



- 5/3 1720 R3000 Shutdown A and C DGSW Pump per 23.208 section 8.3 and placed in Standby (Simone/Crane). - jSs
- 5/3 1735 N3000 Added Hydrogen to the generator per 23.122 section 11.0. initial pressure 70 psig, final pressure 75 psig. - jSs
- 5/3 1800 C1100 Released Surveillance 44.010.071 'RPS - Scram Discharge Volume High Water Level, Division I, Channel Functional Test'. The limiting time allowed is 6 Hours per Tech. Spec. 3.3.1. The exit time for this surveillance is 5/3 1820. - ga
- 5/3 1830 C4100 Received 4D11, SLC Ignition Continuity Loss. Lost indication for the circuit B continuity. In the relay room A reads 5ma. B reads 0.2ma. Enter Tech Spec 3.1.5 Action a. 1. (7 day). - jSs
- 5/3 1830 C41 Enter LCO 99-0197 for SLC 'B' Continuity Loss. The expiration date and time for this LCO is 5/10 1830. - ga
- 5/3 1850 C4100 Completed ODI-016 notifications for the apparent loss of continuity to the B squib valve for SLC. - hh

TG Run 12.0	TG Repair 0.0	TG Reserve N/A	
Time Relieved 1945	Off Going NSS Signature <i>[Signature]</i>		On Coming NSS Signature <i>[Signature]</i>

SLC

1/4 Amp Fuse

Had to do with the Mounting of the circuit for the squib plus - it would have fused if needed when pump started tripped so it would not not T.S.

7 days LCO

- 5/3 2247 G5100 Shut down TWMS IAW 23.144 section 10.0. Final torus level is -1.1 inches. - ps
- 5/3 2258 N3031 Lowered Main Generator Voltage 1 volt IAW 23.118 section 8.0 per CSS O'Brien. - ps
- 5/3 2335 P4400 Manually initiated Div 1 EECW IAW 23.127 Section 5.4, to support removal and cleaning of East RBCCW heat exchanger. Restored cooling to non essential load
- 5/3 2340 T4800 Stopped venting the Drywell per 23.406 section 5.1.2. Final pressure is 11.5". -
- 5/3 2359 P4400 Manually initiated Div 2 EECW IAW 23.127 Section 5.4, to support removal and cleaning of East RBCCW heat exchanger. Restored cooling to non essential load
- 5/4 0006 P4200 Shutdown Center RBCCW pump IAW 23.127 section 7.6 to support removal and cleaning of East RBCCW heat exchanger. - ps
- 5/4 0120 D1100 Shut down Div 1 RHRSW rad monitor sample pump IAW 23.626 section 7.2. -
- 5/4 0123 E1151 Shutdown Div. 1 RHRSW pumps 'A' and 'C' IAW 23.208 section 8.1. - ps
- 5/4 0223 -AUTH In preparation for the pre-planned EDG 11 System Outage a Configuration Risk Management Program (CRMP) evaluation has been completed in accordance with MR 12 section 5.2 (TMIS-99-0038) and the risk determined to be low. TMIS-99-0038 evaluated for SLC Pump 'A' being inop for maintenance with the risk being low (SLC Pump 'A' is currently operable). Currently SLC 'B' is inop due to loss of continuity for the 'B' Squib Valve (LCO 99-0197). SLC is functional, with the loss of continuity being due to a blown fuse in the indicating circuit, therefore the risk is still low. The EDG 11 Outage is authorized to commence. - dh
- 5/4 0300 R30 Enter LCO 99-0198 for EDG 11 Outage. The expiration date and time for this LCO is 5/11 0300. - dh
- 5/4 0300 P8000 Enter LCO 99-0199 'Div 1 RHR CO2 Isolated to prevent discharge while lubricating MCC 72EA-2D position 4B-L'. Commenced hourly firewatch, no longer time sensitive. - dh
- 5/4 0455 U/I K. McMahon is the NSS U/I. - am
- 5/4 0458 N3000 Added Hydrogen to the generator per 23.122 section 11.0, initial pressure 70 psig, final pressure 74.5 psig. - ps
- 5/4 0546 N3031 Raised Main Generator Voltage 1 volt IAW 23.118 section 8.0 per CSS O'Brien. - ps
- 5/4 0546 P4100 Started East CW Make-up Pump IAW 23.131 section 12.0 to raise CW Reservoir Level. - ps

- 5/4 0842 P8000 Started the Electric Fire Pump per 28.504.01 section 5.1. - jSs
- 5/4 0850 V4100 Started OSSF HVAC IAW 23.719 Section 4.0, after resetting Over Loads on fan V4100-C012, Will write a CARD if problem persists. - rz
- 5/4 0901 P8000 Shutdown the Electric Fire Pump per 28.504.01 section 5.1 and returned to Auto. - jSs
- 5/4 0919 -UI K. McMahon no longer NSS U/I. - hh
- 5/4 0937 P8000 Started the Electric Fire Pump per 28.504.01 section 5.2. - jSs
- 5/4 0956 P8000 Shutdown the Electric Fire Pump and returned to Auto per 28.504.01 section 5.2. - jSs
- 5/4 1002 B2100 Released Surveillance 44.030.011 'ECCS - ADS Primary Containment Pneumatic Supply System Low Alarm Functional Test'. The limiting time allowed is 12 Hours to Hot Shutdown per Tech. Spec. 3.5.1. The exit time for this surveillance is 5/4 1030. - ga
- 5/4 1115 X80 Exit LCO 99-0199 titled 'Div 1 RHR CO2 Isolated to prevent discharge while lubricating MCC 72EA-2D position 4B-L' after return to service and completion of a licensed operator walkdown. - ga
- 5/4 1200 R3000 Per the Operability Evaluation for CARD 99-10937, stationed continuous fire watches RB2 South and Relay Room NE stairwell (ref. LCO 99-0084) and released the EDG #1 DGSW pump for tagging as part of the EDG #11 outage. - ga
- 5/4 1336 C4100 Turned off MCC for SLC Pump B to replace fuse for squib circuit B continuity. - jSs
- 5/4 1339 C4100 Turned on MCC for SLC Pump B. Fuse immediately blew. Work request 0007991548 being prepared by I&C to troubleshoot and repair the problem. - jSs
- 5/4 1400 N7100 Started CW Pump No. 3 per 23.101 section 5.2 in preparation to shutdown CW Pump No. 5 for maintenance. - jSs
- 5/4 1405 N7100 Shutdown CW Pump No. 5 per 23.101 section 5.4. - jSs
- 5/4 1412 V4100 Started Chem Storage Booster Fan IAW 23.411 Section 6.0. - rz
- 5/4 1421 R3000 Per the evaluation results for SOE 99-01, the EECW Tech. Spec. clarification (96-002) is still valid for the stated pump/flow path combinations. The ARPs for EECW Makeup Tank A Level High/Low (1D92) and EECW Makeup Tank A Pressure High/Low (1D96) have been updated to reflect this condition. Released the fire watches on RB2 and the relay room that were stationed for maintaining Div 1 EECW operability. - ga
- 5/4 1450 G1100 Completed FDCT (.5 feet) to EFST (7.8 feet) IAW 23.718.02 section 5.1 - rz
- 5/4 1450 G1100 Processing EFST (7.8 feet) to W SAT B (6 feet) IAW 23.718.02 section 5.2. - rz
- 5/4 1500 G1100 Processing CWT (2.1 feet) to BST IAW 23.701.16 section 8.0. - rz
- 5/4 1509 N3000 Added Hydrogen to the generator per 23.122 section 11.0, initial pressure 70 psig, final pressure 75 psig. - jSs
- 5/4 1533 G1100 Completed processing CWT (1.1 feet) to BST IAW 23.701.16 section 8.0. - rz
- 5/4 1540 G4100 Added water to FPCCU skimmer surge tank to raise level IAW 23.708 section 6.7. Initial level 6', final level 8.4' - jSs

- 5/4 2138 C4100 Follow up information concerning the loss of continuity on the "B" SLC squib valve: I&C has completed troubleshooting of the circuit and identified a ground in the portion of the circuit that contains the 0-5 ma meter (C41M600B), and the associated 13k ohm resistor (R2). After visual inspection of this portion of the circuit it is believed that the ground is due to an internal malfunction of the meter. At the current time it is believed that in order to safely replace this meter the "A" SLC pump (and control circuitry) also need to be RT'd. Because of the short time frame LCO with both SLC pumps out of service the decision has been made to delay this work until dayshift to allow an independent review, and to ensure that any additional support groups would be available. This has been discussed with the OE (Peterman), the Superintendent of Operations (Hlavaty), and the Plant Manager (Fessler), all are in agreement. - am
- 5/4 2202 B2100 Released Surveillance 44.020.067 'NSSSS - Turbine Building Area Temperature, Division I, Channel Functional Test'. The limiting time allowed is 6 Hours per Tect Spec. 3.3.2. The exit time for this surveillance is 5/4 2238. - dh
- 5/4 2221 N3000 Added Hydrogen to the generator per 23.122 section 11.0, initial pressure 72 psig, final pressure 74.5 psig. - ps
- 5/4 2245 P4200 Placed East RBCCW heat exchanger in service IAW 23.127 section 7.7 following cleaning and removed West RBCCW heat exchanger IAW 23.127 section 7.7. - ps
- 5/4 2257 G1100 Completed W Sat B (.6 feet) to CST/CRT IAW 23.718.05 section 14.0. - jgm
- 5/4 2311 T4600 Tripped RBHVAC to start Div 1 SBGT and shift CCHVAC to recirc IAW 24.404.02. ps
- 5/4 2319 T4100 Verified CT-2B for Reactor Building SPING for restart of RBHVAC IAW 23.426 section 5.0. - ps
- 5/4 2322 T4100 Started East RBHVAC fans IAW 23.426 section 5.0. - ps
- 5/4 2326 T4100 Started Center RBHVAC fans IAW 23.426 section 5.0. - ps
- 5/4 2328 T4102 Shifted CCHVAC to NORMAL IAW 23.413 section 7.7 following completion of 24.413.03. - ps
- 5/5 0056 G1100 Decanting CPS A (7.5 feet) to WST (1.5 feet) IAW 23.701.10 section 5.2 - jgm
- 5/5 0100 T4800 Released Surveillance 24.409.01 'Post LOCA Thermal Recombiner Functional Test'. The limiting time allowed is 30 Days per Tech. Specs. 3.6.6.1. The exit time for this surveillance is \_\_\_\_\_. - dh
- 5/5 0104 E1151 Started RHRSW pumps "A" & "C" per 23.208 section 5.2 in support of 24.409.01. - ps
- 5/5 0107 D1100 Placed Div 1 RHRSW radiation monitor in service and verified proper operation IAW 23.626 section 7.2 (Fulweber/Woods/Cimadon) - ps
- 5/5 0110 G1100 Completed decanting CPS A (4.7 feet) to WST (2.1 feet) IAW 23.701.10 section 5.2 - jgm
- 5/5 0114 G1100 Placed WCT in recirculation for chemistry sample IAW 23.718.01 section 4.1. - jgm
- 5/5 0115 G1100 Placed WST in recirculation for chemistry sample IAW 23.718.01 section 4.2. - jgm
- 5/5 0117 E1150 Started RHR pump 'A' in torus cooling per 23.205 section 5.4 to support 24.409.01. - ps
- 5/5 0215 G1100 Chemistry (Tim Huiatt) Reports WCT sample results Conductivity 1.1  $\mu$ mho, 152 ppb TOC. - jgm

REACTIVITY CONTROL SYSTEMS3/4.1.5 STANDBY LIQUID CONTROL SYSTEMLIMITING CONDITION FOR OPERATION

3.1.5 The standby liquid control system shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 5\*

ACTION:

a. In OPERATIONAL CONDITION 1 or 2:

1. With one pump and/or one explosive valve inoperable, restore the inoperable pump and/or explosive valve to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.
2. With the standby liquid control system otherwise inoperable, restore the system to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours.

Both pumps  
+ SLL  
Tank

b. In OPERATIONAL CONDITION 5\*:

1. With one pump and/or one explosive valve inoperable, restore the inoperable pump and/or explosive valve to OPERABLE status within 30 days or insert all insertable control rods within the next hour.
2. With the standby liquid control system otherwise inoperable, insert all insertable control rods within 1 hour.

SURVEILLANCE REQUIREMENTS

4.1.5 The standby liquid control system shall be demonstrated OPERABLE:

a. At least once per 24 hours by verifying that;

1. The temperature of the sodium pentaborate solution is greater than or equal to 48°F.
2. The available volume of sodium pentaborate solution is within the limits of Figure 3.1.5-1.
3. The temperature of the pump suction piping is greater than or equal to 48°F.

\*With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

### 3/4.8 ELECTRICAL POWER SYSTEMS

#### 3/4.8.1 A.C. SOURCES

##### A.C. SOURCES - OPERATING

#### LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two separate and independent onsite A.C. electrical power sources, Division I and Division II, each consisting of two emergency diesel generators, each diesel generator with:
  1. A separate day fuel tank containing a minimum of 210 gallons of fuel,
  2. A separate fuel storage system containing a minimum of 35,280 gallons of fuel, and
  3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

#### ACTION:

- a. With one or both offsite circuits of the above required A.C. electrical power sources inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours; demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1. within one hour and at least once per 8 hours thereafter and,
- b. With one or both diesel generators in one of the above required onsite A.C. electrical power divisions inoperable;
  1. Demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1 within one hour and at least once per 8 hours thereafter, and if the diesel generator(s) became inoperable due to any cause other than an inoperable support system, an independently testable component, or preplanned preventive maintenance or testing, by performing Surveillance Requirement 4.8.1.1.2.a.4 for one diesel generator at a time within 24 hours, unless the absence of any potential common mode failure for the remaining diesel generators is determined, and

ELECTRICAL POWER SYSTEMSLIMITING CONDITION FOR OPERATION (Continued)ACTION (Continued)

2. Verify within 8 hours and at least once per 8 hours thereafter, that CTG 11-1 is OPERABLE. Restore the inoperable division to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
3. If the requirements of ACTION b.2. above for CTG 11-1 cannot be met, either restore the inoperable division to OPERABLE status within 72 hours (not to exceed 7 days from the time the division became inoperable); or, satisfy the requirements of ACTION b.2 above within 72 hours and restore the inoperable division to OPERABLE status within 7 days from the time the division became inoperable; or, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With one or both diesel generators in one of the above required onsite A.C. electrical power divisions inoperable, in addition to ACTION b, above, verify within 2 hours that all required systems, subsystems, trains, components and devices that depend on the remaining onsite A.C. electrical power division as a source of emergency power are also OPERABLE; otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. With both of the above required onsite A.C. electrical power divisions inoperable;
  1. Demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1 within one hour and at least once per 8 hours thereafter; and
  2. Restore at least one of the above required inoperable divisions to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours; and
  3. Restore the second of the above required divisions to OPERABLE status within the time required by Action b above from the time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

May 3<sup>rd</sup>  
1830  
Entered LCO.



DETROIT  
EDISON

# Condition Assessment Resolution Document (CARD)

No. 99 13512

Page 1

## INITIATOR

System No: C41 Component PIS No: SLC Location: Feleby Room

Condition Title: SLC 'B' Continuity Loss

QA Finding: Yes  No

## ACTION REQUESTED

WR  TSR  DCR  Label Request  Investigation

## CONDITION DESCRIPTION

RECEIVED (3D11) SLC Continuity loss ANNUNCIATOR and "CKE B Continuity" LIGHT WENT OUT. INVESTIGATION REVEALED FUSE F4 (SEE DWG I-2131-01) WAS BLOWN. INVESTIGATION IN PANEL H11P613 FOUND NO EVIDENCE OF BURNED OR CHARRED WIRES, COMPONENTS, LOOSE TERMINATIONS OR UNUSUAL ODCRS. THE FUSE DID NOT APPEAR TO HAVE BLOWN IN AN UNCHARACTERISTIC MANNER.

## MAINTENANCE RULE EVALUATION REQUIRED

Continued

## IMMEDIATE ACTIONS TAKEN

SEE ABOVE.

Continued

Initiator M. PHILIPON ID No: 51850 Tel Ext: 64771 Date: 5/3/99 Time: 2130  
Initiating Organization: NPP Feedback Requested: Yes  No  Initial Cause Code: 4A (See back for Initial Cause Codes)

## SUPERVISOR REVIEW

Level: 1  2  3  4  6 Intermediate Supervisor Signature: [Signature] ID No: 50574 Date: 5/3/99

## REPORTABILITY / OPERABILITY REVIEW

Not applicable Initial / ID No. / Date

Mode: 1 Rx Power: 97 Rx Temperature: 540 Rx Pressure: 1023 Rx Level: 197 Core Flow: 87

Operable: Yes  No  Requires Engineering Review (MES27): Yes  No  LCO No.: 99-0197

Reportable: 1 Hr  4 Hr  24 Hr  Other: N/A LER No.: \_\_\_\_\_ RACTS No. (DA Link): \_\_\_\_\_

Potentially Reportable Condition Requiring Nuclear Licensing Review (MLS05): Yes  No  Mode Change Restraint: YES N/A

NSS Signature: [Signature] ID No: 50574 Date: 5/3/99