

Effective Date 4/25/09

CATEGORY II

REACTOR PROTECTION SYSTEM

ALARMS

- | | |
|--------------------------------|----------------|
| • REACTOR SCRAM TRIP LOGIC A1 | C3 – A2 |
| • REACTOR SCRAM TRIP LOGIC A2 | C3 – A3 |
| • REACTOR SCRAM TRIP LOGIC B1 | C3 – A4 |
| • REACTOR SCRAM TRIP LOGIC B2 | C3 – A5 |
| • NSSSS MSIV LOGIC A INITIATED | C8 – A1 |
| • NSSSS MSIV LOGIC C INITIATED | C8 – A2 |
| • NSSSS MSIV LOGIC B INITIATED | C8 – A3 |
| • NSSSS MSIV LOGIC D INITIATED | C8 – A4 |
| • MANUAL SCRAM | C5 – A3 |
| • REACTOR RECIRC PUMPS TRIP | C1 – D3 |

INDICATIONS

- Loss of the Outboard MSIV indication (A RPS Bus)
- Loss of the Inboard MSIV indication (B RPS Bus)
- Pilot Scram Valve trip actuator logic lights de-energize for LOGIC A or LOGIC B.
- RDCCS STATUS “ACTIVITY CONTROLS DISAGREE”, Illuminated
- ROD MOTION BLOCKS “INSERT BLOCK” and “WITHDRAW BLOCK”, Illuminated

TERMINATED Date/Time: _____

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IMMEDIATE OPERATOR ACTIONS

NONE

AUTOMATIC ACTIONS

HWCI will trip on a full scram

THE FOLLOWING VALVES WILL CLOSE ON A LOSS OF AN RPS BUS:			
VALVE	DESCRIPTION	BUS A	BUS B
HV-F008	RHR Shutdown Cooling	X X	
HV-F015A	RHR Shutdown Cooling Injection	X X	
HV-F015B	RHR Shutdown Cooling Injection	X X	
HV-F009	RHR Shutdown Cooling Suction	X X	
BB-SV-4310	Reactor Water Sample	X	
HV-F001	Reactor Water Clean-up	X	
HV-F049	RHR Discharge to Radwaste	X	
BC-SV-F079A	RHR Sample Line	X	
BC-SV-F079B	RHR Sample Line	X	
HV-F016	Main Steam Line Drain	X	
BB-SV-4311	Reactor Water Sample	X	
HV-F004	Reactor Water Clean-up	X	
HV-F040	RHR Discharge to Radwaste	X	
BC-SV-F080A	RHR Sample Line	X	
BC-SV-F080B	RHR Sample Line	X	
HV-F019	Main Steam Line Drain	X	

ON A LOSS OF AN RPS BUS: RDCS "ACTIVITY CONTROLS DISAGREE" and Rod Motion "INSERT BLOCK" and "WITHDRAW BLOCK" will occur due to the RDCS Logics inability to determine Mode Selector Switch position.

CAUTIONS:

- 1. The RPS MG Set Transfer Switch is a “Break before Make” type switch. Positioning it to the wrong position will result in a full scram.**

Procedures:

- HC.OP-SO.SB-0001(Q), REACTOR PROTECTION SYSTEM OPERATION
- HC.OP-SO.BG-0001(Q), REACTOR WATER CLEANUP SYSTEM OPERATION
- HC.OP-SO.BC-0002(Q), DECAY HEAT REMOVAL OPERATION
- HC.OP-SO.AB-0001(Q), MAIN STEAM SYSTEM OPERATION
- HC.OP-SO.SM-0001(Q), ISOLATION SYSTEM OPERATION
- HC.CH-SA.RC-0002(Q), OPERATION OF THE REACTOR BLDG./RHR SAMPLE STATION.

Valves:

- 1BB-SV-4310, REACTOR RECIRC INBOARD SAMPLE VALVE
- 1BB-SV-4311, REACTOR RECIRC OUTBOARD SAMPLE VALVE

SUBSEQUENT OPERATOR ACTIONS

CONDITION	ACTION
<p>A. Loss of Normal power to RPS Bus</p> <p>Date/Time: _____</p>	<p>___ A.1 RESTORE Normal Power to the affected Bus. (if possible)</p> <p style="text-align: center;">★<u>CAUTION 1</u>★</p> <p>___ A.2 <u>IF</u> Normal Power cannot be restored:</p> <p>___ a. VERIFY Alternate Power is available.</p> <p>___ b. TRANSFER Power to the Alternate Power Supply by POSITIONING the RPS MG SET TRANSFER SWITCH to the Alternate position. [CD324X]</p> <p>___ A.3 RESET the 1/2 Scram as follows:</p> <p>___ a. TURN the key for the Affected RPS channel(s) to the RESET position.</p> <p>___ b. TURN the key BACK to NORMAL.</p> <p>___ c. VERIFY the Scram is reset.</p> <p>___ A.4 <u>IF</u> the MSIV's are OPEN <u>THEN</u> RESET the tripped NSSSS Logic as follows:</p> <p>___ a. PRESS the NUCLEAR STEAM SUPPLY SHUTOFF SYSTEM TRIP LOGIC A(B,C,D) RESET Pb.</p> <p>___ b. VERIFY MSIV TRIP LOGIC TRIPPED goes off.</p> <p>___ A.5 RESTORE isolated equipment IAW applicable SOP.</p>
<p>B. RPS Channel Trip.</p> <p>Date/Time: _____</p>	<p>___ B.1 <u>WHEN</u> the cause of the trip is CORRECTED RESET the 1/2 Scram as follows:</p> <p>___ a. TURN the key for the Affected RPS channel(s) to the RESET position.</p> <p>___ b. TURN the key BACK to NORMAL.</p> <p>___ c. VERIFY the Scram is reset.</p>
<p>C. SV-4310 OR 4311 have CLOSED.</p> <p>Date/Time: _____</p>	<p>___ C.1 NOTIFY Chemistry to remove the RWR sample line from service IAW CH-SA.RC-0002.</p>

REVISION SUMMARY

- Incorporates CP 80095664 which adds a statement that HWCI will trip on a full scram to the Automatic Actions. This was reviewed by the CP and is editorial. (60077918-0310)
- Deletes HV-F023 and HV-F022 in the table under Automatic Actions. These valves were reviewed deleted by CP. This is an editorial change. (20400419)