FINAL
04/06/09

Southern Nuclear
E. I. Hatch Nuclear Plant

Operations Training
JPM

Admin 1

TITLE		
VERIFY FUEL MOVEMENT SHEET		
AUTHOR	**MEDIA NUMBER**	**TIME**
Frank Fagan	LR-JP-45.33A	30 Minutes
RECOMMENDED BY	**APPROVED BY**	**DATE**
N/R		

SOUTHERN COMPANY

SOUTHERN NUCLEAR OPERATING COMPANY
PLANT E. I. HATCH

FORM TITLE: TRAINING MATERIAL REVISION SHEET

Program/Course Code: **OPERATIONS TRAINING** Media Number: **LR-JP-45.33A**

Rev. No.	Date	Reason for Revision	Author's Initials	Supv's Initials
00	03/17/09	Initial development	FNF	

UNIT 1 (X) UNIT 2 (X)

TASK TITLE:	**VERIFY FUEL MOVEMENT SHEET**
JPM NUMBER:	LR-JP-45.33A
TASK STANDARD:	Verify proper fuel movements.
TASK NUMBER:	045.033
OBJECTIVE NUMBER:	045.033.O

PLANT HATCH JTA IMPORTANCE RATING:

RO Not Available

SRO Not Available

K/A CATALOG NUMBER: G2.1.35

K/A CATALOG JTA IMPORTANCE RATING:

RO 2.2

SRO 3.9

OPERATOR APPLICABILITY: Senior Reactor Operator

GENERAL REFERENCES:	**Refuel Floor**
	34FH-OPS-001-0 (current version) 42FH-ERP-014-0 (current version)

REQUIRED MATERIALS:	**Refuel Floor**
	Fuel Movement Sheets 34FH-OPS-001-0 (current version) 42FH-ERP-014-0 (current version)

APPROXIMATE COMPLETION TIME: 30 Minutes

SIMULATOR SETUP: N/A

UNIT 2

READ TO THE OPERATOR

INITIAL CONDITIONS:

1. Unit 2 is in a refueling outage.
2. You are the oncoming Refuel Floor SRO.
3. The off-going Refuel Floor SRO asks you to verify Page 1 of the attached Fuel Movement Sheet.
4. The fuel movement sheet, Core Map and pictures of the core cells are available.

INITIATING CUES:

Verify the in-core placement of all components listed on Page 1 of the attached Fuel Movement Sheet.

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)

For **INITIAL** Operator Programs:
For OJT/OJE; ALL PROCEDURE STEPS must be completed for Satisfactory Performance.
For License Examinations; ALL CRITICAL STEPS must be completed for Satisfactory Performance.

START TIME:_____

PROMPT: Hand the operator the fuel movement sheet, Core Map and pictures of the core cells .

PROMPT: IF the operator has problems reading the bundle serial numbers, THEN provide the serial numbers to the operator.

PROMPT: IF the operator asks about Spent Fuel Pool verification, THEN tell the operator he is only responsible for in-core verifications.

1.	Obtains the correct procedures.	Obtains and reviews 42FH-ERP-014-0, "Fuel Movement" and 34FH-OPS-001-0, "Fuel Movement Operation."	SAT / UNSAT
2.	Verify correct loading of Control Cell 38-37.	Operator determines Control Cell 38-37 bundles are the correct bundles and in the correct orientation:	
		• JLV675	SAT / UNSAT
		• JLV682	SAT / UNSAT
		• JLK804	SAT / UNSAT
		• JLK817	SAT / UNSAT

(Indicates critical step)**

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)
**3.	Determine INCORRECT loading of Control Cell 14-37.	Operator determines Control Cell 14-37 bundles are the correct bundles but in the INCORRECT orientation:	
		• JLV678	SAT / UNSAT
		• JLV670	SAT / UNSAT
NOTE: Bundles JLV678 and JLV670 are 180° out.			
4.	Verify correct loading of Control Cell 14-37.	Operator determines Control Cell 14-37 bundles are the correct bundles and in the correct orientation:	
		• JLK805	SAT / UNSAT
		• JLK812	SAT / UNSAT
**5.	Determine INCORRECT loading of Control Cell 38-17.	Operator determines Control Cell 38-17 bundle is the INCORRECT bundle but in the correct orientation:	
		• JLV668	SAT / UNSAT

NOTE: Wrong bundle loaded. The correct bundle is JLV698

6.	Verify correct loading of Control Cell 38-17.	Operator determines Control Cell 14-37 bundles are the correct bundles and in the correct orientation:	
		• JLV674	SAT / UNSAT
		• JLK807	SAT / UNSAT
		• JLK820	SAT / UNSAT
**7.	Determine INCORRECT loading of Control Cell 14-17.	Operator determines Control Cell 14-17 Double Blade Guide is in the INCORRECT orientation.	SAT / UNSAT

(Indicates critical step)**

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)

END TIME:_____

NOTE: The terminating cue shall be given to the Operator when:

- With no reasonable progress, the Operator exceeds double the allotted time.
- Operator states the task is complete.

TERMINATING CUE: That completes this JPM.

(Indicates critical step)**

SOUTHERN NUCLEAR
PLANT E.I. HATCH | PAGE 1 OF

FORM TITLE:
FUEL MOVEMENT SHEETS

TYPE OF FUEL MOVEMENT:
(check the type of fuel sheets)

Core Off-Load:	____	Partial Offload:	____
Core Reload:	X	Upfront Shuffle:	____
Shuffle:	____	Backend Shuffle:	____
General Moves:	____	Other (Specify):	____
Special Activity:	____		

Brief description of moves: Control Cells 38-37, 14-37 and 38-37 to be loaded with fuel and blade guides removed. Control Cell 14-17 to have blade guide installed for insertion of control rod.

Verify the following for all core reload move sheets:

The first 4 steps in the movement sequence will place bundles around the SRM which will first be in the fueled region.

N/A / _____
Date

N/A / _____
Date

Verify the following for all core shuffle move sheets:

At least 2 irradiated fuel assemblies will remain around each SRM unless approved by the Reactor Engineering Supervisor or designated alternate.

Robert Hilton / 04/22/09
Date

* *Dan williams* / 04/22/09
Date

Prepared by: *Dan williams* / 04/22/09
Reactor Engineering Date

Verified by: *Jay Paqual* / 04/22/09
Reactor Engineering Date

* Verified by: *Kenneth Fairbough* / 04/22/09
Reactor Engineering Date

** Approved by: *Robert Hilton* / 04/22/09
Reactor Engineering Supervisor Date

* Additional verification IF required by the Reactor Engineering Supervisor for certain evolutions or marked N/A, initialed and dated by the RE Supervisor.

** The "Approved" space on the actual sheets is to be signed by the Reactor Engineering Supervisor or designated alternate.

Spent Fuel Pool Inventory Database Updated By: *Kenneth Fairbough* /04/22/09
Date

Verified By: *Robert Hilton* /04/22/09
Date

SOUTHERN NUCLEAR PLANT E. I. HATCH	Unit 2	Page 1 of 1	
FORM TITLE: FUEL MOVEMENT SHEETS	[X] Performs these moves in sequence [ ] These may be performed non-sequentially	Approved *Robert Hilton*	Date 04/22/09

Step #	Move From:					Comments:	Move To:				Double Verif.	
	Location	Init	OR	Init	Serial Number		Location	Init	OR	Init	Init	Date
1	23K11	JH	SW	JH	JLV675		37-36	JH	SE	JH	AB	04/22/09
2	23K10	JH	SW	JH	JLV682		39-38	JH	NW	JH	AB	04/22/09
3	37-38 / 39-36	JH	N/A	JH	DBL B/G		17F11 / 17G10	JH	N/A	JH	AB	04/22/09
4	23H12	JH	SW	JH	JLK804		37-38	JH	SW	JH	AB	04/22/09
5	23H11	JH	SW	JH	JLK817		39-36	JH	NE	JH	AB	04/22/09
6	23H10	JH	SW	JH	JLV678		13-36	JH	SE	JH	AB	04/22/09
7	23H09	JH	SW	JH	JLV670		15-38	JH	NW	JH	AB	04/22/09
8	13-38 / 15-36	JH	N/A	JH	DBL B/G		17F10 / 17G09	JH	N/A	JH	AB	04/22/09
9	23K09	JH	SW	JH	JLK805		13-38	JH	SW	JH	AB	04/22/09
10	23K08	JH	SW	JH	JLK812		15-36	JH	NE	JH	AB	04/22/09
11	23G11	JH	SW	JH	JLV698		37-16	JH	SE	JH	AB	04/22/09
12	23G10	JH	SW	JH	JLV674		39-18	JH	NW	JH	AB	04/22/09
13	37-18 / 39-16	JH	N/A	JH	DBL B/G		17F09 / 17G08	JH	N/A	JH	AB	04/22/09
14	23F10	JH	SW	JH	JLK807		37-18	JH	SW	JH	AB	04/22/09
15	23F09	JH	SW	JH	JLK820		39-16	JH	NE	JH	AB	04/22/09
16	17J13 / 17J12	JH	N/A	JH	DBL B/G		13-18 / 15-16	JH	N/A	JH	AB	04/22/09

FORM TITLE:
FUEL MOVEMENT SHEETS

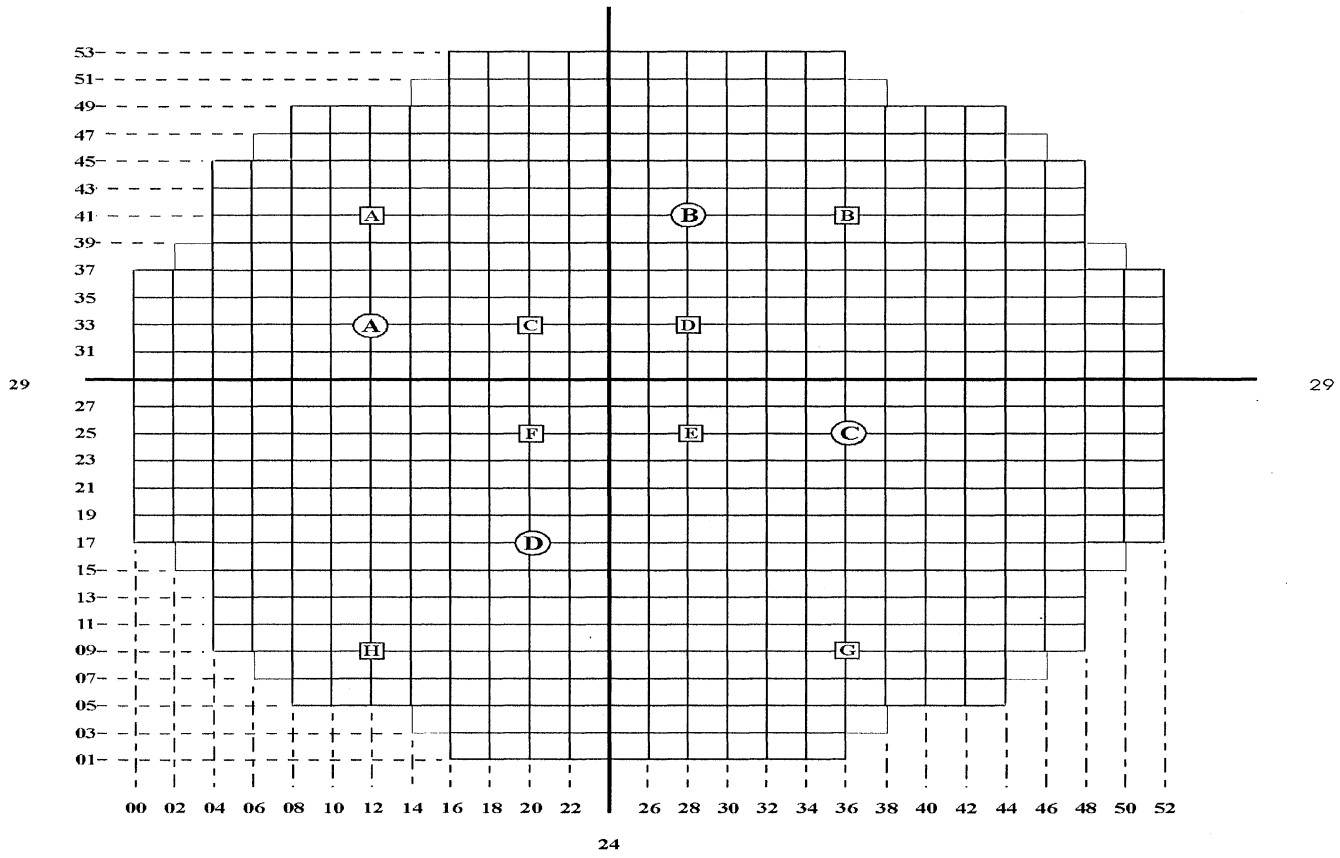
Movements Performed/Verified By:

Print	Init	Date	Print	Init	Date
John Hart	JH	04/22/09			
Alan Barnes	AB	04/22/09			

NORTH

HATCH UNIT 2

Northeast Quadrant | **Southeast Quadrant**



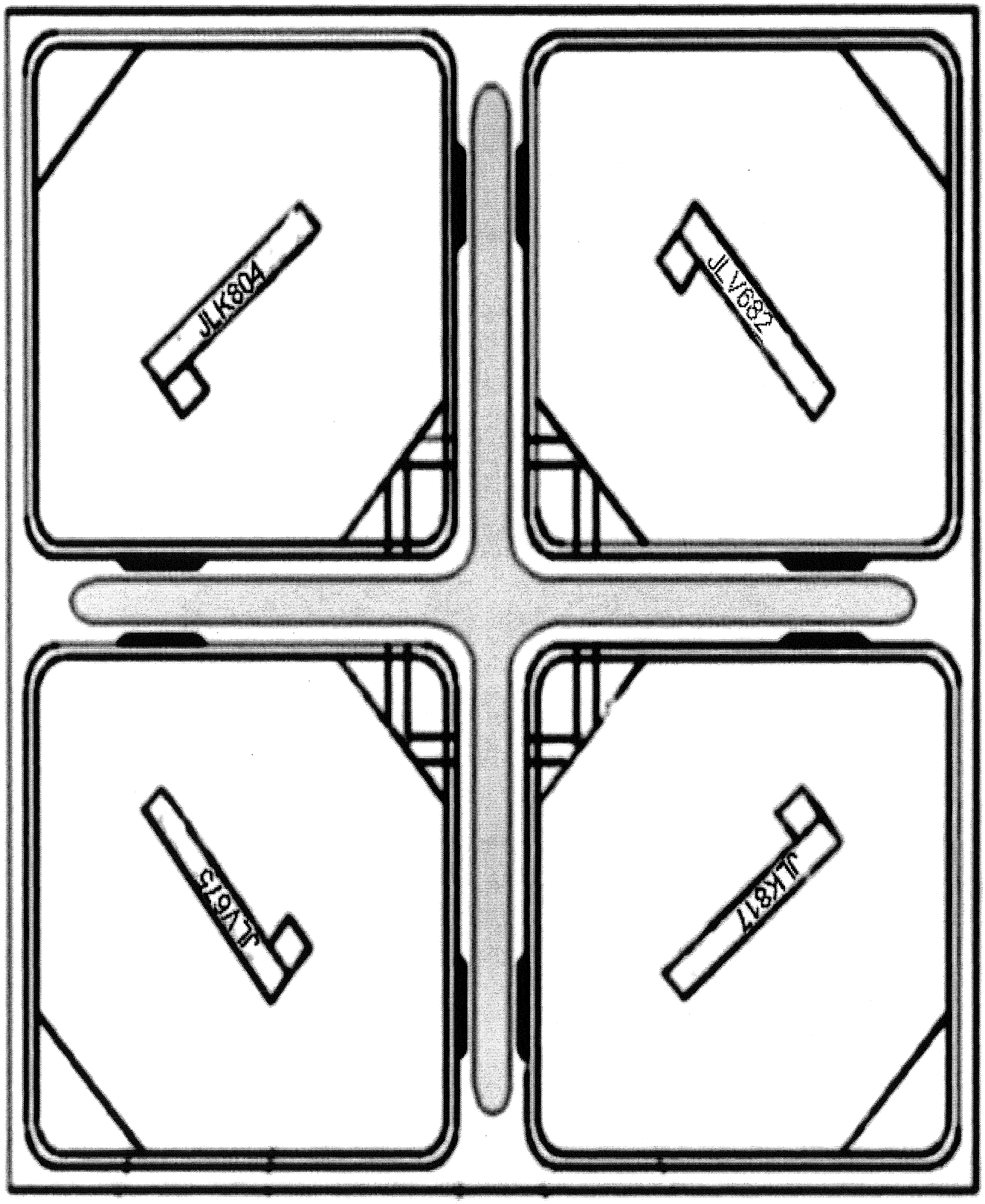
Northwest Quadrant | **Southwest Quadrant**

□ —IRM

○ —SRM

CENTER IS AT (24,29)

EAST



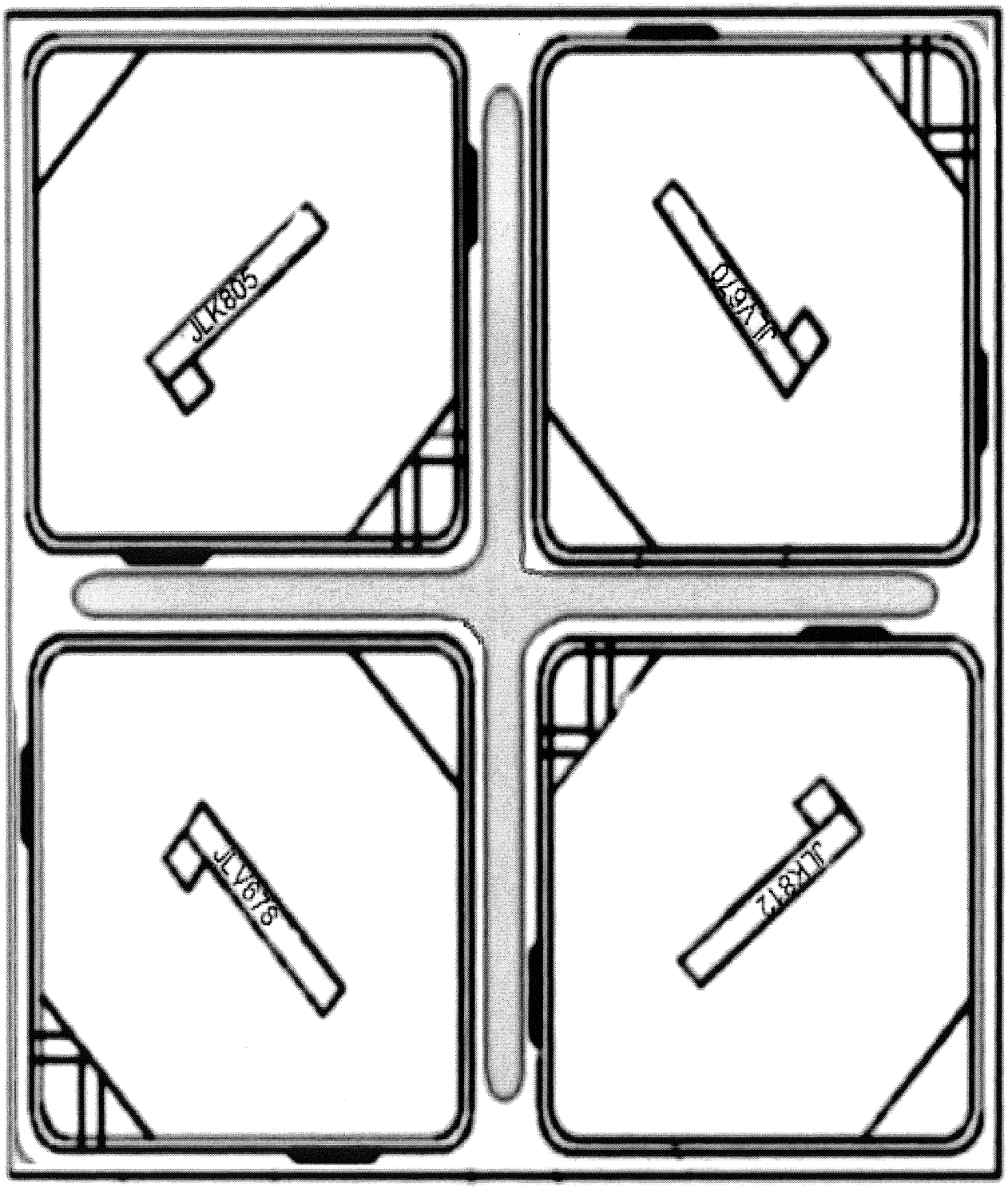
NORTH

SOUTH

WEST

CONTROL CELL 38-37

EAST



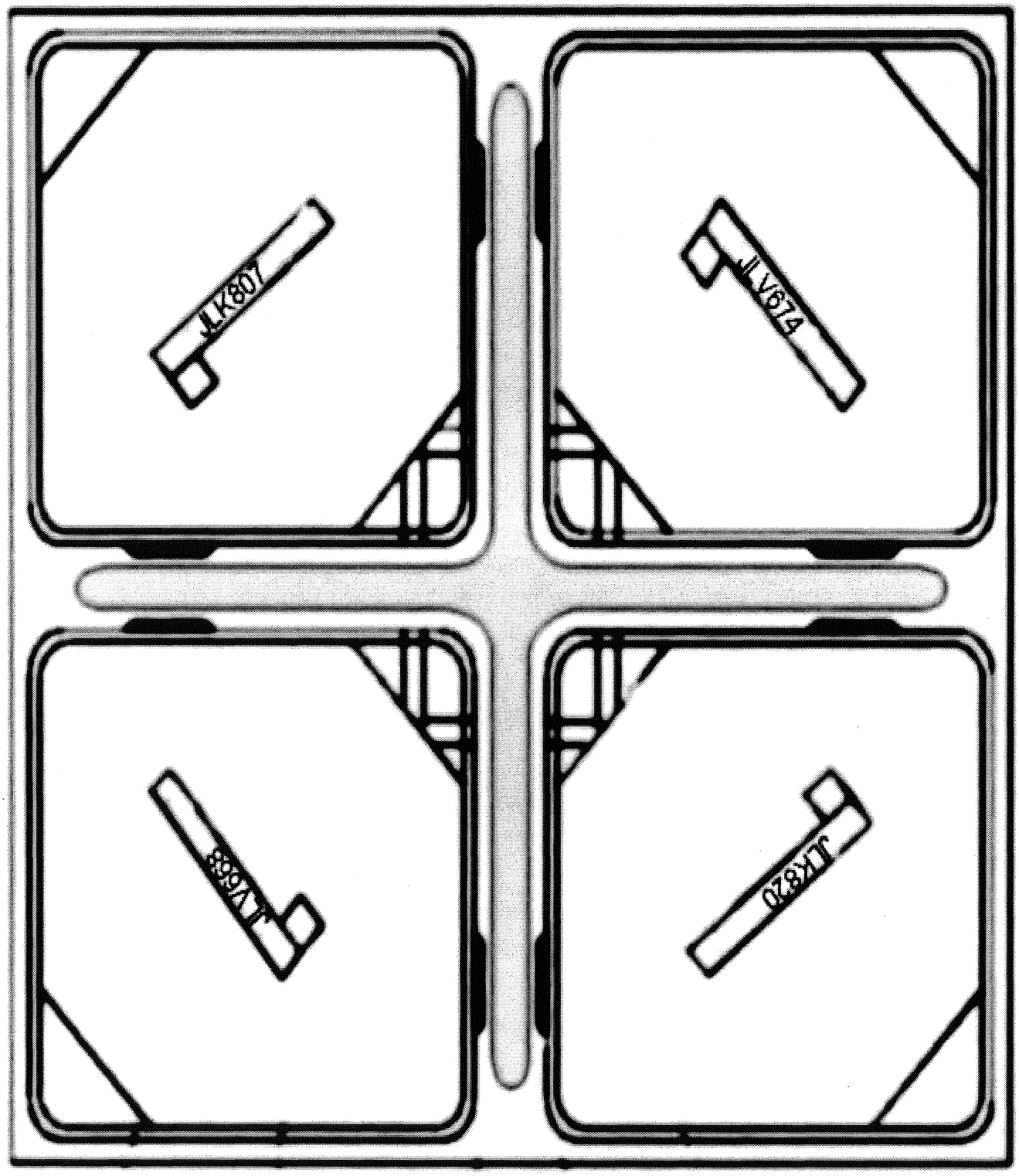
NORTH

SOUTH

WEST

CONTROL CELL 14-37

EAST



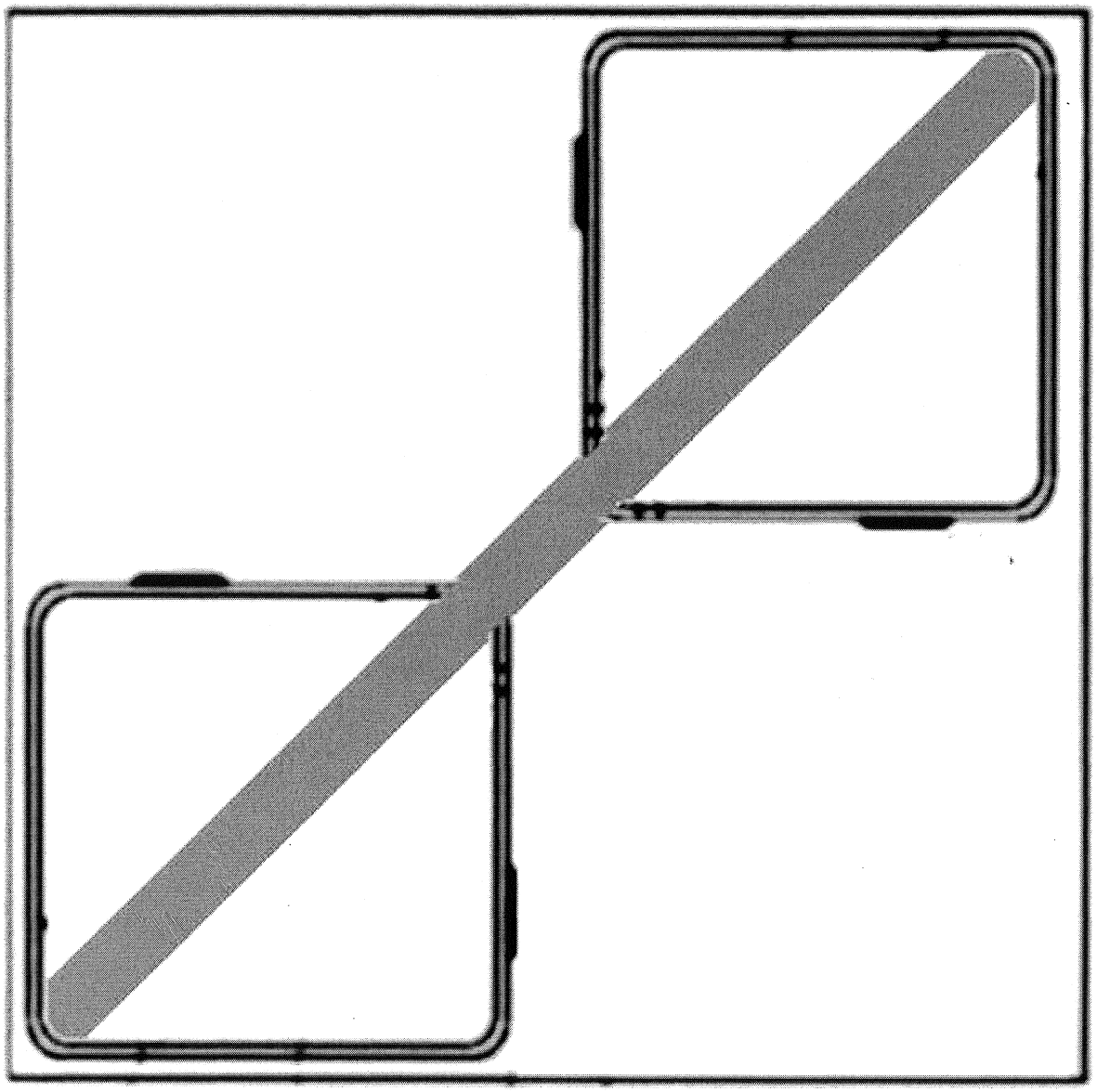
NORTH

SOUTH

WEST

CONTROL CELL 38-17

EAST



NORTH

SOUTH

WEST

CONTROL CELL 14-17

FINAL
04/06/09

Southern Nuclear
E. I. Hatch Nuclear Plant

Operations Training
JPM
Admin 2

TITLE		
ECCS STATUS CHECK		
AUTHOR	**MEDIA NUMBER**	**TIME**
F.N.FAGAN	LR-JP-007.15-00	30 Minutes
RECOMMENDED BY	**APPROVED BY**	**DATE**
N/R		

SOUTHERN COMPANY

Energy to Serve Your World℠

SOUTHERN NUCLEAR OPERATING COMPANY
PLANT E. I. HATCH

FORM TITLE: TRAINING MATERIAL REVISION SHEET

Program/Course Code: **OPERATIONS TRAINING** Media Number: LR-JP-007.15-00

Rev. No.	Date	Reason for Revision	Author's Initials	Supv's Initials
00		Initial development	FNF	

UNIT 1 ( ) UNIT 2 (X)

TASK TITLE:	PERFORM A VALVE POSITION VERIFICATION OF THE SYSTEM
JPM NUMBER:	LR-JP-007.15-00
TASK STANDARD:	The task shall be complete when the operator has closed the open valve and documented the as-found condition.
TASK NUMBER:	H-OPRO007.015
OBJECTIVE NUMBER:	H-OP007.015.A

PLANT HATCH JTA IMPORTANCE RATING:

RO 2.2

SRO 2.69

K/A CATALOG NUMBER: 2.1.29

K/A CATALOG JTA IMPORTANCE RATING:

RO 4.1

SRO 4.0

OPERATOR APPLICABILITY: Nuclear Plant Operator (NPO)

GENERAL REFERENCES:	**Unit 2**
	OPS-0050 Operator At The Controls Relief Checklist 34SV-SUV-018-2 ECCS Status Check

REQUIRED MATERIALS:	**Unit 2**
	OPS-0050 Operator At The Controls Relief Checklist 34SV-SUV-018-2 ECCS Status Check

APPROXIMATE COMPLETION TIME: 30 Minutes

SIMULATOR SETUP: Refer to simulator setup sheet on the following page

SIMULATOR SETUP

Simulator Initial Conditions:

1. **RESET** the Simulator to an **IC 113,** or other 100% power IC.
2. **INSERT** the following **OVERRIDE:**

OVERRIDE #	TITLE	FINAL VALUE	RAMP RATE	ACT. TIME
diE11-F048B	RHR B Ht Exch Bypass	CLOSE	N/A	0

3. Take the Simulator **OUT OF FREEZE** and **PERFORM** the following **MANIPULATIONS:**
    - Place RCIC Flow Controller setpoint to 200 gpm
5. **PLACE** the Simulator in **FREEZE** until the INITIATING CUE is given.
6. **ESTIMATED** Simulator **SETUP TIME**: **10 Minutes**

UNIT 2

READ AND GIVE A COPY TO THE OPERATOR

INITIAL CONDITIONS:

1. Unit 2 is at 100% power and 1 hour into the shift you have assumed the OATC duties.
2. As per "Operator At The Controls Relief Checklist", the "ECCS Status Check" had been started and is only partially complete.

INITIATING CUES:

The Shift Supervisor directs you to:

- Complete 34SV-SUV-018-2, "ECCS Status Checks" sections:
  - 7.2.3.3 for RHR B
  - 7.2.5 for RCIC

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)

For **INITIAL** Operator Programs:
For OJT/OJE; ALL PROCEDURE STEPS must be completed for Satisfactory Performance.
For License Examinations; ALL CRITICAL STEPS must be completed for Satisfactory Performance.

NOTE: Hand the operator a partially completed "Operator At The Controls Relief Checklist" (filled in up to the ECCS Status Check) and "ECCS Status Check" procedure. (everything filled in except leave blank Table 5, Table 7 and no initials on section: 7.2.3.3, 7.2.5.1, 7.2.5.2)

START TIME:_____

1.	The operator reviews the checklist.	Operator reviews the ECCS Status Check list.	SAT / UNSAT
2.	Verify CLOSED 2E11-F075B, RHRSW Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
3.	Verify OPEN 2E11-F065B, Torus Suction Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
4.	Verify OPEN 2E11-F065D, Torus Suction Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
5.	Verify OPEN 2E11-F060B, RHR Injection Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
6.	Verify OPEN 2E11-F017B, RHR Outbd Inj Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
7.	Verify CLOSED2E11-F015B, RHR Inbd Inj Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
8.	Verify OPEN 2E11-F007B, Min Flow Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
9.	Verify CLOSED 2E11-F021B, Cnmt Spray Inbd Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
10.	Verify CLOSED 2E11-F016B, Cnmt Spray Outbd Vlv	• Operator observes control switch green light on.. • Places checkmark in Table 5.	SAT / UNSAT

(Indicates critical step)**

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)
11.	Verify OPEN 2E11-F047B, Hx Inlet Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
12.	Verify OPEN 2E11-F003B, Hx Outlet Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
13.	Verify OPEN 2E11-F048B, Hx Bypass Vlv	• Operator observes control switch green light on	SAT / UNSAT
14.	Document as found conditions	• Operator documents on Table 5 that the valve was closed and circles the notation	
**15	Inform Shift Supervisor	• Operator informs Shift Supervisor that 2E11-F048B was closed.	SAT / UNSAT

PROMPT: WHEN informed that 2E11-F048B is closed, THEN repeat back the message. IF asked for guidance, THEN inform the candidate that for this component, he is to provide the guidance as the Shift Supervisor.

16.	Attempts to open 2E11-F048B.	Operator attempts to open 2E11-F048B.	SAT / UNSAT
17.	Notify Shift Supervisor of failure of 2E11-F048B to open	Operator notifies Shift Supervisor of failure of 2E11-F048B to open	SAT / UNSAT

NOTE: The candidate may not inform the Shift Supervisor if the previous prompt (that he is also the Shift Supervisor) is remembered.

PROMPT: WHEN informed that 2E11-F048B fails to open, THEN inform the operator that you will contact maintenance.

18.	Verify CLOSED 2E11-F027B Torus Spray Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
19.	Verify CLOSED 2E11-F024B Full Flow Test Line Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
20.	Verify CLOSED 2E11-F028B Torus Spray or Test Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
21.	Verify CLOSED 2E11-F011B RHR Hx To Torus Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
22.	Verify CLOSED 2E11-F073B RHRSW Crosstie Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT

(Indicates critical step)**

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)
23.	Verify CLOSED 2E11-F122B Testable Check F050B Bypass Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
24.	Verify OPEN 2E11-F004B Torus Suction Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
25.	Verify CLOSED 2E11-F006B Shutdown Cooling Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
26.	Verify OPEN 2E11-F004D Torus Suction Vlv	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
27.	Verify CLOSED 2E11-F006D Shutdown Cooling Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
28.	Verify CLOSED 2E11-F103B Hx Vent Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
29.	Verify CLOSED 2E11-F104B Hx Vent Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
30.	Verify CLOSED 2E11-F119B Serv Wtr Crosstie Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
31.	Verify CLOSED 2E11-F053B** Hx. Outlet Press Reducing Vlv	• Operator observes control switch is in the closed position. • Places checkmark in Table 5.	SAT / UNSAT
32.	Verify OPEN 2E11-F041B Drywell Press Switches Inst Line Isolation (2H11-P654)	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
33.	Verify OPEN 2E11-F041D Drywell Press Switches Inst Line Isolation (2H11-P654)	• Operator observes control switch red light on. • Places checkmark in Table 5.	SAT / UNSAT
34.	Verify CLOSED 2E11-F040 RHR to Radwaste Vlv (2H11-P602)	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
35.	Verify CLOSED 2E11-F049 RHR to Radwaste Vlv	• Operator observes control switch green light on. • Places checkmark in Table 5.	SAT / UNSAT
36.	Confirm that the RCIC Turbine Flow Controller is in AUTO (green light ILLUMINATED) AND set at 400 GPM with demand meter indicating > 100%.	Operator observes RCIC Flow Controller is set at 200 gpm.	SAT / UNSAT

(Indicates critical step)**

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)
37	Inform Shift Supervisor	Operator informs Shift Supervisor that RCIC Flow Controller is set at 200 gpm..	SAT / UNSAT

NOTE: The candidate may NOT inform the Shift Supervisor if the previous prompt (that he is also the Shift Supervisor) is remembered.

PROMPT: IF informed that RCIC Flow Controller demand meter is 200 gpm, THEN repeat back the message.
IF asked for guidance, THEN inform the candidate that for this component, he is he is to provide the guidance as the Shift Supervisor.

**38	Return RCIC Flow Controller to normal.	Operator adjusts RCIC Flow Controller to 400 gpm.	SAT / UNSAT
39.	Verify OPEN/STOP 2E51-F007 Steam Supply Isol Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
40.	Verify OPEN/STOP 2E51-F008 Steam Supply Line Isol Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
41.	Verify CLOSED 2E51-F045 Steam to Turbine Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
42.	Verify CLOSED 2E51-F019 Min Flow Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
43.	Verify CLOSED 2E51-F022 Test Line To CST	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
44.	Verify CLOSED 2E51-F013 Pump Discharge Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
45.	Verify OPEN 2E51-F012 Pump Discharge Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
46.	Verify OPEN 2E51-F003 Torus Suction Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
47.	Verify CLOSED 2E51-F031 Torus Inbd Suction Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
48.	Verify OPEN 2E51-F010 CST Suction Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT

(Indicates critical step)**

STEP #	PERFORMANCE STEP	STANDARD	SAT/UNSAT (COMMENTS)
49.	Verify CLOSED 2E51-F029 Torus Outbd Suction Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
50.	Verify CLOSED 2E51-F046 Turb Clg Water Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
51.	Verify CLOSED 2E51-F054 Steam Line Drain Vlv	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
52.	Verify CLOSED 2E51-F004 Barom Cndsr Disch To CRW	• Operator observes control switch green light on. • Places checkmark in Table 7.	SAT / UNSAT
53.	Verify OPEN 2E51-F005 Barom Cndsr Disch To CRW (2H11-P601)	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
54.	Verify OPEN 2E51-F025 Steam Line Drain Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
55.	Verify OPEN 2E51-F026 Steam Line Drain Vlv (2H11-P601)	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
56.	Verify OPEN 2E51-F104 Exh Vacuum Brkr Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
57.	Verify OPEN 2E51-F105 Exh Vacuum Brkr Vlv (2H11-P601)	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
58.	Verify OPEN 2E51-F523 Governor Vlv (open indication)	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT
59.	Verify OPEN 2E51-F524 Trip & Throttle Vlv	• Operator observes control switch red light on. • Places checkmark in Table 7.	SAT / UNSAT

END TIME:_____

NOTE: The terminating cue shall be given to the Applicant when:

- With no reasonable progress, the Applicant exceeds double the allotted time.
- Operator has completed the ECCS Status Check Surveillance.

TERMINATING CUE: That completes this JPM.

(Indicates critical step)**

SOUTHERN NUCLEAR
PLANT E. I. HATCH

PAGE 1 of 1

FORM TITLE:
OPERATOR AT THE CONTROLS RELIEF CHECKLIST

_____ _0600___ to __1800___ _04__/__22_/_09__

UNIT ____2_____ OATC ON DUTY SHIFT DATE (mm/dd/yy)

Part I To be reviewed prior to OATC assuming shift.

- Control Board Walkdown (front & back panel) ☒
- Oncoming OATC reviewed OATC Log from the previous 12-hour shift ☒
- Ensure radio available. ☒

Part II To be completed as early in shift as possible. Check each box as completed

- Review Reactivity Briefing Sheet (OPS-1625 for U2) OR (OPS-1689 for U1) ☒
- Review of Active Operating Orders. ☒
- Review procedure 34SV-SUV-018-1/2, ECCS Status Check ☐
- Review condensate and RWCU demin status. ☐
- OATC has informed other NPOs on duty of work to be done on this shift. ☐
- Review Compensatory Actions for this shift. ☐
- Review RAS Log. ☐
- Review Night Order Book. ☐
- Confirm logged on to GENCOM. ☐

Part III To be completed prior to leaving shift.

- Mid Shift control room panel walk down completed. ☐
- Review 34SV-SUV-019-1/2 for completeness. ☐
- Review 34GO-OPS-030-1/2 for completeness. ☐
- Review 34GO-OPS-031-1 for completeness. ☐
- Review/sign procedures completed on shift. ☐
- Operating Orders required this shift completed. ☐
- Compensatory Actions for this shift completed. ☐
- OATC GMA Key Inventory. ☐
- Once per shift validation of ELDS entry per 34GO-OPS-018-1/2. ☐

Part IV To be completed by on duty OATC just prior to end of shift. On coming OATC will place his initials in the box when reviewed in PART IV.

General Information (i.e., Demins to be B/W & PC, etc).

OFF Standard Conditions

Procedures In progress

Procedures	Step	Awaiting

_____ _____/_____/_____

OFF GOING OATC SIGNATURE DATE (mm/dd/yy)

_____ _____/_____/_____

REVIEWED BY (SS) DATE (mm/dd/yy)

1.0 OBJECTIVE

This procedure provides instructions for use when demonstrating Emergency Core Cooling System's operability as required by Unit 2 TS SR 3.5.1.2 and 3.5.2.4.

In addition, instructions are provided for use WHEN demonstrating Reactor Core Isolation Cooling System AND Suppression Pool Cooling and Spray Modes of the Residual Heat Removal System operability as required by Unit 2 TS SR 3.5.3.2, 3.6.2.3.1, 3.6.2.4.1, and partially covers 3.7.1.1.

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2.0 APPLICABILITY

This procedure is applicable to the valves in the flow paths of the following ECCS AND safe shutdown systems: High Pressure Coolant Injection System, Reactor Core Isolation Cooling System, LPCI AND Suppression Pool Cooling and Spray Modes of the Residual Heat Removal System AND the Core Spray System. It is performed WITHIN two hours of every shift change AND is required to be performed once every 31 days by Tech Specs. This procedure is also applicable to the ECCS and RCIC Room Coolers and valves as an administrative control over system alignment.

3.0 REFERENCES

3.1 90AC-OAM-001-0, Test and Surveillance Control

3.2 Unit 2, TS SR 3.5.1.2, 3.5.2.4, 3.5.3.2, 3.6.2.3.1, 3.6.2.4.1, and 3.7.1.1

3.3 USNRC Inspection Report 50-366/79-21

3.4 H-26014 and H-26015, RHR System P&ID, Sheets 1 and 2

3.5 H-26018, Core Spray System P&ID

3.6 H-26020 and H-26021, HPCI System P&ID, Sheets 1 and 2

3.7 H-26023 and H-26024, RCIC System P&ID, Sheets 1 and 2

4.0 REQUIREMENTS

4.1 PERSONNEL REQUIREMENTS

The number and qualification level of Operations personnel performing this procedure will be determined by Shift Supervisor.

4.2 MATERIAL AND EQUIPMENT

N/A - Not applicable to this procedure

4.3 SPECIAL REQUIREMENTS

4.3.1 IF valves OR switches are NOT in position specified, i.e., NOT in Standby Lineup, the Shift Supervisor will determine from other plant conditions IF the system/loop is operable.

4.3.2 For any valves found out of the Normal Position, perform the following:

4.3.2.1 Record AND circle the valve position in the appropriate table AND inform the Shift Supervisor.

4.3.2.2 Provide an explanation of the position as follows:

4.3.2.2.1 IF the misposition causes the ECCS OR Safe Shutdown system to be inoperable, record explanation in Unsatisfactory Conditions.

4.3.2.2.2 IF the position does NOT cause the system to be inoperable, record the explanation under Comments/Corrective Actions section.

4.3.2.3 The Shift Supervisor will initiate corrective action as necessary to return the valve OR switch to its correct position.

5.0 PRECAUTIONS/LIMITATIONS

5.1 PRECAUTIONS

Observe safety rules outlined in the Southern Nuclear Safety and Health Manual.

5.2 LIMITATIONS

These checks may be performed in any order necessary.

6.0 PREREQUISITES

N/A - Not applicable to this procedure

7.0 PROCEDURE

7.1 PRETEST

7.1.1 Obtain Unit 2 Shift Supervisor's permission to perform this test. JK

7.1.2 Record the Plant Condition (1, 2, 3, 4, 5 or *): 1 JK

7.2 ECCS STATUS CHECK

CONTINUOUS

7.2.1 IF Core Spray Loop A is required to be operable, confirm that Core Spray Loop A valves in the flow path are in the correct position by completing Table 1. JK

Table 1

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
Core Spray Loop A Valves				
2E21-F001A	OPEN	Torus Suction Vlv	√	
2E21-F019A	OPEN	Torus Suction Vlv	√	
2E21-F004A	OPEN	Outbd Discharge Vlv	√	
2E21-F005A	CLOSED	Inbd Discharge Vlv	√	
2E21-F015A	CLOSED	Test Vlv	√	
2E21-F031A	OPEN	Min Flow Vlv	√	
2E21-F007A	OPEN	Manual Injection Vlv	√	
2E21-F037A	CLOSED	(Testable Check) Bypass Vlv	√	

7.2.2 IF Core Spray Loop B is required to be operable, confirm that Core Spray Loop B valves in the flow path are in the correct position by completing Table 2.

JK

Table 2

Core Spray Loop B Valves				
2E21-F001B	OPEN	Torus Suction Vlv	√	
2E21-F019B	OPEN	Torus Suction Vlv	√	
2E21-F004B	OPEN	Outbd Discharge Vlv	√	
2E21-F005B	CLOSED	Inbd Discharge Vlv	√	
2E21-F015B	CLOSED	Test Vlv	√	
2E21-F031B	OPEN	Min Flow Vlv	√	
2E21-F007B	OPEN	Manual Injection Vlv	√	
2E21-F037B	CLOSED	(Testable Check) Bypass Vlv	√	
2G51-F017	CLOSED	Torus Water Makeup Outbd Isol (2H11-P700)	√	
2G51-F013	CLOSED	Torus Water Makeup Inbd Isol (2H11-P700)	√	

NOTE	Valves 2E11-F008 and F009 positions are confirmed whenever any loop of RHR is required to be operable.

7.2.3 Confirm that the RHR System valves in the LPCI AND Suppression Pool Cooling modes are in the correct position as follows:

7.2.3.1 IF the LPCI OR Suppression Pool Cooling mode OR Suppression Pool Spray Mode of RHR Loop A is required to be operable, confirm that RHR Loop A valves in the LPCI AND/OR Suppression Pool Cooling AND/OR Suppression Pool Spray Flow Path are in the correct position by completing Tables 3 and 4. JK

7.2.3.2 IF RHR Loop A is in a mode of operation other than Standby for LPCI and Suppression Pool Cooling AND/OR Suppression Pool Spray Modes of operation, confirm that Loop A is operable AND record that mode of operation below:

Mode of Loop A operation: N/A N/A

Table 3

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E11-F009	CLOSED	SDC Suction Vlv (2H11-P602)	√	
2E11-F008	CLOSED	SDC Suction Vlv	√	

Table 4

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
RHR Loop A Valves				
2E11-F075A	CLOSED	RHRSW Vlv	√	
2E11-F065A	OPEN	Torus Suction Vlv	√	
2E11-F065C	OPEN	Torus Suction Vlv	√	
2E11-F060A	OPEN	RHR Injection Vlv	√	

Table 4 (continued)

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E11-F017A	OPEN	RHR Outbd Inj Vlv	√	
2E11-F015A	CLOSED	RHR Inbd Inj Vlv	√	
2E11-F007A	OPEN	Min Flow Vlv	√	
2E11-F021A	CLOSED	Cnmt Spray Inbd Vlv	√	
2E11-F016A	CLOSED	Cnmt Spray Outbd Vlv	√	
2E11-F047A	OPEN	Hx Inlet Vlv	√	
2E11-F003A	OPEN	Hx Outlet Vlv	√	
2E11-F048A	OPEN	Hx Bypass Vlv	√	
2E11-F027A	CLOSED	Torus Spray Vlv	√	
2E11-F024A	CLOSED	Full Flow Test Line Vlv	√	
2E11-F028A	CLOSED	Torus Spray or Test Vlv	√	
2E11-F011A	CLOSED	RHR Hx To Torus Vlv	√	
2E11-F073A	CLOSED	RHRSW Crosstie Vlv	√	
2E11-F122A	CLOSED	Testable Check F050A Bypass Vlv	√	
2E11-F004A	OPEN	Torus Suction Vlv	√	
2E11-F004C	OPEN	Torus Suction Vlv	√	
2E11-F006A	CLOSED	Shutdown Cooling Vlv	√	
2E11-F006C	CLOSED	Shutdown Cooling Vlv	√	
2E11-F103A	CLOSED	Hx Vent Vlv	√	
2E11-F104A	CLOSED	Hx Vent Vlv	√	
2E11-F119A	CLOSED	Serv Water Crosstie Vlv	√	

Table 4 (continued)

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E11-F053A**	CLOSED	Hx. Outlet Press Reducing Vlv	√	
2E11-F041A	OPEN	D/W Press Sw Inst Line Isol (2H11-P657)	√	
2E11-F041C	OPEN	D/W Press Sw Inst Line Isol (2H11-P657)	√	

** Confirm that power is off to this valve by confirming the F053A solenoid control switch is in closed (valve fails closed on loss of power).

7.2.3.3 IF the LPCI OR Suppression Pool Cooling mode OR Suppression Pool Spray Mode of RHR Loop B is required to be operable, confirm that RHR Loop B valves in the LPCI AND/OR Suppression Pool Cooling AND/OR Suppression Pool Spray Flow Path are in the correct position by completing Tables 3 and 5. _____

7.2.3.4 IF RHR Loop B is in a mode of operation other than Standby for LPCI and Suppression Pool Cooling AND/OR Suppression Pool Spray Modes of operation, confirm that Loop B is operable AND record that mode of operation below:

Mode of Loop B operation: NA NA .

Table 5

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
RHR Loop B Valves				
2E11-F075B	CLOSED	RHRSW Vlv		
2E11-F065B	OPEN	Torus Suction Vlv		
2E11-F065D	OPEN	Torus Suction Vlv		
2E11-F060B	OPEN	RHR Injection Vlv		
2E11-F017B	OPEN	RHR Outbd Inj Vlv		
2E11-F015B	CLOSED	RHR Inbd Inj Vlv		
2E11-F007B	OPEN	Min Flow Vlv		
2E11-F021B	CLOSED	Cnmt Spray Inbd Vlv		
2E11-F016B	CLOSED	Cnmt Spray Outbd Vlv		
2E11-F047B	OPEN	Hx Inlet Vlv		
2E11-F003B	OPEN	Hx Outlet Vlv		
2E11-F048B	OPEN	Hx Bypass Vlv		
2E11-F027B	CLOSED	Torus Spray Vlv		

Table 5 (continued)

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E11-F024B	CLOSED	Full Flow Test Line Vlv		
2E11-F028B	CLOSED	Torus Spray or Test Vlv		
2E11-F011B	CLOSED	RHR Hx To Torus Vlv		
2E11-F073B	CLOSED	RHRSW Crosstie Vlv		
2E11-F122B	CLOSED	Testable Check F050B Bypass Vlv		
2E11-F004B	OPEN	Torus Suction Vlv		
2E11-F006B	CLOSED	Shutdown Cooling Vlv		
2E11-F004D	OPEN	Torus Suction Vlv		
2E11-F006D	CLOSED	Shutdown Cooling Vlv		
2E11-F103B	CLOSED	Hx Vent Vlv		
2E11-F104B	CLOSED	Hx Vent Vlv		
2E11-F119B	CLOSED	Serv Wtr Crosstie Vlv		
2E11-F053B**	CLOSED	Hx. Outlet Press Reducing Vlv		
2E11-F041B	OPEN	Drywell Press Switches Inst Line Isolation (2H11-P654)		
2E11-F041D	OPEN	Drywell Press Switches Inst Line Isolation (2H11-P654)		
2E11-F040	CLOSED	RHR to Radwaste Vlv (2H11-P602)		
2E11-F049	CLOSED	RHR to Radwaste Vlv		

** Confirm that power is off to this valve by confirming the F053B solenoid control switch is in closed (valve fails closed on loss of power).

7.2.3.5 Confirm that the following valves are de-energized in the CLOSED position.

7.2.3.5.1 2E11-F022, Rx Head Spray Vlv JK

7.2.3.5.2 2E11-F023, Rx Head Spray Vlv JK

7.2.4 IF HPCI System is required to be operable, perform the following:

7.2.4.1 Confirm that the HPCI Flow Controller is in AUTO (green light ILLUMINATED) AND set at 4250 GPM with demand meter indicating > 100%. JK

7.2.4.2 Confirm that the valves are in the correct position by completing Table 6. JK

Table 6

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E41-F002	OPEN/STOP	Inbd Steam Isol Vlv	√	
2E41-F003	OPEN/STOP	Outbd Steam Isol Vlv	√	
2E41-F001	CLOSED	Turb Steam Supply Vlv	√	
2E41-F011	CLOSED	Test To CST Vlv	√	
2E41-F012	CLOSED	Min Flow Vlv	√	
2E41-F051	OPEN	Torus Suction Vlv	√	
2E41-F042	CLOSED	Torus Inbd Suct Vlv	√	
2E41-F008	CLOSED	Test To CST Vlv	√	
2E41-F059	CLOSED	Lube Oil Clg Wtr Vlv	√	
2E41-F054	CLOSED	Drain Pot Trap Byp Vlv	√	
2E41-F041	CLOSED	Torus Outbd Suct Vlv	√	
2E41-F007	OPEN	Pump Discharge Vlv	√	
2E41-F053	AUTO	Drain Pot Drain Vlv	√	

Table 6 (continued)

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E41-F004	OPEN	CST Suction Vlv	√	
2E41-F006	CLOSED	Pump Discharge Vlv	√	
2E41-F104	OPEN	Exh Vacuum Brkr Vlv (2H11-602)	√	
2E41-F111	OPEN	Exh Vacuum Brkr Vlv	√	
2E41-F025	OPEN	Barom Cndsr Disch To CRW (2H11-P602)	√	
2E41-F026**	CLOSED	Barom Cndsr Disch To CRW	√	
2E41-F028	OPEN	Steam Line Drain Vlv (2H11-P602)	√	
2E41-F029	OPEN	Steam Line Drain Vlv	√	
2E41-F3052	CLOSED	HPCI Control Vlv	√	
2E41-F3053	CLOSED	HPCI Stop Vlv	√	

** Valve cycles automatically on barometric condenser level.

7.2.5 IF RCIC System is required to be operable, perform the following:

7.2.5.1 Confirm that the RCIC Turbine Flow Controller is in AUTO (green light ILLUMINATED) AND set at 400 GPM with demand meter indicating > 100%. _____

7.2.5.2 Confirm that the valves are in the correct position by completing Table 7. _____

Table 7

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E51-F007	OPEN/STOP	Steam Supply Isol Vlv		
2E51-F008	OPEN/STOP	Steam Supply Line Isol Vlv		
2E51-F045	CLOSED	Steam to Turbine Vlv		
2E51-F019	CLOSED	Min Flow Vlv		
2E51-F022	CLOSED	Test Line To CST		
2E51-F013	CLOSED	Pump Discharge Vlv		
2E51-F012	OPEN	Pump Discharge Vlv		
2E51-F003	OPEN	Torus Suction Vlv		
2E51-F031	CLOSED	Torus Inbd Suction Vlv		
2E51-F010	OPEN	CST Suction Vlv		
2E51-F029	CLOSED	Torus Outbd Suction Vlv		
2E51-F046	CLOSED	Turb Clg Water Vlv		
2E51-F054	CLOSED	Steam Line Drain Vlv		
2E51-F004**	CLOSED	Barom Cndsr Disch To CRW		
2E51-F005	OPEN	Barom Cndsr Disch To CRW (2H11-P601)		

** Valve cycles automatically on barometric condenser level.

Table 7 (continued)

VALVE NUMBER	OPERABLE (NORMAL) POSITION	VALVE DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION (O/C)
2E51-F025	OPEN	Steam Line Drain Vlv		
2E51-F026	OPEN	Steam Line Drain Vlv (2H11-P601)		
2E51-F104	OPEN	Exh Vacuum Brkr Vlv		
2E51-F105	OPEN	Exh Vacuum Brkr Vlv (2H11-P601)		
2E51-F523	OPEN	Governor Vlv (open indication)		
2E51-F524	OPEN	Trip & Throttle Vlv		

7.2.6 Confirm that the Control Room Ventilation System is correctly aligned for the existing plant condition per 34SO-Z41-001-1, Control Room Ventilation System.

JK

7.2.7 Confirm that the ECCS AND RCIC ROOM COOLER System is correctly aligned for the existing plant condition per Table 8.

JK

Table 8

Panel 2H11-P657				
COOLER NUMBER	OPERABLE POSITION CIRCLE	COOLER DESCRIPTION	CONFIRMED (√)	OFF-NORMAL POSITION
2T41-B001A	AUTO/RUN (Note 1)	CRD PUMP ROOM COOLER	√	
2T41-B002A	AUTO (Note 2)	CS/RHR S-E DIAGONAL PUMP ROOM COOLER	√	
2T41-B003A	AUTO (Note 2)	CS/RHR N-E DIAGONAL PUMP ROOM COOLER	√	
2T41-B004A	AUTO/RUN (Note 3)	RCIC PUMP RM COOLER	√	
2T41-B005A	AUTO/RUN (Note 4)	HPCI PUMP RM COOLER	√	
Panel 2H11-P654				
2T41-B001B	AUTO/RUN (Note 1)	CRD PUMP ROOM COOLER	√	
2T41-B002B	AUTO (Note 2)	CS/RHR S-E DIAGONAL PUMP ROOM COOLER	√	
2T41-B003B	AUTO (Note 2)	CS/RHR N-E DIAGONAL PUMP ROOM COOLER	√	
2T41-B004B	AUTO/RUN (Note 3)	RCIC PUMP RM COOLER	√	
2T41-B005B	AUTO/RUN (Note 4)	HPCI PUMP RM COOLER	√	

Note 1. One CRD cooler in RUN, one in AUTO
Note 2. Both CS/RHR coolers in each diagonal in AUTO
Note 3. One RCIC cooler in RUN or AUTO, one in AUTO
Note 4. One HPCI cooler in RUN, one in AUTO

7.3 TEST RESULTS

7.3.1 Reason for test: ( ) Normal surveillance (X) Other _____

7.3.2 Acceptance Criteria

7.3.2.1 WHEN a Loop of RHR is required to be operable, each Residual Heat Removal System Valve in the LPCI or Suppression Pool Cooling or Suppression Pool Spray flow path, that is NOT locked, sealed OR otherwise secured in position, is in the correct position listed in Tables 3 and 4(5) OR the Shift Supervisor had determined from other plant requirements, e.g., Shutdown Cooling required, that the Loop is operable.

7.3.2.2 WHEN a Core Spray Loop is required to be operable, each Core Spray System Valve in the flow path, that is NOT locked, sealed OR otherwise secured in position, is in the correct position listed in Table 1(2).

7.3.2.3 WHEN HPCI is required to be operable, each HPCI System Valve in the flow path, that is NOT locked, sealed OR otherwise secured in position, is in the correct position listed in Table 6, unless the Shift Supervisor had determined from other plant requirements, HPCI aligned to Torus, that HPCI is operable.

7.3.2.4 WHEN RCIC is required to be operable, each RCIC System Valve in the flow path that, is NOT locked, sealed OR otherwise secured in position, is in the correct position listed in Table 7, unless the Shift Supervisor has determined from other plant requirements e.g., Surveillance Procedure in progress, that RCIC is operable.

7.3.3 Test Result:
( ) Satisfactory
( ) Unsatisfactory

7.3.4 Unsatisfactory Conditions: _____

_____

_____

_____

_____

_____

_____

7.3.5 Comments/Corrective Actions: _____

_____

_____

_____

_____

_____

7.3.6 Test completed and/or verified by:

	/		/	
Print Name	/	Initial	/	Date
	/		/	
Print Name	/	Initial	/	Date
	/		/	
Print Name	/	Initial	/	Date
	/		/	
Print Name	/	Initial	/	Date
	/		/	
Print Name	/	Initial	/	Date

7.4 **TEST REVIEW**

7.4.1 The Shift Supervisor will review the procedure data for completeness and indicate concurrence with the test satisfactory/unsatisfactory determination by signing below.

Results reviewed by: SS_____ Date _____

7.4.2 The Shift Supervisor will forward this procedure, with all sign-offs complete, to Document Control for retention in accordance with 20AC-ADM-002-0, Quality Assurance Records Administration.

FINAL
04/06/09

Southern Nuclear
E. I. Hatch Nuclear Plant

Operations Training

Admin 3

TITLE		
	MCREC RAS	
AUTHOR	**MEDIA NUMBER**	**TIME**
D. H. GIDDENS	LR-JP-10027-00	30 Minutes
RECOMMENDED BY	**APPROVED BY**	**DATE**
N/R		

SOUTHERN COMPANY
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SOUTHERN NUCLEAR OPERATING COMPANY
PLANT E. I. HATCH

FORM TITLE: TRAINING MATERIAL REVISION SHEET

Program/Course Code: **OPERATIONS TRAINING** Media Number: **LR-JP-10027**

Rev. No.	Date	Reason for Revision	Author's Initials	Supv's Initials

UNIT 1 (X) UNIT 2 ()

TASK TITLE:	MCREC RAS
JPM NUMBER:	LR-JP-10027-00
TASK STANDARD:	The task shall be completed the candidate has completed sections 1 and 2 of Required Action Sheet, form 1349.
TASK NUMBER:	OPSR300.027
OBJECTIVE NUMBER:	H-OP300.027A

PLANT HATCH JTA IMPORTANCE RATING:

RO N/A

SRO N/A

K/A CATALOG NUMBER: G 2.2.23

K/A CATALOG JTA IMPORTANCE RATING:

RO NA

SRO 4.6

OPERATOR APPLICABILITY: Senior Reactor Operator

GENERAL REFERENCES:	**Unit 1**
	31GO-OPS-006, Conditions, Required Actions and Completion Times OPS-1349 TECH SPECS UNIT 1

REQUIRED MATERIALS:	**Unit 1**
	UNIT 1 TECH SPECS A blank form OPS-1349 31GO-OPS-006-0 Conditions, Required Actions and Completion Times Inop Status Indicator Picture

APPROXIMATE COMPLETION TIME: 30 Minutes

SIMULATOR SETUP: N/A

UNIT 1

READ AND GIVE A COPY TO THE OPERATOR

INITIAL CONDITIONS:

1. Unit 1 is in Mode 5 with fuel movement within the core in progress. Fuel movements are expected to last for 15 days.
2. Unit 2 is at 100% power.
3. Today, during routine operator rounds, at 0600 on ~~4/22/09,~~ 4/20/09 an SO found the 1Z41-C012A, Main Control Room filter train fan breaker tripped and can not be reset. BLC
4. The last surveillance for the fan was successfully completed on 03/25/09.
5. The remaining filter train fan and the three air handling units and associated fans are operable.

INITIATING CUES:

Complete sections 1 and 2 of a Required Action Sheet, form OPS-1349, for Unit 1 for 1Z41-C012A, Main Control Room filter train fan.

For **INITIAL** Operator Programs:
For OJT/OJE; ALL PROCEDURE STEPS must be completed for Satisfactory Performance.
For License Examinations; ALL CRITICAL STEPS must be completed for Satisfactory Performance.

START TIME:_____

1.	Operator obtains the procedure needed to perform the task.	Operator has obtained procedure Unit 1 tech spec	SAT / UNSAT

NOTE: Provide the candidate with a blank RAS form, OPS 1349. Have a spare RAS form available.

PROMPT: WHEN the operator indicates he would look in the Required Action Tracking Log for a RAS number, INFORM him that the number is 1-09-027.

2.	Assign a RAS number from the Required Action Tracking Log.	Writes in 1-09-027 as the Required Action Sheet Number.	SAT / UNSAT
3.	Locates the appropriate tech spec section.	Addresses Unit 1 tech spec section 3.7.4 Action A.	SAT / UNSAT
****4.**	Completes the RAS form section 1 "MPL" number	Writes 1Z41-C012A, In the MPL block.	SAT / UNSAT
5.	Completes RAS form section 1 "Description" block.	Writes MCREC fan or a similar name In the Description block.	SAT / UNSAT
****6.**	Completes RAS form section 1 "Inoperable" time/date block	Writes 0600 for the time and 4/22/09 for the date in the Inoperable time/date block.	SAT / UNSAT
7.	Reviews the RAS section 1 "Return to Oper" time/date block.	Writes nothing in the Return To OPER Time/Date block.	SAT / UNSAT
8.	Reviews the RAS section 1 "Init" block	Writes nothing in the INIT block.	SAT / UNSAT
****9.**	Completes the RAS section 2 "Initiation" Time/Date block.	Writes time of 0600 and date of 4/22/09 in the Initiation Time/Date block of section 2.	SAT / UNSAT
****10.**	Completes the RAS section 2 "Req Restoration" Time/Date block	Writes a time of 0600 and a date of 4/29/09 in the REQ RESTORATION Time/Date block of section 2.	SAT / UNSAT
11.	Completes the RAS section 2 "Modified Completion" Time/Date	Writes N/A or similar wording in the Modified Completion Time/Date block of section 2.	SAT / UNSAT

12.	Completes the RAS section 2 "Extended Completion Time/Date/Init" block.	Writes N/A or similar wording in the Extended Completion Time/Date/Init block in section 2.	SAT / UNSAT
13.	Completes the RAS section 2 "SFDP Entered" block.	Marks the N/A box of the SFDP Entered block	SAT / UNSAT

NOTE: If candidate asks to see the Status Indication, hand the candidate a picture of the status indicators.

14.	Completes the RAS section 2 "INOP Status Indication" block.	Marks the yes box of the INOP Status Indication Block after directing personnel to switch the light on.	SAT / UNSAT
PROMPT: WHEN asked to turn on the status indication light, INFORM the operator the light is now on.			
****15.**	Completes the RAS section 2 "Applicability" block.	Writes Modes 1, 2, and 3, During movement of irradiated fuel assemblies in the secondary containment, During Core Alterations, During operations with a potential for draining the reactor vessel, (OPDRVs). In the Applicability block of section 2.	SAT / UNSAT
****16.**	Completes the RAS section 2 "REQ. Action If Comp Time Exceeded" block.	Writes, D.1 Place OPERABLE MCREC subsystem in pressurization mode Immediately OR D.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment Immediately AND D.2.2 Suspend CORE ALTERATIONS Immediately AND D.2.3 Initiate actions to suspend OPDRVs. Immediately, in the Required Action if Comp time is exceeded block.	SAT / UNSAT
17.	Completes the RAS section 2 "Reference Document" block.	Writes tech spec 3.7.4 in the reference block of section 2.	SAT / UNSAT
18.	Completes the RAS section 2 "Revision/Amendment" block.	Writes 225 in the Revision/Amendment block.	SAT / UNSAT
19.	Completes the RAS section 4, "Reference Document" block.	Writes "3.7.4.A.1" (or similar) in the "Reference Document" block	SAT / UNSAT

20.	Completes the RAS section 4, "Required Action" block.	Writes "Restore MCREC subsystem to Operable status" in the Required Action block.	SAT / UNSAT
21.	Completes the RAS section 4, "Req Comp Time of Freq" block.	Writes "7 days" in the Req Comp Time of Freq block.	SAT / UNSAT

END
TIME:_____

NOTE: The terminating cue shall be given to the Applicant when:

- With no reasonable progress, the Applicant exceeds double the allotted time.
- Applicant states the task is complete.

TERMINATING CUE: That completes this JPM.

FORM TITLE:

REQUIRED ACTION SHEET

REQUIRED ACTION SHEET NUMBER __ - ____ - _____

SECTION 1 **INITIATING CONDITIONS**

MPL	DESCRIPTION	INOPERABLE TIME/DATE		RETURN TO OPER TIME/DATE		INIT
1Z41-C012A	MCREC fan	0600	4/22/09			

SECTION 2 **REQUIRED ACTION SHEET ACTIVATION**

INITIATION TIME/DATE 0600 4/22/09	REQ. RESTORATION TIME/DATE 0600 4/29/09	MODIFIED COMPLETION TIME/DATE N/A
EXTENDED COMPLETION TIME/DATE/INIT N/A	SFDP ENTERED ☐YES ☒N/A	INOP STATUS INDIC LIT ☒YES ☐ N/A
APPLICABILITY	Modes 1, 2, and 3, During movement of irradiated fuel assemblies in the secondary containment, During Core Alterations, During operations with a potential for draining the reactor vessel, (OPDRVs).	
REQ. ACTION IF COMP TIME EXCEEDED	D.1 Place OPERABLE MCREC subsystem in pressurization mode Immediately OR D.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment Immediately AND D.2.2 Suspend CORE ALTERATIONS Immediately AND D.2.3 Initiate actions to suspend OPDRVs. Immediately.	
REFERENCE DOCUMENT	TS 3.7.4	REVISION/AMENDMENT 225
SS SIGN / TSA ACTIVE		SOS SIGN

FORM TITLE:

REQUIRED ACTION SHEET

SECTION 5 **REQUIRED ACTION SHEET TERMINATION**

INDICATE COMPLETE(D) ACTIONS:

☐ PROCEDURES: _____

☐ OTHER:

MWO FT COMPLETE	INOP STATUS INDIC OFF	REQUIRED ACTION TERMINATED TIME/DATE
☐YES ☐N/A	☐YES ☐N/A	
SS SIGN / TSA TERMINATED		SOS SIGN

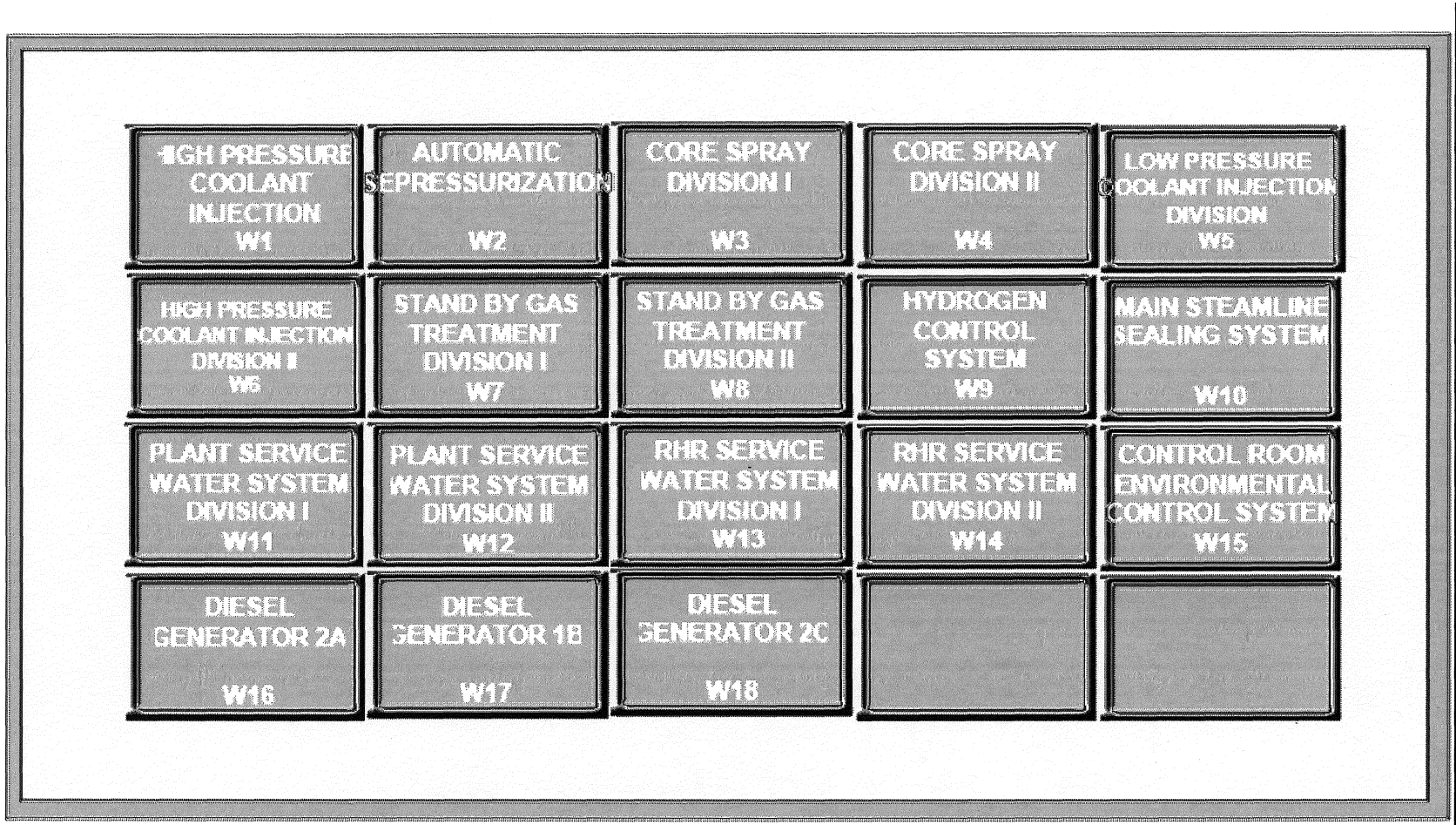
SECTION 3 **≤ 1 HOUR ACTIONS**

REFERENCE DOCUMENT	REQUIRED ACTION	REQ. COMP TIME	PERFORMED TIME/DATE	INIT
			/	
			/	
			/	
			/	
			/	
			/	

SECTION 4 **> 1 HOUR ACTIONS**

REFERENCE DOCUMENT	REQUIRED ACTION	REQ. COMP TIME OR FREQ.	SEQ. NO.	COMPLETE TIME/DATE	COMP. INITIAL
3.7.4.A.1	Restore MCREC subsystem to Operable Status.	7 days		/	
				/	
				/	
				/	
				/	

				/	
				/	
				/	


HIGH PRESSURE COOLANT INJECTION W1
AUTOMATIC DEPRESSURIZATION W2
CORE SPRAY DIVISION I W3
CORE SPRAY DIVISION II W4
LOW PRESSURE COOLANT INJECTION DIVISION W5
HIGH PRESSURE COOLANT INJECTION DIVISION II W6
STAND BY GAS TREATMENT DIVISION I W7
STAND BY GAS TREATMENT DIVISION II W8
HYDROGEN CONTROL SYSTEM W9
MAIN STEAMLINE SEALING SYSTEM W10
PLANT SERVICE WATER SYSTEM DIVISION I W11
PLANT SERVICE WATER SYSTEM DIVISION II W12
RHR SERVICE WATER SYSTEM DIVISION I W13
RHR SERVICE WATER SYSTEM DIVISION II W14
CONTROL ROOM ENVIRONMENTAL CONTROL SYSTEM W15
DIESEL GENERATOR 2A W16
DIESEL GENERATOR 1B W17
DIESEL GENERATOR 2C W18

FORM TITLE:

REQUIRED ACTION SHEET

REQUIRED ACTION SHEET NUMBER __ - ____ - _____

SECTION 1 **INITIATING CONDITIONS**

MPL	DESCRIPTION	INOPERABLE TIME/DATE		RETURN TO OPER TIME/DATE		INIT

SECTION 2 **REQUIRED ACTION SHEET ACTIVATION**

INITIATION TIME/DATE	REQ. RESTORATION TIME/DATE	MODIFIED COMPLETION TIME/DATE
EXTENDED COMPLETION TIME/DATE/INIT	SFDP ENTERED ☐YES ☐N/A	INOP STATUS INDIC LIT ☐YES ☐ N/A
APPLICABILITY		
REQ. ACTION IF COMP TIME EXCEEDED		
REFERENCE DOCUMENT		REVISION/AMENDMENT
SS SIGN / TSA ACTIVE		SOS SIGN

SECTION 5 **REQUIRED ACTION SHEET TERMINATION**

INDICATE COMPLETE(D) ACTIONS:

☐ PROCEDURES: _____

☐ OTHER:

MWO FT COMPLETE	INOP STATUS INDIC OFF	REQUIRED ACTION TERMINATED TIME/DATE
☐YES ☐N/A	☐YES ☐N/A	
SS SIGN / TSA TERMINATED		SOS SIGN

FORM TITLE:

REQUIRED ACTION SHEET

SECTION 3 **≤ 1 HOUR ACTIONS**

REFERENCE DOCUMENT	REQUIRED ACTION	REQ. COMP TIME	PERFORMED TIME/DATE	INIT
			/	
			/	
			/	
			/	
			/	
			/	

SECTION 4 **> 1 HOUR ACTIONS**

REFERENCE DOCUMENT	REQUIRED ACTION	REQ. COMP TIME OR FREQ.	SEQ. NO.	COMPLETE TIME/DATE	COMP. INITIAL
				/	
				/	
				/	
				/	
				/	
				/	
				/	
				/	
				/	

FORM TITLE:

REQUIRED ACTION SHEET

REQUIRED ACTION SHEET NUMBER __ - ____ - _____

SECTION 1 **INITIATING CONDITIONS**

MPL	DESCRIPTION	INOPERABLE TIME/DATE		RETURN TO OPER TIME/DATE		INIT

SECTION 2 **REQUIRED ACTION SHEET ACTIVATION**

INITIATION TIME/DATE	REQ. RESTORATION TIME/DATE	MODIFIED COMPLETION TIME/DATE
EXTENDED COMPLETION TIME/DATE/INIT	SFDP ENTERED ☐YES ☐N/A	INOP STATUS INDIC LIT ☐YES ☐ N/A

APPLICABILITY		
REQ. ACTION IF COMP TIME EXCEEDED		
REFERENCE DOCUMENT		REVISION/AMENDMENT
SS SIGN / TSA ACTIVE	SOS SIGN	

SECTION 5 **REQUIRED ACTION SHEET TERMINATION**

INDICATE COMPLETE(D) ACTIONS:

☐ PROCEDURES: _____

☐ OTHER:

MWO FT COMPLETE	INOP STATUS INDIC OFF	REQUIRED ACTION TERMINATED TIME/DATE
☐YES ☐N/A	☐YES ☐N/A	
SS SIGN / TSA TERMINATED	SOS SIGN	

FORM TITLE:

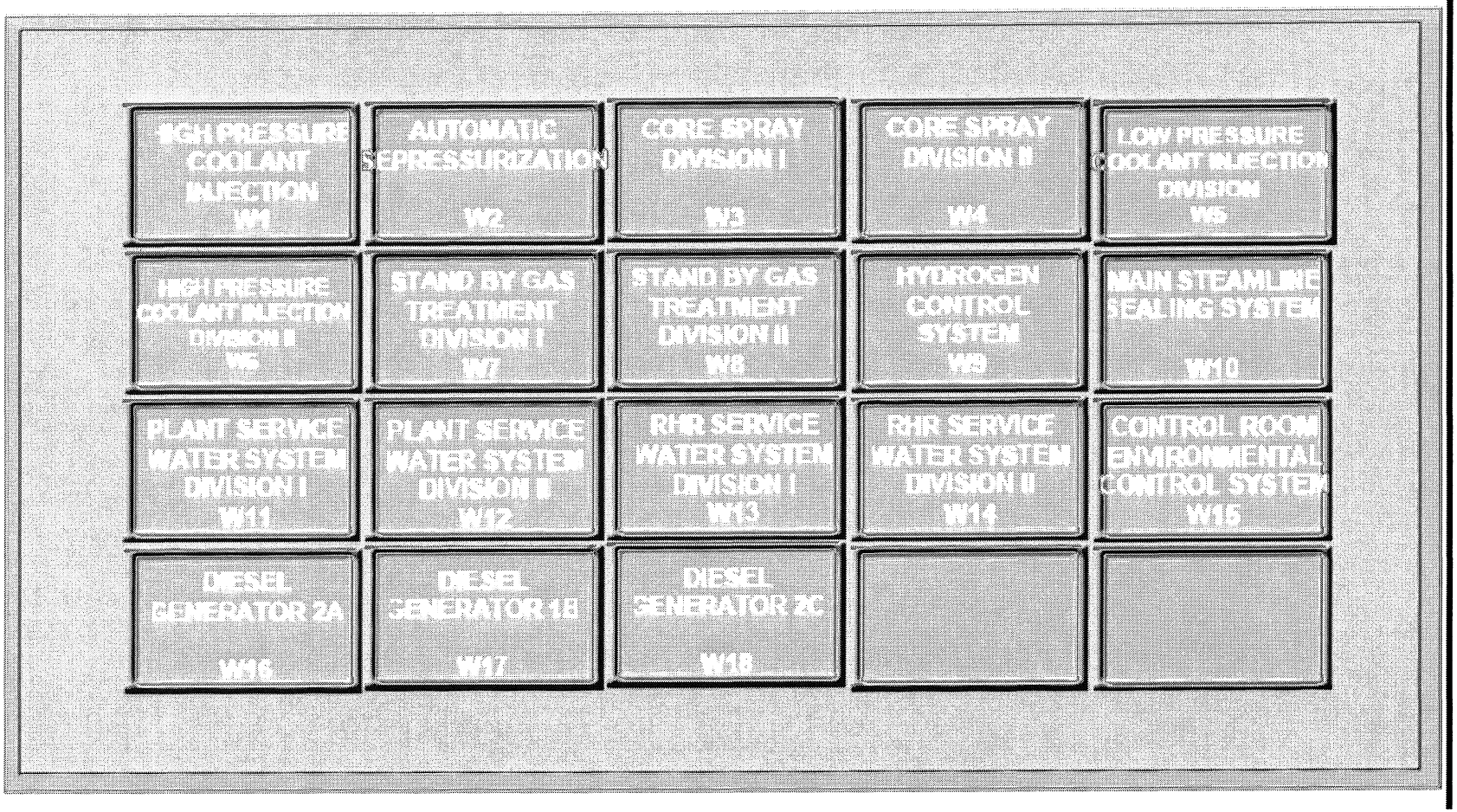
REQUIRED ACTION SHEET

SECTION 3 **≤ 1 HOUR ACTIONS**

REFERENCE DOCUMENT	REQUIRED ACTION	REQ. COMP TIME	PERFORMED TIME/DATE	INIT
			/	
			/	
			/	
			/	
			/	
			/	

SECTION 4 **> 1 HOUR ACTIONS**

REFERENCE DOCUMENT	REQUIRED ACTION	REQ. COMP TIME OR FREQ.	SEQ. NO.	COMPLETE TIME/DATE	COMP. INITIAL
				/	
				/	
				/	
				/	
				/	
				/	
				/	
				/	
				/	


HIGH PRESSURE COOLANT INJECTION W1
AUTOMATIC DEPRESSURIZATION W2
CORE SPRAY DIVISION I W3
CORE SPRAY DIVISION II W4
LOW PRESSURE COOLANT INJECTION DIVISION W5
HIGH PRESSURE COOLANT INJECTION DIVISION II W6
STAND BY GAS TREATMENT DIVISION I W7
STAND BY GAS TREATMENT DIVISION II W8
HYDROGEN CONTROL SYSTEM W9
MAIN STEAMLINE SEALING SYSTEM W10
PLANT SERVICE WATER SYSTEM DIVISION I W11
PLANT SERVICE WATER SYSTEM DIVISION II W12
RHR SERVICE WATER SYSTEM DIVISION I W13
RHR SERVICE WATER SYSTEM DIVISION II W14
CONTROL ROOM ENVIRONMENTAL CONTROL SYSTEM W15
DIESEL GENERATOR 2A W16
DIESEL GENERATOR 1B W17
DIESEL GENERATOR 2C W18

EXPIRATION DATE:	APPROVALS:				EFFECTIVE DATE:
	DEPARTMENT MGR	C. R. Dedrickson	DATE	09-16-99	
N/A	NPGM/POAGM/PSAGM	N/A	DATE	N/A	1-24-08

1.0 OBJECTIVE

This procedure provides guidance for documenting events which cause entry into CONDITIONS, thus causing REQUIRED ACTIONS to be performed within the specified COMPLETION TIMES. These items are specified by the Unit Technical Specifications (TS), Offsite Dose Calculation Manual (ODCM), Technical Requirements Manual (TRM), Holtec Technical Specifications (HTS), AND the Safety Function Determination Program.

This procedure also provides administrative tracking of items required by other plant procedures (34GO-OPS-001-1/2).

TABLE OF CONTENTS

Section **Page**

2.0 APPLICABILITY

2.1 DEFINITION OF TERMS

- COMPLETION TIME: That part of a REFERENCE DOCUMENT that specifies the time frame during which a specified action must be completed. For the TRM, HTS, and the TS, these are specified in a column clearly labeled COMPLETION TIME. For FHA Appendix B and the ODCM these are contained within the sections labeled ACTION.

- CONDITION: That part of a REFERENCE DOCUMENT that specifies a situation (e.g., one PSW pump inoperable) for which the specified action must be completed in a specified time. For the TRM, HTS, and the TS, these are specified in a column clearly labeled CONDITION. For the FHA Appendix B and the ODCM these are contained within the sections labeled ACTION.

- REFERENCE DOCUMENT: A term used in this procedure to mean any one of the following: TS, ODCM, HTS, or TRM.

- REQUIRED ACTION: That part of a REFERENCE DOCUMENT that prescribes actions to be taken under designated CONDITIONS within specified COMPLETION TIMES. For the TRM, HTS, and the TS, these are specified in a column clearly labeled REQUIRED ACTION. For the FHA Appendix B and the ODCM these are contained within the sections labeled ACTION.

2.2 OPERATIONS SUPERVISORY PERSONNEL

Responsible for the determination of REFERENCE DOCUMENT applicability, documentation of entry into CONDITIONS, AND compliance with REQUIRED ACTIONS/COMPLETION TIMES.

2.3 LIMITING CONDITION FOR OPERATION

Use of the term “LCO” and TRACKING ACTION SHEETS in other procedures is equivalent to use of REQUIRED ACTION.

3.0 REFERENCES

3.1 30AC-OPS-003-0, Plant Operations

3.2 Technical Specifications Unit 1

3.3 Technical Specifications Unit 2

3.4 Unit 1 Technical Requirements Manual (Unit 1 TRM)

3.5 Unit 2 Technical Requirements Manual (Unit 2 TRM)

3.6 Off Site Dose Calculation Manual (ODCM)

3.7 Safety Function Determination Program

3.8 Holtec Technical Specifications

3.9 FULL SIZE FORM (S)

- OPS-1349 Required Action Sheet
- OPS-1350 Required Action Tracking Sheet
- OPS-1351 WO Status Sheet
- OPS-1352 Required Action Tracking Log

3.10 NMP-AD-012 Operability Determination and Functionality Assessments for Resolution of Degraded and Nonconfomring Conditions

4.0 REQUIREMENTS

4.1 PERSONNEL REQUIREMENTS

N/A Not applicable to this procedure

4.2 MATERIAL AND EQUIPMENT

N/A Not Applicable to this procedure

4.3 SPECIAL REQUIREMENTS

4.3.1 A REQUIRED ACTION SHEET (RAS) (OPS-1349) SHALL be initiated for the following conditions:

4.3.1.1 A Loss of Safety Function is determined to exist WHEN evaluated per Attachment 1 of the TRM T 12.0, Safety Function Determination Program.
The RAS is to be initiated on the Structures, Systems, or Components (SSCs) determined to have a loss of safety function as evaluated from the preceding.

4.3.1.2 Equipment is out of service OR INOPERABLE, AND its downtime OR time in a condition is limited by plant licensing documents such that this time requires tracking UNTIL the time is reset (e.g., RWM, RCS Chemistry).

4.3.1.3 WHEN Corrective Maintenance is to be performed on Tech. Spec. applicable SSCs.

4.3.2 A RAS SHALL be initiated whenever one of the following conditions exists AND will remain in existence at the end of the shift:

4.3.2.1 An INOPERABILITY of required systems, structures or components (SSCs) required by a REFERENCE DOCUMENT.
IF the INOPERABLE SSC does NOT result in a Loss of Safety Function (refer to 4.3.1.1), the RAS will be initiated for ONLY the Support SSC.

4.3.2.2 Preventative maintenance is performed on a SSC required by a REFERENCE DOCUMENT.

4.3.2.3 WHEN selected Non-LCO support systems are INOPERABLE AND other plant procedures require the initiation of a RAS
(e.g., 34GO-OPS-001-1/2 specifies Cold Reference Leg Keepfill System).

4.3.2.4 WHEN a surveillance OR ACTION is required to be performed (other than maintaining alternate systems OR components OPERABLE) in order to comply with RASs.

4.3.2.5 For instrumentation, the TS and the TRM usually provide allowances when an instrument is out of service for required Surveillances (e.g., "when a channel is placed in an INOPERABLE status solely for performance of required Surveillances. Entry into associated CONDITIONS and REQUIRED ACTIONS may be delayed for up to 6 hours.") for these instruments.
IF testing/maint. is being performed on these instruments that is NOT required Surveillance, entry into associated CONDITIONS can NOT be delayed.

4.3.2.6 WHEN a surveillance is performed which does NOT maintain channel AND/OR function capability as required by a REFERENCE DOCUMENT.

4.3.2.7 WHEN a channel is placed in an INOPERABLE mode for the performance of a required surveillance for a time exceeding the REFERENCE DOCUMENT allowable surveillance time.

4.3.3 Conventions for Use when a RAS Is NOT Required.

NOTE:	Corrective Maintenance must be tracked by a RAS.

4.3.3.1 A RAS DOES NOT have to be initiated for a REQUIRED ACTION (Except For Corrective Maintenance) that WILL NOT be in effect at the end of the shift; however, the SS will perform the following:

4.3.3.1.1 Notify the SM of the INOPERABILITY.

4.3.3.1.2 ENTER the time the REQUIRED ACTION is active, the CONDITION initiating the ACTION, and the applicable REQUIRED ACTION specification number (e.g., TS LCO 3.3.2.2, REQUIRED ACTION A.1) into the MCR Log.

4.3.3.1.3 ENTER any actions taken to comply with the CONDITION in the MCR Log.

4.3.3.1.4 WHEN the CONDITION is no longer applicable, ENTER the time and the action(s) that terminated the CONDITION in the MCR Log.

4.3.3.1.5 Notify the SM the CONDITION / REQUIRED ACTION was terminated.

4.3.3.2 WHEN Required Surveillances are performed, the equipment MPL and time will be logged in the MCR Log to track time out of service,
UNLESS the procedure being performed has provisions for tracking the time out of service.

4.3.3.3 WHEN equipment is returned to service per TS 3.0.5, ENTER the time returned to service in the MCR Log. THEN comply with one of the following:

4.3.3.3.1 IF the equipment is NOT being restored to an OPERABLE status,
indicate in the MCR Log that control of the equipment is being returned to the RAS.

4.3.3.3.2 IF the equipment is being restored to an OPERABLE status, close out the RAS, and so state in the MCR Log.

4.3.4 Conventions for Use WHEN a RAS IS required

4.3.4.1 IF separate entry CONDITIONS are allowed by a REFERENCE DOCUMENT, initiate separate REQUIRED ACTION TRACKING SHEETs.
Exceptions to separate entries can be made for Conditional Tracking Actions WHEN the first entry was NOT one of the required functions OR channels (e.g., APRMs).

4.3.4.2 IF Separate entry conditions are NOT allowed by a REFERENCE DOCUMENT, ENTER any subsequent INOPERABILITIES on the original REQUIRED ACTION TRACKING SHEET, including the time and date of the subsequent event.
THE ORIGINAL TIME AND DATE OF CONDITION ENTRY WILL REMAIN THE SAME.

4.3.5 This procedure provides guidance for tracking REQUIRED ACTIONS. Under extenuating circumstances, policies for tracking REQUIRED ACTIONS may be altered by the Operations Manager OR his Designee, provided no REFERENCE DOCUMENT requirement is violated AND the intent of Section 1.0 of this procedure is met.

4.3.6 When the PLANT HATCH RAS/FAS LIST is updated, RAS's with Required Actions greater than one week (7 days), will have the COMPLETION DATE normally set at one half (1/2) the REQUIRED DATE. (e.g.: for a 30 day RAS, the COMPLETION DATE would be 15 days). Operations Management approval will be required to extend the COMPLETION DATE beyond one half of the REQUIRED DATE.

4.3.7 Blocks that are NOT required to be completed may be left blank without being NA'd.

4.3.8 Any WO's requiring an ASME inspection will be added to a RAS. Even for non Tech Spec systems, a Tracking RAS will be initiated when operations is informed that the work order requires an ASME inspection.

5.0 PRECAUTIONS/LIMITATIONS

5.1 PRECAUTIONS

N/A - Not applicable to this procedure

5.2 LIMITATIONS

N/A - Not applicable to this procedure

6.0 PREREQUISITES

N/A - Not applicable to this procedure

7.0 PROCEDURE

7.1 INITIATION OF A REQUIRED ACTION SHEET

CONTINUOUS

7.1.1 Initiate a REQUIRED ACTION SHEET (RAS) (Form OPS-1349) by performing the following:

7.1.1.1 Assign a RAS NUMBER from the REQUIRED ACTION TRACKING LOG (Form OPS-1352). RAS numbers may be pre-assigned as determined appropriate.

7.1.1.2 ENTER the MPL number in the MPL block and the description of the SSC in the DESCRIPTION block in Section 1of OPS-1349 of the REFERENCE DOCUMENT required component.

7.1.1.3 ENTER the time and date the SSC became INOPERABLE in the INOPERABLE TIME/DATE block in Section 1 of OPS-1349.

7.1.1.4 WHEN separate entry conditions are NOT allowed, ENTER subsequent, INOPERABLE items on the same RAS (OPS-1349) MPL, DESCRIPTION, and INOPERABLE blocks.
The time and date for subsequent equipment will be WHEN the subsequent INOPERABILITY occurs.

This discussion refers to subsequent INOPERABILITY of items for the same CONDITION.

7.1.1.5 IF plant / equipment conditions are such that the equipment is NOT presently required to be OPERABLE, go to 7.3.

7.1.1.6 ENTER the INITIATION, TIME/DATE data in Section 2 of the RAS. This is the time the equipment is required to be OPERABLE OR becomes required to be OPERABLE by plant conditions.

7.1.1.7 ENTER the REQUIRED RESTORATION TIME/DATE in Section 2 of the RAS. This time is determined from the more restrictive of either the REQUIRED ACTION time OR the MODIFIED COMPLETION TIME/DATE.

7.1.1.8 IF applicable (e.g., TS LCO 3.1.7, TS LCO 3.8.1), ENTER the MODIFIED COMPLETION TIME/DATE in Section 2.

7.1.1.8.1 This time is the maximum allowable time that is allowed for failing to meet a REFERENCE DOCUMENT CONDITION / REQUIRED ACTION (e.g., TS LCO 3.1.7, REQUIRED ACTION A.1 has a MODIFIED COMPLETION TIME/DATE of 10 days for SLC).

7.1.1.8.2 This time is the same for subsequent INOPERABLE equipment which occurs while related TS LCO INOPERABLE equipment exists (e.g., SBLC pump A is INOPERABLE on day 1 and, then, on day 2 the SLC Tank fails to meet a requirement. The MODIFIED COMPLETION TIME for the tank and any subsequent entries would be the same as for SBLC pump A OR 10 days from the day 1 entry into the TS LCO REQUIRED ACTIONS.).

7.1.1.9 Indicate the applicability of the Safety Function Determination Program in the SFDP ENTERED block of Section 2.

7.1.1.10 Check appropriate box in the INOP STATUS INDIC LIT block of Section 2 for the inoperable equipment status indicators.

7.1.1.11 ENTER CONDITIONS, plant modes AND/OR applicability of the equipment OR CONDITION in the APPLICABILITY block of Section 2.

7.1.1.12 RECORD the REFERENCE DOCUMENT in the block of the same name of Section 2. (e.g., Unit 1 TS 3.6.1).

7.1.1.13 RECORD the REFERENCE DOCUMENT revision or amendment number in the REVISION/AMENDMENT block of Section 2.

7.1.1.14 ENTER the REQUIRED ACTION in the REQ. ACTION IF COMP TIME IS EXCEEDED block of Section 2, using the following:

7.1.1.14.1 ENTER the REQUIRED ACTION Number as shown in the REFERENCE DOCUMENT block of Section 2 (e.g., TS LCO 3.6.1.1, REQUIRED ACTION D.1). THEN, fill in the REFERENCE DOCUMENT, REQUIRED ACTION, REQ. COMP TIME OR FREQ., AND SEQ NO. blocks of Section 4.

AND/OR

7.1.1.14.2 ENTER the ACTION required (e.g., Be in Mode 3 in 12 hours and in Mode 4 in 36 hours.)

7.1.1.15 SS signs SS SIGN/TSA ACTIVE block of Section 2 of the RAS, signifying the sheet is active.

7.1.1.16 SM reviews and signs SM SIGN block of Section 2, indicating concurrence with the RAS.

7.1.1.17 As equipment is returned to OPERABLE status, ENTER the time/date in the RETURN TO OPER TIME/DATE block AND initial in the INIT block of Section 1.

7.1.2 PERFORM the following in the ≤ 1 HOUR ACTIONS section (section 3) of the RAS:

7.1.2.1 ENTER the REFERENCE DOCUMENT and section number in the appropriate block (e.g., TS LCO 3.4.1).

7.1.2.2 ENTER the REQUIRED ACTION as specified above (e.g., REQUIRED ACTION C.1: ENTER 3.0.3) using separate lines for each ACTION containing multiple parts.
IF the REFERENCE DOCUMENT allows a choice of REQUIRED ACTIONS, list only the one chosen.

7.1.2.3 ENTER the REQ COMP TIME block.

7.1.2.4 ENTER the Time and Date the ACTION is completed in the PERFORMED TIME/DATE block and initial in the INIT block WHEN the ACTION is completed.

7.1.3 PERFORM the following in the > 1 HOUR ACTIONS section (section 4):

7.1.3.1 ENTER the REFERENCE DOCUMENT and section number in the REFERENCE DOCUMENT block (e.g., TS 3.1.7, REQUIRED ACTION A.1).

7.1.3.2 ENTER the REQUIRED ACTION specified above in the REQUIRED ACTION block using the following guidelines:

7.1.3.2.1 WHEN more than one ACTION is required, use separate lines for each ACTION.

7.1.3.2.2 IF an ACTION is required to be performed initially and at specified intervals thereafter, use separate lines to track each requirement, IF the time intervals are different (e.g., 1 hour versus 8 hours).

7.1.3.2.3 INITIATE a REQUIRED ACTION TRACKING SHEET (Form OPS-1350) for each REQUIRED ACTION recurring at routine / periodic intervals.

7.1.3.3 ENTER the required completion time OR the Frequency at which the ACTION is to be performed in the FREQUENCY block of OPS-1350.

7.1.3.4 IF an ACTION is required to be performed at recurring intervals, assign a sequential number (e.g., 1, 2, 3, etc.) in the SEQUENCE block of OPS-1350 for each action to be tracked.

7.1.3.5 ENTER the Logical Connector(s) in the appropriate spaces beneath the REQUIRED ACTION block in Section 4 of OPS-1349 containing multiple parts.
IF no logical connector is entered, "LEVEL 1 AND" is implied.
ENTER the Logical Connector at the appropriate level of indention.

7.1.3.6 WHEN the subsequent action has been completed,
THEN ENTER the time and date in the COMPLETE TIME/DATE block in Section 4 on OPS-1349.

7.1.3.7 SS initials the COMP INITIAL block in Section 4 of OPS-1349, signifying all subsequent ACTIONS for the line have been completed.

7.1.3.8 SS close out the item in the REQUIRED ACTION TRACKING LOG (Form OPS-1352.).

7.2 TERMINATING REQUIRED ACTION SHEETS

CONTINUOUS

7.2.1 PERFORM the following WHEN terminating RASs:

7.2.1.1 ENTER the time and date the CONDITION no longer exists in the RETURN TO OPER TIME/DATE block in Section 1 of OPS-1349.

7.2.1.2 ENTER SS initials in the INIT block in Section 1 of OPS-1349, signifying the equipment has been returned to an OPERABLE status.

7.2.1.3 Complete INDICATE COMPLETE (D) ACTIONS block in Section 5 of OPS-1349 to document procedure(s) / other action that were satisfactorily completed to terminate the RAS.

7.2.1.4 Check appropriate check box in the WO FT COMPLETE block in Section 5 of OPS-1349 for all WO functional tests completed satisfactorily.
Attachment 1 can be used to perform Functional Test on WO against a RAS. Once the FTs on Att 1 are complete and a check is made to ensure this list contains all associated FTs for the RAS then proceed with RAS Termination.

7.2.1.5 Check appropriate check box in the INOP STATUS INDIC OFF block in Section 5 of OPS-1349 for the inoperable status indicator.

7.2.1.6 ENTER the Time and Date the RAS is terminated in the REQUIRED ACTION TERMINATED TIME/DATE block in Section 5 of OPS-1349.

7.2.1.7 SS signs SS SIGN/TSA TERMINATED block AND
SM signs SM SIGN block in Section 5 of OPS-1349 terminating the RAS.

7.2.1.8 IF Attachement 1 was used as a method to perform the WO FTs for the RAS then use this information to sign off the actual WOs listed on the attachment.

7.3 INITIATING REQUIRED ACTION SHEET ON SSCs NOT REQUIRED TO BE OPERABLE DUE TO EXISTING PLANT CONDITIONS

CONTINUOUS

7.3.1 WHEN the equipment OR CONDITION does NOT apply due to current plant / equipment conditions (Conditional Tracking Actions), perform the following:

7.3.1.1 Check appropriate box in INOP STATUS INDIC LIT block in Section 2 of OPS-1349 for the inoperable equipment status indicators.

7.3.1.2 ENTER CONDITIONS, plant modes AND/OR applicability of the equipment OR CONDITION in the APPLICABILITY block in Section 2 of OPS-1349.

7.3.1.3 RECORD the REFERENCE DOCUMENT in the REFERENCE DOCUMENT block in Section 2 of OPS-1349. (e.g., Unit 1 TS LCO 3.6.1, REQUIRED ACTION A.1)

7.3.1.4 RECORD the REFERENCE DOCUMENT revision or amendment number in REVISION/AMENDMENT block in Section 2 of OPS-1349.

7.3.1.5 SS INITIALS the SS SIGN/TSA ACTIVE block.
The SS SIGNS this block WHEN the RAS becomes active.

7.3.1.6 SM INITIALS the SM SIGN block.
The SM SIGNS this block WHEN the RAS becomes active.

7.3.1.7 Complete the remainder of the REQUIRED ACTION TRACKING SHEET (per steps 7.1.1.5 through 7.1.4) WHEN the equipment becomes required to be OPERABLE by plant / equipment conditions.
The Initiation Time and Date is WHEN plant / equipment conditions are such that the equipment is required to be OPERABLE.

7.4 WO STATUS SHEET

CONTINUOUS

7.4.1 WOs (can also be used for Deficiencies and procedures) are tracked using one of the following methods:

7.4.1.1 The RAS number is written on the WO,
THEN the WO is updated in the Document Management System with the RAS number (preferred method), OR

7.4.1.2 The WO number is recorded on the WO Status Sheet (Form OPS-1351).

7.4.2 WHEN entering information on the WO Status Sheet, record the following:

7.4.2.1 The RAS number

7.4.2.2 The Equipment MPL number

7.4.2.3 The current date

7.4.2.4 The applicable WO, Condition Report number OR procedure number

7.4.2.5 The Description of the equipment OR problem

7.4.2.6 The completion date.
This is to be entered WHEN work on WO OR procedure is complete AND all functional testing is completed satisfactorily.

7.4.2.7 SS initials the appropriate block signifying WO no longer holding equipment INOPERABLE.

7.5 EXTENDED COMPLETION TIMES

CONTINUOUS

Completion Times for multiple entry conditions may be extended using the guidance in TS 1.3. WHEN using Extended Completion Times, determine the permissible Extended Completion Time per TS 1.3, AND enter it in EXTENDED COMPLETION TIME/DATE/INIT block in Section 2 of OPS-1349.

RAS # _____

This is a list of the actions required to terminate this RAS.

Page 2 contains the list of components being tested.

Procedure Number / Other actions	**Section to perform**	**Completion Date:**	**Initials:**

SRO Approval: _____ Date: _____

Attach a copy of a RAS report listing the WO and FT to this page.

Work Order Number	MPL NO.	Procedure Number OR FT if not a procedure (leak check, etc.)	Section of procedure to be performed or ALL or NA if no procedure	COMP DATE	INIT.

Prepared By (SRO): _____ Date: _____

- Use additional sheets if more space is needed.
- This sheet does not become a permanent record in Documentum as a form.
- A copy of this package may be attached to the RAS being teminated as a record of FT performance.

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E. I. Hatch Nuclear Plant

Operations Training
JPM

Admin 4

TITLE		
EVALUATE AN INOPERABLE ODCM RADIATION DETECTOR		
AUTHOR	**MEDIA NUMBER**	**TIME**
DAVID GIDDENS	LR-JP-10029-00	20 Minutes
RECOMMENDED BY	**APPROVED BY**	**DATE**
N/R		

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PLANT E. I. HATCH

FORM TITLE: TRAINING MATERIAL REVISION SHEET

Program/Course Code: **OPERATIONS TRAINING** Media Number: **LR-JP-10029**

Rev. No.	Date	Reason for Revision	Author's Initials	Supv's Initials

UNIT 1 (X) UNIT 2 ()

TASK TITLE:	Declare A Tech Spec System Operable/Inoperable
JPM NUMBER:	LR-JP-10029-00
TASK STANDARD:	The task shall be completed when the candidate has provided an answer for each item within the initiating cue.
TASK NUMBER:	H-OPSR300.006
OBJECTIVE NUMBER:	H-OP300.006A
TYPE	SRO Administrative

PLANT HATCH JTA IMPORTANCE RATING:

RO N/A

SRO 3.00

K/A CATALOG NUMBER: G2.3.11

K/A CATALOG JTA IMPORTANCE RATING:

RO N/A

SRO 4.3

OPERATOR APPLICABILITY: Senior Reactor Operator (SRO)

GENERAL REFERENCES:	**Unit 1**
	Unit 1 Tech Specs Unit 1 TRM Unit 1 ODCM 34AR-650-350-1, HX 1A PSW/RBCCW DIFF PRESS LOW Annunciator

REQUIRED MATERIALS:	**Unit 1**
	Unit 1 ODCM Unit 1 TRM

APPROXIMATE COMPLETION TIME: 20 Minutes

SIMULATOR SETUP: N/A

UNIT 1

READ AND GIVE A COPY TO THE OPERATOR

INITIAL CONDITIONS:

1. Unit 1 is in Mode 3 with the "B" RBCCW Heat Exchanger out of service and under clearance.
2. Maintenance reports scaffolding has fallen on a radiation detector, 1D11-K605, severing its electrical cable and causing other damage.
3. It is estimated it will be 2 months before a replacement can be delivered.
4. While restoring the "B" RBCCW Heat Exchanger to service the following alarms occurs:

   - Annunciator 650-350-1,"HX 1A PSW/RBCCW DIFF PRESS LOW," alarms

5. An SO reports the following local pressures:
   - PSW pressure indicator 1P41-R577.....96 psig ("A" Heat Exchanger PSW Inlet pressure)
   - PSW pressure indicator 1P41-R578.....89 psig ("A" Heat Exchanger PSW Outlet pressure)
   - RBCCW pressure indicator 1P42-R002A,.....92 psig ("A" Heat Exchanger RBCCW Inlet pressure)
   - RBCCW pressure indicator 1P42-R005A,.....87 psig ("A" Heat Exchanger RBCCW Outlet pressure)

INITIATING CUES:

Determine if the radiation detector is required at this time and any other additional actions.

For **INITIAL** Operator Programs:
For OJT/OJE; ALL PROCEDURE STEPS must be completed for Satisfactory Performance.
For License Examinations; ALL CRITICAL STEPS must be completed for Satisfactory Performance.

NOTE: Provide candidate ARP 650-350-1

START TIME:_____

1.	Operator obtains the procedure needed references	Operator has obtained the Unit 1 ODCM and other controlled documents.	SAT / UNSAT

Note: The candidate has several means to find the specification for this radiation detector. One is to use the Master Equipment Cross Reference in the Unit 1 TRM, another is the Tech Spec/TRM/ODCM reference section of the ARP.

****2.**	Determine if 1D11-K605 is a ODCM radiation detector.	Operator determines the instrument is a required ODCM detector.	SAT / UNSAT
3.	Locate the administrative requirements associated with this radiation detector.	The candidate identifies that ODCM section 2.1 contains the requirements for this radiation detector being inop.	SAT / UNSAT
4.	Selects the applicable instrument on table 2-1 of the Unit 1 ODCM.	On table 2-1 determines the inoperative detector is addressed in section 2 of the table, as this instrument does not provide any automatic isolation.	SAT / UNSAT
5.	Evaluates whether the minimum number of channels OPERABLE is met from table 2.	Recognizes the minimum number of channels is **NOT** met.	SAT / UNSAT
6.	Evaluates the applicability of the specification, whether the instrument is required to be OPERABLE, under the current plant conditions.	Determines note (2) applies: • "Whenever the Service Water System pressure is below the Closed Cooling Water System pressure, or Δp indication is not available."	SAT / UNSAT

7.	Evaluates the system pressure between PSW and RBCCW.	Determines the lowest PSW pressure of 89 psig IS lower than the most limiting RBCCW pressure of 92 psig and DP must be re-established.	SAT / UNSAT

PROMPT: IF candidate indicates pressure needs to be adjusted per the ODCM or ARP, THEN inform him that that the cause of the low pressure is being investigated.

****8.**	Identifies the actions required by action 101.	Determines that once per shift grab samples are collected and analyzed for a gross radioactivity.	SAT / UNSAT
****9.**	Identifies how long the instrument may remain inoperable before "additional" actions are required.	Identifies that if the instrument is inoperative for over 30 days: • "An explanation of the circumstances must be included in the next Radioactive Effluent Release Report."	SAT / UNSAT

END TIME:_____

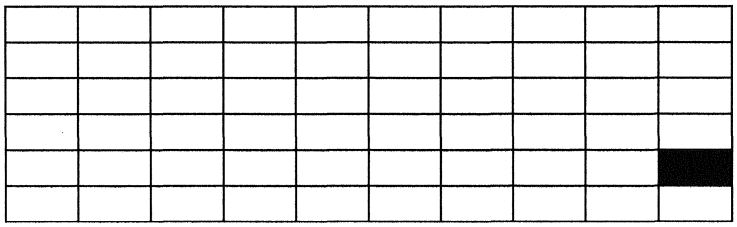
NOTE: The terminating cue shall be given to the Applicant when:

- With no reasonable progress, the Applicant exceeds double the allotted time.
- Applicant states the task is complete.

TERMINATING CUE: That completes this JPM.

1.0 IDENTIFICATION:

ALARM PANEL 1H11-P650



HX 1A

PSW/RBCCW DIFF

DIFF PRESS LOW

DEVICE: 1P42-R200A

SETPOINT: 7 PSID

2.0 CONDITION:

Plant Service Water to RBCCW differential pressure has decreased to setpoint.

3.0 CLASSIFICATION: EQUIPMENT STATUS

4.0 LOCATION: 1H11-P650 Panel 3

5.0 OPERATOR ACTIONS:

5.1 At 112TCT07, confirm low differential pressure by observing 1P42-B001A, Heat Exchanger, RBCCW Inlet Pressure, on 2P42-PI-R002A to 1P41-PI-R578, Service Water Outlet Pressure.

5.2 Confirm that the Plant Service Water System is in operation per 34SO-P41-001-1, Plant Service Water System.

5.3 At 112TCT07, confirm OPEN 1P41-F399A, 1P42-B001A, RBCCW Heat Exchanger Service Water Inlet Valve.

5.4 IF RBCCW loads are being isolated remove RBCCW pumps from service as required to maintain Service Water to RBCCW pressure above setpoint.

5.5 THROTTLE 1P41-F206A, RBCCW HX Serv Water Disch Vlv, to increase PSW pressure observing 1P41-PI-R578.

6.0 CAUSES:

6.1 Plant Service Water pressure has decreased from the normal operating pressure.

6.2 RBCCW Heat Exchanger service water inlet valve throttled OR closed.

7.0 REFERENCES

7.1 57SV-CAL-001-1, PSW TO RBCCW dP Channel Cal

7.2 H-13613, Wiring Diag Ann Logic Cab 1A Bag D

7.3 H-14036, Wiring Diagram 600V Swgr Bus 1C Frame 7 R23-S003

7.4 H-11609, P&ID Service Water Piping

8.0 TECH. SPECS./TRM/ODCM/FHA:

Unit One, ODCM, 2.1

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Operations Training
JPM
Admin 5

TITLE		
REVIEW/AUTHORIZE EMERGENCY EXPOSURES		
AUTHOR	**MEDIA NUMBER**	**TIME**
F.N.FAGAN	LR-JP-200.108-00	30 Minutes
RECOMMENDED BY	**APPROVED BY**	**DATE**
N/R		

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PLANT E. I. HATCH

FORM TITLE: TRAINING MATERIAL REVISION SHEET

Program/Course Code: **OPERATIONS TRAINING** Media Number:

Rev. No.	Date	Reason for Revision	Author's Initials	Supv's Initials
00		Initial development	FNF	

UNIT 1 (X) UNIT 2 ()

TASK TITLE:	Develop Duty Roster For Extended Emergency Activities
JPM NUMBER:	LR-JP-200.108-00
TASK STANDARD:	The task shall be complete when the operator has completed review and/or approval of TRN-0115, "Authorization To Exceed 10 CFR 20 Limits".
TASK NUMBER:	H-OPSR200.108
OBJECTIVE NUMBER:	

PLANT HATCH JTA IMPORTANCE RATING:

RO N/A

SRO 4.08

K/A CATALOG NUMBER: G2.4.38

K/A CATALOG JTA IMPORTANCE RATING:

RO N/A

SRO 4.4

OPERATOR APPLICABILITY: Senior Reactor Operator (SRO)

GENERAL REFERENCES:	**Unit 1**
	73EP-EIP-017-0 , Emergency Exposure Control 60AC-HPX-001-0, Radiation Exposure Limits

REQUIRED MATERIALS:	**Unit 1**
	73EP-EIP-017-0 , Emergency Exposure Control

APPROXIMATE COMPLETION TIME: 30 Minutes

SIMULATOR SETUP: N/A

UNIT 1

READ TO THE OPERATOR

INITIAL CONDITIONS:

1. An ATWS has occurred with fuel damage.
2. A General Emergency has been declared.
3. You are the Emergency Director.
4. The OSC is manned and requests you to review and approve emergency radiation exposure for the following missions:
   - Mission 1: 3 people have volunteered (Long, Smith, Harms) to rescue someone in the plant; however only 2 rescuers are ~~needed.~~ to be approved. BM
   - Mission 2: 1 volunteer (Jones) needs to vent the scram air header.

INITIATING CUES:

- Choose two volunteers to rescue someone in the plant
- Review and approve for TRN-0115, Authorization to Exceed 10CFR20 Limits for the ~~selected~~ individuals ~~(Long, Smith, Harms and Jones)~~ you select BM

For **INITIAL** Operator Programs:
For OJT/OJE; ALL PROCEDURE STEPS must be completed for Satisfactory Performance.
For License Examinations; ALL CRITICAL STEPS must be completed for Satisfactory Performance.

NOTE: Provide the operator with the attached TRN-0115 Forms.

START TIME:_____

1.	Obtains the correct procedure.	Emergency Director obtains a copy of 73EP-EIP-017-0.	SAT / UNSAT
2.	Reviews precautions and limitations.	Emergency Director reviews precautions and limitations.	SAT / UNSAT
3.	Reviews procedural guidelines for dose.	Emergency Director reviews "Emergency Response Personnel Exposure Guides" table.	SAT / UNSAT
4.	Reviews first form for "Authorization To Exceed 10 CFR 20 Limits".	Emergency Director reviews form TRN-0115 for Jack T. Jones.	SAT / UNSAT
5.	Determine if operator meets the dose guidelines of 73EP-EIP-017-0.	Emergency Director determines Jack T. Jones does **NOT** meet the guidelines.	SAT / UNSAT

PROMPT: IF asked, THEN inform the operator that Jack T. Jones has not been informed of the risks involved with the exposure.

NOTE: Per the exposure guide, personnel "must be fully aware of the risks involved".

****6.**	Determine if form "Authorization To Exceed 10 CFR 20 Limits" will be signed.	Emergency Director does **NOT** sign form TRN-0115 for Jack T. Jones.	SAT / UNSAT
7.	Reviews second form for "Authorization To Exceed 10 CFR 20 Limits".	Emergency Director reviews form TRN-0115 for John R. Smith.	SAT / UNSAT
8.	Determine if operator meets the dose guidelines of 73EP-EIP-017-0.	Emergency Director determines Jack R. Smith **DOES** meet the guidelines.	SAT / UNSAT
****9.**	Determine if form "Authorization To Exceed 10 CFR 20 Limits" will be signed.	Emergency Director **DOES** sign form TRN-0115 for John R. Smith.	SAT / UNSAT
10.	Reviews third form for "Authorization To Exceed 10 CFR 20 Limits".	Emergency Director reviews form TRN-0115 for Alex M. Long.	SAT / UNSAT
11.	Determine if operator meets the dose guidelines of 73EP-EIP-017-0.	Emergency Director determines Alex M. Long does **NOT** meet the guidelines.	SAT / UNSAT
12	Determine if form "Authorization To Exceed 10 CFR 20 Limits" will be signed	Emergency Director does **NOT** sign form TRN-0115 for Alex M. Long.	SAT / UNSAT

NOTE: Alex is not approved because he is under 45 of age and Mark S. Harms has volunteered.

13.	Reviews fourth form for "Authorization To Exceed 10 CFR 20 Limits".	Emergency Director reviews form TRN-0115 for Mark S. Harms.	SAT / UNSAT
14.	Determine if operator meets the dose guidelines of 73EP-EIP-017-0.	Emergency Director determines Mark S. Harms **DOES** meet the guidelines.	SAT / UNSAT
**15	Determine if form "Authorization To Exceed 10 CFR 20 Limits" will be signed.	Emergency Director **DOES** sign form TRN-0115 for Mark S. Harms.	SAT / UNSAT
			END TIME:_____

NOTE: The terminating cue shall be given to the Applicant when:

- With no reasonable progress, the Applicant exceeds double the allotted time.
- Applicant states the task is complete.

TERMINATING CUE: We will stop here.

SOUTHERN NUCLEAR
PLANT E.I. HATCH | PAGE 1 OF 1

FORM TITLE: AUTHORIZATION TO EXCEED 10 CFR 20 LIMITS

JACK	T.	JONES	9872	3455
(FIRST)	(M.I.)	(LAST)	TLD NUMBER	SECURITY BADGE NO

is authorized to receive an exposure of

30 REM and a thyroid exposure of 0 REM

for the period of 04/20/09 to 04/21/09.

Reason for requesting exposure in excess of 10CFR20 limits:

Venting the scram air header is required to insert control rods and limit the current off-site release to the public.

Jack Jones is a 49 year old man and in good health.

Current year exposure:

900 mr

Exposure determined by:

Barry Barns 4/20/09
Dosimetry Representative Date

EXPOSURE IN EXCESS OF 10CRF20 LIMITS
I have been made aware of the extension of my exposure limits.
Jack T. Jones 4/20/09
Employee's Signature / Date

EXPOSURE ABOVE 25 REM
I have been made aware of the risks involved with the exposures listed above and I accept that risk.
_____
Employee's Signature / Date

APPROVAL

_____ /
Emergency Director Date

FORM TITLE: AUTHORIZATION TO EXCEED 10 CFR 20 LIMITS

JOHN	R.	SMITH	1802	9458
(FIRST)	(M.I.)	(LAST)	TLD NUMBER	SECURITY BADGE NO

is authorized to receive an exposure of

35 REM and a thyroid exposure of 0 REM

for the period of 04/20/09 to 04/21/09.

Reason for requesting exposure in excess of 10CFR20 limits:

A man is injured and pinned in a high radiation area and is expected to receive a lethal dose in 60 minutes.

John Smith is a 46 year old man and in good health.

Current year exposure:

1200 mr

Exposure determined by:

Barry Barns 4/20/09
Dosimetry Representative Date

EXPOSURE IN EXCESS OF 10CRF20 LIMITS
I have been made aware of the extension of my exposure limits.
John R. Smith 4/20/09
Employee's Signature / Date

EXPOSURE ABOVE 25 REM
I have been made aware of the risks involved with the exposures listed above and I accept that risk.
John R. Smith 4/20/09
Employee's Signature / Date

APPROVAL

/
Emergency Director Date

SOUTHERN NUCLEAR PLANT E.I. HATCH	PAGE 1 OF 1
FORM TITLE: AUTHORIZATION TO EXCEED 10 CFR 20 LIMITS	

ALEX	M	LONG	2334	4255
(FIRST)	(M.I.)	(LAST)	TLD NUMBER	SECURITY BADGE NO

is authorized to receive an exposure of

35 REM and a thyroid exposure of 0 REM

for the period of 04/20/09 to 04/21/09 .

Reason for requesting exposure in excess of 10CFR20 limits:

A man is injured and pinned in a high radiation area and is expected to receive a lethal dose in 60 minutes.

Alex Long is a 38 year old man and in good health.

Current year exposure:

300 mr

Exposure determined by:

Barry Barns 4/20/09
Dosimetry Representative Date

EXPOSURE IN EXCESS OF 10CRF20 LIMITS	EXPOSURE ABOVE 25 REM
I have been made aware of the extension of my exposure limits.	I have been made aware of the risks involved with the exposures listed above and I accept that risk.
Alex M Long 4/20/09	Alex M Long 4/20/09
Employee's Signature / Date	Employee's Signature / Date

APPROVAL

/
Emergency Director Date

SOUTHERN NUCLEAR
PLANT E.I. HATCH

FORM TITLE: AUTHORIZATION TO EXCEED 10 CFR 20 LIMITS

MARK	S	HARMS	5866	1421
(FIRST)	(M.I.)	(LAST)	TLD NUMBER	SECURITY BADGE NO

is authorized to receive an exposure of

35 REM and a thyroid exposure of 0 REM

for the period of 04/20/09 to 04/21/09 .

Reason for requesting exposure in excess of 10CFR20 limits:

A man is injured and pinned in a high radiation area and is expected to receive a lethal dose in 60 minutes.

Mark Harms is a 50 year old man and in good health.

Current year exposure:

1400 mr

Exposure determined by:

Barry Barns 4/20/09
Dosimetry Representative Date

EXPOSURE IN EXCESS OF 10CRF20 LIMITS
I have been made aware of the extension of my exposure limits.
Mark Harms 4/20/09
Employee's Signature / Date

EXPOSURE ABOVE 25 REM
I have been made aware of the risks involved with the exposures listed above and I accept that risk.
Mark Harms 4/20/09
Employee's Signature / Date

APPROVAL

/
Emergency Director Date