11.5)	≥ 12 sec ≤ 16 sec	≤ 20 sec	<u>14</u> sec	YES/NO	_____
4. TS 5.5.6 5.5.6 <hr/> HV-150-F045 opening stroke time (step 6.11.13) [6 to 10 sec stroke + 7 sec timer delay]	≥ 11 sec	≤ 17 sec	<u>12</u> sec	YES/NO	_____
5. TS 5.5.6 5.5.6 <hr/> HV-150-F045 closure stroke time (step 6.11.16)	≥ 6 sec	≤ 10 sec	<u>9</u> sec	YES/NO	_____

	<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
		<u>ACCEPTABLE</u>	<u>LIMIT</u>			
6.	TS SR 3.6.1.3.5 5.5.6 5.5.6	≥ 6 sec ≤ 10 sec	≤ 10 sec	<u>9</u> sec	YES/NO	_____
	<u>HV-149-F062 closure stroke time (step 6.12.4)</u>					
7.	TS 5.5.6 5.5.6	≥ 21 sec	≤ 32 sec	<u>19</u> sec	YES/NO	_____
	<u>HV-149-F060 closure stroke time (step 6.13.4)</u>					
8.	TS 5.5.6 5.5.6	≥ 36 sec	≤ 52 sec	<u>46</u> sec	YES/NO	_____
	<u>HV-149-F059 closure stroke time (step 6.14.4)</u>					
9.	TS 5.5.6 5.5.6	≥ 3 sec	≤ 5 sec	<u>4</u> sec	YES/NO	_____
	<u>FV-149-F019 opening stroke time (step 6.15.5)</u>					
10.	TS 5.5.6 5.5.6	≥ 3 sec	≤ 5 sec	<u>4</u> sec	YES/NO	_____
	<u>FV-149-F019 closure stroke time (step 6.15.6)</u>					
11.	TS 5.5.6 5.5.6 5.5.6	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>11</u> sec	YES/NO	_____
	<u>HV-149-F012 closure stroke time (step 6.16.4)</u>					

	<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
		<u>ACCEPTABLE</u>	<u>LIMIT</u>			
12.	TS 5.5.6 5.5.6 5.5.6 HV-149-F013 opening stroke time (step 6.16.12)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>11</u> sec	YES/NO	_____
13.	TS 5.5.6 5.5.6 5.5.6 HV-149-F013 closure stroke time (step 6.16.13)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>9</u> sec	YES/NO	_____
14.	TS 5.5.6 5.5.6 5.5.6 HV-149-F012 opening stroke time (step 6.16.17)	≥ 7 sec ≤ 13 sec	≤ 15 sec	<u>16</u> sec	YES/NO	_____
15.	TS 5.5.6 5.5.6 HV-149-F022 opening stroke time (step 6.17.6)	≥ 17 sec	≤ 26 sec	<u>23</u> sec	YES/NO	_____
16.	TS 5.5.6 5.5.6 HV-149-F022 closure stroke time (step 6.17.9)	≥ 17 sec	≤ 26 sec	<u>20</u> sec	YES/NO	_____
17.	TS 5.5.6 5.5.6 HV-149-F031 opening stroke time (step 6.18.7)	≥ 27 sec	≤ 35 sec	<u>33</u> sec	YES/NO	_____

TEST CRITERIA	ACCEPTANCE CRITERIA		AS FOUND	ACCEPTANCE CRITERIA MET	CONFIRM
	ACCEPTABLE	LIMIT			
18. TS 5.5.6 <u>5.5.6</u> HV-149-F010 closure stroke time (step 6.18.8)	≥ 26 sec	≤ 38 sec	<u>31</u> sec	YES/NO	_____
19. TS 5.5.6 <u>5.5.6</u> HV-149-F031 closure stroke time (step 6.18.12)	≥ 27 sec	≤ 35 sec	<u>29</u> sec	YES/NO	_____
20. TS 5.5.6 <u>5.5.6</u> HV-149-F010 opening stroke time (step 6.18.13)	≥ 26 sec	≤ 38 sec	<u>31</u> sec	YES/NO	_____
21. TS 5.5.6 5.5.6 <u>5.5.6</u> HV-149-F088 opening stroke time (step 6.21.4 or 6.22.7)	≤ 8 sec ≥ 2 sec	≤ 12 sec	<u>6</u> sec	YES/NO	_____
22. TS 5.5.6 5.5.6 <u>5.5.6</u> HV-149-F088 closure stroke time (step 6.21.7 or 6.22.10)	≤ 8 sec ≥ 2 sec	≤ 12 sec	<u>6</u> sec	YES/NO	_____
23. TS 5.5.6 <u>5.5.6</u> HV-149-F025 closure stroke time (step 6.23.3)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	_____

	<u>TEST CRITERIA</u>	<u>ACCEPTANCE CRITERIA</u>		<u>AS FOUND</u>	<u>ACCEPTANCE CRITERIA MET</u>	<u>CONFIRM</u>
		<u>ACCEPTABLE</u>	<u>LIMIT</u>			
24.	TS 5.5.6 <u>5.5.6</u> HV-149-F025 opening stroke time (step 6.23.6)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>
25.	TS 5.5.6 <u>5.5.6</u> HV-149-F026 closure stroke time (step 6.24.3)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>
26.	TS 5.5.6 <u>5.5.6</u> HV-149-F026 opening stroke time (step 6.24.6)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>
27.	TS 5.5.6 <u>5.5.6</u> HV-150-F005 closure stroke time (step 6.25.3)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>
28.	TS 5.5.6 <u>5.5.6</u> HV-150-F004 opening stroke time (step 6.25.6)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>
29.	TS 5.5.6 <u>5.5.6</u> HV-150-F004 closure stroke time (step 6.25.9)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>
30.	TS 5.5.6 <u>5.5.6</u> HV-150-F005 opening stroke time (step 6.25.13)	≥ 0 sec	≤ 2 sec	<u>1</u> sec	YES/NO	<u> </u>

REQUIRED ACTION

	<u>APPLICABLE</u>	<u>CONFIRM</u>
I. If Acceptance Criteria has not been met, NOTIFY Shift Supervision that SO-150-004 has failed. (Step 6.28)		_____
II. For each Acceptance Criteria failure:		
A. If measured stroke time for any valve fails to meet the "Limiting Value For Full Stroke Time" acceptance criteria listed in the right hand (LIMIT) column, DECLARE that valve INOPERABLE.	YES/NO	_____
B. If measured stroke time for any valve fails to meet the acceptance criteria listed in the left-hand (ACCEPTABLE) column:		
1. On Surveillance Authorization Form, Part VI check that acceptance criteria failed.		
2. DECLARE that valve INOPERABLE; or RETEST that valve, if able, using a Surveillance Authorization Retest Form.	YES/NO	_____
3. For each retested valve:		
a. If measured stroke time for a retested valve fails to meet TS 5.5.6 Acceptance Criteria listed in the left-hand (ACCEPTABLE) column, ANALYZE the data within 96 hours to verify that the new stroke time represents acceptable valve operation, or DECLARE the valve INOPERABLE. (Analysis performed by System Engineer and the 96 hours tracked by US on Surveillance Authorization cover sheet and US Turnover Sheet.)	YES/NO	_____
b. If measured stroke time for a retested valve is within the TS 5.5.6 Acceptance Criteria listed in the left-hand (ACCEPTABLE) column, the test has been successfully completed. Additionally, CONTACT System Engineer for analysis of the cause of the initial deviation.	YES/NO	_____
III. Shift Supervision has confirmed that the following REQUIRED ACTIONS are in effect as applicable:		
1. TS 3.6.1.3 Condition A Actions	YES/NO	_____
2. TS 3.6.1.3 Condition C Actions	YES/NO	_____
3. TS 3.5.3 Condition A Actions	YES/NO	_____

ADMIN EXAMINATION QUESTION WORKSHEET
 Attachment 1
 (Form ES-401-6 comparable)

A.3.a RO only

SRO only

Both

Proposed Question

The Main Turbine Control Valve area is posted: "CAUTION LOCKED HIGH RADIATION AREA". You have been issued a key to enter the area to inspect the hydraulic lines to the valve.

- a. What is the minimum expected dose based on this posting, if this inspection takes 15 minutes?
- b. Would you require a dose extension per SSES procedures to perform this evolution with a current dose of 1200 mRem for the year?

Proposed Answer

Reference(s)

TS 5.7

- a. ~250 mRem or .25 rem (Locked Hi Rad is area >1 rem/hr)
- b. No, (dose extension needed for >2000 mRem, (total would be 1450 mrem)

NDAP-QA-0625 6.2.3
NDAP-QA-0626 5.7

K&A Statement 2.3.1 – Knowledge of 10CFR 20 and related facility radiation control requirements 2.6/3.0

SSES Cross-Reference
 Learning Objective(s) # _____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET
Attachment 1
(Form ES-401-6 comparable)

A.3.b RO only

SRO only

Both

NOTE: PERFORM ON SAME DATE AS A.3.b SRO

Proposed Question

A radiation worker unexpectedly receives a dose of 110 millirem in six (6) minutes while performing work in a penetration room.

What administrative requirements exist for entry into this room?

Proposed Answer

Reference(s)

NDAP-QA-0626
section 6.2.3.b

- Determine that it is a high Radiation Area >1 R/Hr.
- must comply with RWP requirements
- must receive ALARA pre job review
- must receive prejob briefing

Note: This door is a locked door and requires HP key for entry. This may be provided to the evaluator, but is a part of the posting and locking requirements of the NDAP.

K&A Statement 2.3.10 – Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure 2.9/3.3

SSES Cross-Reference
Learning Objective(s) # _____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1
(Form ES-401-6 comparable)

A.4.a RO only

SRO only

Both

NOTE: The fire alarm will be generated from an actual printout from the SIMPLEX Panel in the Simulator. If unable to generate printout, provide the candidate with the following :

FIRE DET X114_Z3/ACK
8:04 SUN 21-JUL-02
27/29-749 FPC RM/SLC
ACK BY PANEL
Proposed Question

You are the Unit 1 PCOP when the attached printout of the SIMPLEX Alarm Points are actuated.

FIRE DET X114_Z3/ACK
8:04 SUN 21-JUL-02
27/29-749 FPC RM/SLC
ACK BY PANEL

Reports from persons in that area confirm smoke in the area. Based upon the information contained in the printout, answer the following:

- Where would you direct the Fire Brigade Leader to set up the Command Post?
- What automatic Fire Suppression systems are in that area?

Proposed Answer

Reference(s)

Fire Pre-Plan Proc.
FP-113-119
Simplex Fire Alarm
AR-SP-002

- Stairwell 102 is identified under Guidelines For Fire Attack. It may be moved at the discretion of the Fire Brigade Leader if conditions warrant.
- Pre- Action Sprinkler System PA-151

K&A Statement 2.4.27 – Knowledge of fire in the plant procedure 3.0/3.5
SSES Cross-Reference
Learning Objective(s) # _____ , _____ , _____ , _____

ADMIN EXAMINATION QUESTION WORKSHEET

Attachment 1

(Form ES-401-6 comparable)

A.4.b RO only

SRO only

Both

Proposed Question

The Shift Supervisor has declared an "ALERT" today at 0200. You are the Control Room Communicator.

- a. What is the latest time the NRC notification must be made?
- b. After contacting the NRC on the normal line, it goes dead. How will you re-establish contact with the NRC?

Proposed Answer

- a. 0300 today
- b. call 1-301-816-5100 or other backup number

Reference(s)

EP-PS-126 Tab A
step C4

EP-PS-126 Tab 4

NDAP-QA-0720 Att E

K&A Statement 2.4.43 – Knowledge of emergency communications systems and techniques 2.8/3.5

SSES Cross-Reference
Learning Objective(s) #

_____ , _____ , _____ , _____