

Ref 19
File

SITE PROBLEM REPORT
RESOLUTION TRANSMITTAL

To: Change Control For Distribution
S. H. Klein For Information
B. A. Karrasch For Information
L.C. Payers For Action
S.P. Mangan All Affected Task Engineers
For Information
All Affected Engineering
Unit Managers

File: 13- 06 - 183
Contract No.: 620-00 06
SPR Number: 153 1000
Title: Re-RV2 Failure
Down Reactor T2 & E
Status Code: R
Date Of Transmittal: 2/20/79

ion Requested: No action is requested from SPC by the Customer
to begin is required to purge close this site

RECEIVED
DATE 2/20/79
TIME 10:00 AM
BY [Signature]

Reply and Return This Transmittal to: Steve Dorman 83166

Nuclear Service Support Engineer

CC: J. R. Bohart - International Support
P. E. Perrone - OFR
L. C. Rogers - TMI Site
B. W. Street - Oconee Site
D. A. Lee - TECo Site

8001170 698

P

| | | |
|--|--------------------|--|
| Customer Parley Control | Office L. Brown | Prod. ID, Cont. No. 13-63-0006 |
| Vendor Holley Meter Company | P.A. NO. | Part No./Test No. Group No. Sub. No. 53-001-001 |
| Project Name IC-1-2 Failed Under Reactor Trip I | | Problem Contact S. P. Wagner 2/12/79 |

DESCRIPTION OF PROBLEM:

SEE ATTACHED

STATUS-ACTION TO DATE, INCLUDING PERSONS CONTACTED:

SEE ATTACHED

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

SEE ATTACHED

INFORMATION ONLY

RESOLUTION: DURNS & ROE MADE CHANGE TO CLOSE VALVE ON LOSS OF POWER. BTR ISSUED ENGR. CHANGE MEMO TO HAVE CHANGE MADE. NO FURTHER ACTION IS REQUIRED FROM BFW. (FROM BOB CUTLER - GPUSC). LRPLETKE

| | | | |
|---|------|--|--|
| PREPARED BY | DATE | APPROVED BY | DATE |
| REVIEWED BY | DATE | | |
| COST CATEGORY <input type="checkbox"/> NORM <input type="checkbox"/> OTHER | | FIELD CHANGE REQ <input type="checkbox"/> YES <input type="checkbox"/> NO | P.C.A. NO. 04- SIGNIF. DEFICIENCY <input type="checkbox"/> YES <input type="checkbox"/> NO |

SITE COMPLETION REPORT:

| | |
|--|--------------------------------------|
| DEVIATIONS: <input type="checkbox"/> NONE | SPR REV NO. <input type="checkbox"/> |
| DATE COMPLETED: | |
| COMPLETED BY | DATE |
| SHEET 1 OF 10 | |

DESCRIPTION OF INCIDENT

On 29 March 1978 at 1437 hours, the TMI-1 reactor tripped on pump power trip followed by rapid depressurization of the Reactor Coolant System. The reactor coolant low pressure trips associated within 73 seconds and the emergency HP injection started in about 2 minutes following the reactor trip.

The cause of the trip was traced to deenergizing of vital power supply 2-1V.

- (a) Vital Bus 2-1V feeds the RCP-1A monitoring circuit. Since RCP-2A was already down for plant repairs, the loss of power to the RCP-1A monitoring circuit registered as pump operating in "A" loop and hence the signal to trip the reactor.
- (b) Vital Bus 2-1V also supplies power to the X bus for non-nuclear instrumentation. Because of loss of X bus to RWI, the electromagnetic relief valve, RC-RV2, received an open command, which initiated a rapid system depressurization.
- (c) The electromagnetic relief valve, RC-RV2, does not have valve indication in the Control Room, so the Control Room operator was unaware that RC-RV2 had opened; hence, the operator did not take the remedial action of closing the electromagnetic relief valve isolation valve, RC-IV2.
- (d) There exists an apparent anomaly in the logic for the operation of NaOH tank valves connected to RWST lines that feed the MU pumps suction. Due to this logic, NaOH was fed into the suction lines of MU pumps during the high pressure injection, which engaged after rapid depressurization.
- (e) The circumstances which led to the deenergization of vital power supply 2-1V are enumerated in the Met-Ed Reactor Trip Report (copy attached for reference).

STATUS - ACTION TO DATE

GPU/Hot-Bd are sorting the related problems as follows:

- (a) The reactor building isolation and cooling surveillance procedure is being revised to the effect that they do not disconnect the alternate source of power to vital buses.
- (b) The logic for operating NaOH tank valves during HP injection is being reconsidered. The Reactor Coolant System chemistry was brought back to specifications.
- (c) The electromechanical fail open logic is being questioned.

Tom Scott of Nuclear Service and Bob Burris of Control Analysis were informed. The apparent consensus was that the electromagnetic relief valve should not fail open but should fail closed. In the safety analysis, no credit was taken for the relieving capability of the electromagnetic valve. The code safety valves exist to take care of the pressure transients.

On request by Ron Toole, GPU Test Superintendent, a logic change was suggested to GPU after consulting Doug Kemp of Engineering. A copy of GPU Problem Report 2718 is attached for reference.

It was also suggested that RC-RV2 open-close signal status lamp be wired to operator console. Burns & Roe is working on this aspect.

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL

As requested by Ron Toole, a formal field change is being issued to modify the fail open logic of RC-RV2, and the desirability of having the key switch in NMI cabinets at location 4-5-14 for testing auto operation of RC-RV2 should be reconsidered.

SYSTEM:

RCS

TP NO.

MTX NO. 147

PROBLEM DESCRIPTION:

The electronic relief valve opens on loss of power to its control bytable. Suggest changing this or providing an indication on Control Panel that indicates valve has an open signal.

BY:

R. Toke

ORGANIZATION:

GPM

DATE:

3-30-78

FOR RESOLUTION BY:

B&W - Rogers

DATE SENT:

3-30-78

PROPOSED RESOLUTION:

SEE ATTACHED

BY:

S. J. ...

DATE:

4-3-78

ACTION BY:

B&W - Brownwell

DATE SENT:

4-3-78

Pri 1 - issue ECM to accomplish

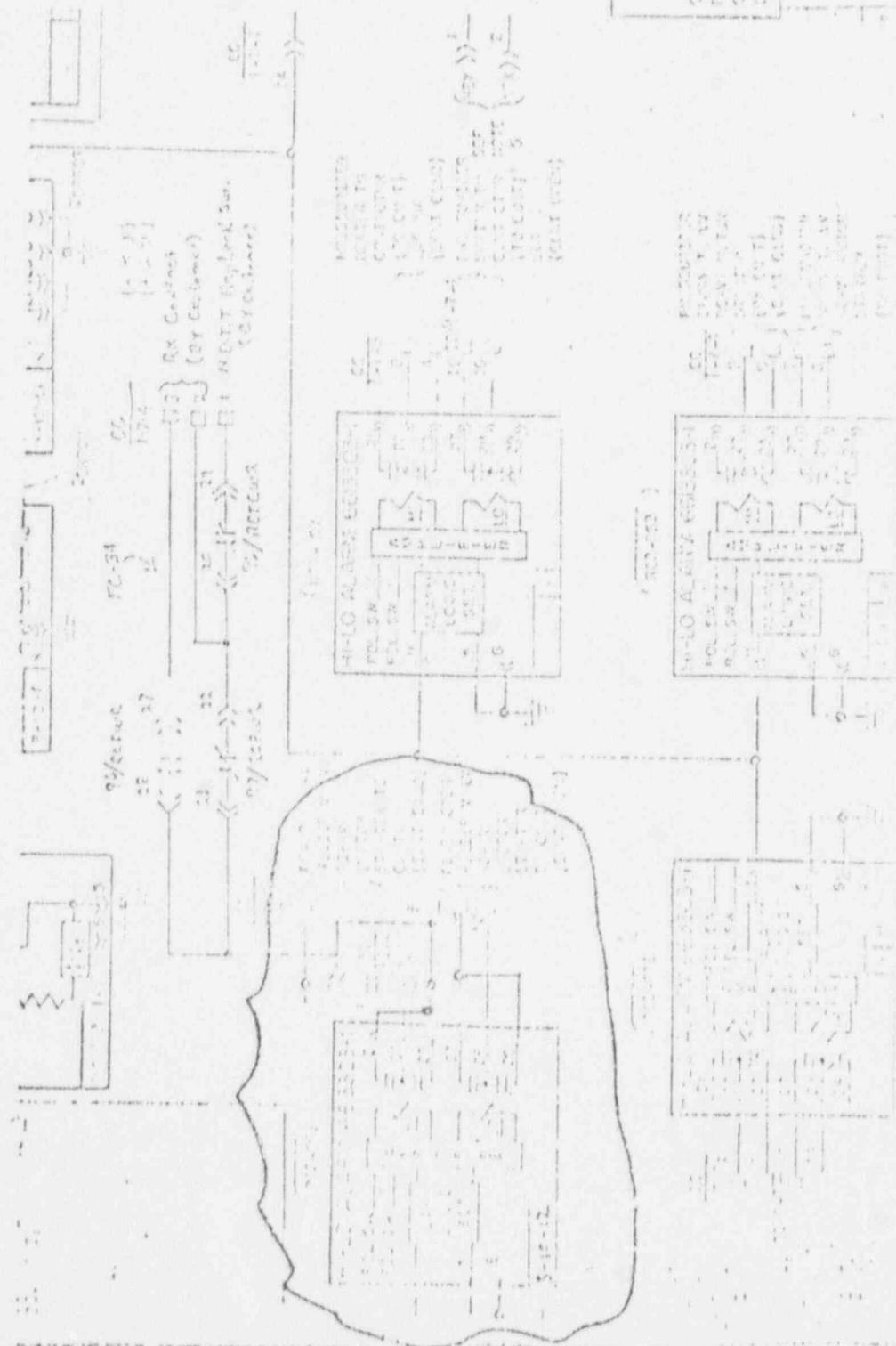
ACTION COMPLETED
SATISFACTORILY BY:

PROPOSED RESOLUTION

BEW has reviewed the electromagnetic relief valve logic and agrees to the concept of having relief valve fail closed on loss of HMI power supply to the Hi-Low Monitor (3-10-12). To achieve this condition, switch S-1 should be in the deenergized mode and the wiring modifications be made as indicated in the attached sketch. Per your request, a formal field change will follow.

To provide an indication that the electromagnetic relief valve has an open signal, a review of the construction schematics indicates that a control room indicating light operated from power to the solenoid can be added without additional cabling. (Refer to H&B drawing #3079, sheet 14.) This light could be actuated by the same auxiliary relay in the power distribution panel that supplies power to the valve solenoid.

1. Change Switch S-1 position to deenergized in module 3-10-12
2. Lift lead from pin 23 of module 3-10-12 and connect to pin 21
3. Lift lead from pin 27 of module 3-10-12 and connect to pin 29



| | | | |
|-----------------------|--|------------------------------|--|
| CUSTOMER: [illegible] | | DATE: [illegible] | |
| PLANT: [illegible] | | CONTRACTING ENG: [illegible] | |
| BY: [illegible] | | DATE: [illegible] | |
| GALLEY METER COMPANY | | WICKLIFFE, OHIO | |

1. Time 1937

Date 3-27-70

2. Cause of trip.

Fuse blew on 2-1V inverter de-energizing RCP monitor. RCP - 2A already stopped so RPS saw both pumps stopped in "A" loop

3. Plant conditions prior to trip

| | | | |
|--|--|----------------------|----------------------|
| Power Level <u>446⁹ MWs</u> | Reactor Coolant System Pressure <u>2320</u> psig | | |
| Temp <u>535</u> °F | Reactor Coolant System Flow <u>680</u> % | | |
| Takeup Tank Level <u>39</u> inches | Pressurizer Level <u>95"</u> inches H ₂ O | | |
| RC Break <u>2494</u> ppm | IPP <u>0</u> | | |
| Control Rod Positions (withdrawn) | | | |
| Group 1 <u>100</u> % | Group 3 <u>100</u> % | Group 5 <u>100</u> % | Group 7 <u>83</u> % |
| Group 2 <u>100</u> % | Group 4 <u>100</u> % | Group 6 <u>83</u> % | Group 8 <u>100</u> % |

ICR Stations in Hand All except turbine bypass and 5H FW valves.

4. Evolutions in progress prior to trip.

ISOTHERMAL Temp with determination.

5. Corrective actions to prevent recurrence.

Fix fuse blowing problem on Inverters

6. Time and date next criticality achieved.

M. K. Beebe
Shift Supervisor

Supervisor of Operations

| | | | |
|--------------|------|--------------------------------|-------|
| 14:37:25:000 | 3195 | RP RED CH PWR/PMPS TRIP | TRIP |
| 14:37:25:095 | 3196 | RP YELLOW CH PWR/PMPS TRIP | TRIP |
| 14:37:25:023 | 3198 | RP BMS CH PWR/PMPS TRIP | TRIP |
| 14:37:25:039 | 3175 | RP RED CH RC HI PRESS TRIP | HIGH |
| 14:37:25:075 | 3207 | RP RED CH CONT MON PS FAULT | FAULT |
| 14:37:25:098 | 3197 | RP GREEN CH PWR/PMPS TRIP | TRIP |
| 14:37:25:119 | 3191 | RP RED CH PWR/BAL/FL TRIP | TRIP |
| 14:37:25:151 | 3179 | RP RED CH RC LOW PRESS TRIP | LOW |
| 14:37:25:175 | 3183 | RP RED CH PRESS-TEMP TRIP | TRIP |
| 14:37:25:178 | 3203 | RP RED CH RC HI TEMP TRIP | HIGH |
| 14:37:25:192 | 3195 | RP RED CH PWR/PMPS TRIP | TRIP |
| 14:37:25:204 | 3187 | RP RED CH OVERPOWER TRIP | TRIP |
| 14:38:39:160 | 3182 | RP BLUE CH RC LOW PRESS TRIP | LOW |
| 14:38:39:709 | 3181 | RP YELLOW CH RC LOW PRESS TRIP | LOW |
| 14:38:46:812 | 3180 | RP GREEN CH RC LOW PRESS TRIP | LOW |
| 14:39:18:333 | 3166 | ES ACT B EMER INJ BT3 CH TRIP | TRIP |
| 14:39:18:335 | 3163 | ES ACT A EMER INJ BT3 CH TRIP | TRIP |
| 14:39:25:589 | 3162 | ES ACT A EMER INJ BT2 CH TRIP | TRIP |
| 14:39:25:591 | 3165 | ES ACT B EMER INJ BT2 CH TRIP | TRIP |

GROUP 4
15:34:11
03/29/78

SEQUENCE OF EVENTS REVIEW

| | | | |
|--------------|------|-------------------------------|------|
| 14:41:38:854 | 3164 | ES ACT B EMER INJ BT1 CH TRIP | TRIP |
| 14:41:38:884 | 3161 | ES ACT A EMER INJ BT1 CH TRIP | TRIP |
| 14:41:38:905 | 3179 | RP RED CH RC LOW PRESS TRIP | LOW |
| 14:41:39:670 | 3195 | RP RED CH PWR/PMPS TRIP | TRIP |

1A

2A

1B

2B

2-10

| | | | | |
|----------|------|------|-----------------------------------|--------|
| 14:55:00 | NORM | 0035 | DR CLR 1B TO COM H FL(RH/N) | 0 |
| 14:12:00 | CONT | 2325 | ES ACT A 2/3 LOGIC BLDG ISLN GP2 | TEST |
| 14:12:48 | CONT | 2825 | ES ACT A BLDG ISLN INJL TEST GP2 | NORM |
| 14:25:00 | CONT | 2825 | ES ACT A BLDG ISLN INJL TEST GP2 | TEST |
| 14:27:00 | CONT | 2825 | ES ACT A BLDG ISLN INJL TEST GP2 | NORM |
| 14:27:10 | BAD | 0486 | SP FLOWTR VLV TRAIN B DP (PSI) | -???.? |
| 14:27:00 | LOW | 0003 | SP STM GEN B S-U RANGE LVL (IN) | 25.9 |
| 14:29:40 | NORM | 0486 | SP FLOWTR VLV TRAIN B DP (PSI) | 183.2 |
| 14:29:57 | NORM | 0003 | SP STM GEN B S-U RANGE LVL (IN) | 26.5 |
| 14:30:10 | BAD | 0486 | SP FLOWTR VLV TRAIN B DP (PSI) | -???.? |
| 15:25:46 | FLAG | 3576 | SP10A-PT4 INSTR CONDITION | GOOD |
| 15:24:48 | FLAG | 3575 | SP10A-PT3 INSTR CONDITION | BAD |
| 15:24:48 | FLAG | 3577 | SP10B-PT3 INSTR CONDITION | BAD |
| 15:26:29 | NORM | 0486 | SP FLOWTR VLV TRAIN B DP (PSI) | 183.2 |
| 15:29:31 | BAD | 0006 | RP AVERAGE LINEAR POWER (PCT) | -???.? |
| 15:29:31 | CONT | 2871 | RP CH A POWER SUPPLY | TRIP |
| 15:29:31 | CONT | 2875 | RP CH A FAN | FAIL |
| 15:29:31 | CONT | 2883 | RP CH A RCP CONT MON PS VOLTS | TRIP |
| 15:29:32 | CONT | 2923 | RC LOOP A PT3 PRESS < 1600 PSI | YES |
| 15:29:32 | CONT | 2951 | DSP A MTR COOLING WTR | TRIP |
| 15:29:32 | CONT | 3003 | RP CH A RCIR BLDG PRESS % | HIGH |
| 15:29:32 | CONT | 3010 | CRD REACTOR TRIP CONFIRM | TRIP |
| 15:29:32 | CONT | 3013 | CRD SAFETY RODS NOT WITHDRAWN | YES |
| 15:29:32 | CONT | 3016 | CRD PROG LAMP FAULT | YES |
| 15:29:32 | CONT | 2828 | ES ACT A 2/3 LOGIC BLDG ISLN GP2 | ISLN |
| 15:29:32 | NORM | 0006 | RP AVERAGE LINEAR POWER (PCT) | 2.2 |
| 15:29:33 | LOW | 0521 | RP PWR CH H'S IMBALANCE(PCT) | -43.80 |
| 15:29:34 | CONT | 2673 | PRESS ITR GROUP 5 | NORM |
| 15:29:34 | LOW | 0807 | RP CH A POS SUPPLY OUTPUT(VOLTS) | 1.92 |
| 15:29:34 | HIGH | 0511 | RP CH A NEG SUPPLY OUTPUT(VOLTS) | -1.55 |
| 15:29:34 | LOW | 0619 | RP POWER RANGE HV H15 (VOLTS) | 81. |
| 15:29:35 | CONT | 2676 | PRESS ITR GROUP 5 | NORM |
| 15:29:40 | LOW | 0770 | CH BOR WTR TANK LVL 2 (FTH2O) | 28.31 |
| 15:29:55 | LOW | 0398 | RC LOOP A WIDE RANGE PRESS | 3. |
| 15:29:55 | HIGH | 0402 | RC PRESS REL VLV RV2 OUT TEMP | 218.6 |
| 15:29:53 | NORM | 0475 | SP STARTUP FLOWTR FLOW A (IN/H2O) | 439.2 |
| 15:31:02 | CONT | 2328 | ES ACT A 2/3 LOGIC BLDG ISLN GP2 | NORM |
| 15:31:24 | CONT | 2318 | ES ACT A 2/3 LOGIC EMER INJ GP1 | ACT |
| 15:31:24 | CONT | 2319 | ES ACT A 2/3 LOGIC EMER INJ GP2 | ACT |
| 15:31:24 | CONT | 2820 | ES ACT A 2/3 LOGIC EMER INJ GP3 | ACT |
| 15:31:24 | CONT | 2943 | ES ACT B 2/3 LOGIC EMER INJ GP1 | ACT |
| 15:31:24 | CONT | 2844 | ES ACT B 2/3 LOGIC EMER INJ GP2 | NORM |
| 15:31:24 | CONT | 2945 | ES ACT B 2/3 LOGIC EMER INJ GP3 | NORM |
| 15:31:24 | CONT | 2925 | RC LOOP B PT1 PRESS < 1600 PSI | YES |
| 15:31:24 | CONT | 2934 | DHP A MTR STATUS | NORM |
| 15:31:24 | CONT | 2935 | DHP B MTR STATUS | NORM |
| 15:31:24 | LOW | 0115 | DECAY HT REM PMP 1A DISCH PRESS | 17.1 |
| 15:31:24 | LOW | 0116 | DECAY HT REM PMP 1B DISCH PRESS | 30.0 |
| 15:31:24 | CONT | 3183 | ES ACT A EMER INJ BT3 CH TRIP | TRIP |
| 15:31:24 | CONT | 3186 | ES ACT B EMER INJ BT3 CH TRIP | TRIP |
| 15:31:24 | CONT | 3241 | CH REMOVAL PMP 1A | ON |
| 15:31:24 | CONT | 3242 | CH REMOVAL PMP 1B | ON |
| 15:31:24 | CONT | 3247 | DECAY HT CL CLG WTR PMP DC-P-1A | ON |
| 15:31:24 | CONT | 3248 | DECAY HT CL CLG WTR PMP DC-P-1B | ON |
| 15:31:25 | CONT | 2740 | D-G ROOM AIR CDROR DE-P-2C | NORM |
| 15:31:25 | HIGH | 0403 | RC PRESS REL VLV RV1A OUT TEMP | 202.4 |
| 15:31:25 | HIGH | 0404 | RC PRESS REL VLV RV1B OUT TEMP | 202.1 |
| 15:31:25 | CONT | 2933 | DHP B MOTOR COOLING WTR | NORM |
| 15:31:25 | CONT | 2924 | RC LOOP A PT4 PRESS < 1600 PSI | YES |
| 15:31:25 | CONT | 3169 | ES ACT A EMER INJ BT3 CH TRIP | TRIP |

-???.? 14:37

| | | | | |
|----------|------|------|-----------------------------------|--------|
| 15:31:53 | CONT | 2622 | ES ACT A EMER INJ CH2 BYPASSED | NORM |
| 15:31:54 | CONT | 2034 | DWP A MTR STATUS | TRIP |
| 15:31:54 | CONT | 3241 | INH REMOVAL IMP 1A | OFF |
| 15:31:54 | CONT | 2618 | ES ACT A 2/3 LOGIC EMER INJ GP1 | NORM |
| 15:31:54 | CONT | 2819 | ES ACT A 2/3 LOGIC EMER INJ GP2 | NORM |
| 15:31:54 | CONT | 2820 | ES ACT A 2/3 LOGIC EMER INJ GP3 | NORM |
| 15:31:54 | CONT | 2823 | ES ACT A EMER INJ CH3 BYPASSED | NORM |
| 15:31:55 | LOW | 0339 | RC LOOP A WIDE RANGE PRESS | 1576. |
| 15:31:55 | LOW | 0500 | RC LOOP B WIDE RANGE PRESS | 1539. |
| 15:31:57 | CONT | 2847 | ES ACT B EMER INJ CH2 BYPASSED | NORM |
| 15:31:58 | CONT | 2843 | ES ACT B 2/3 LOGIC EMER INJ GP1 | NORM |
| 15:31:58 | CONT | 2844 | ES ACT B 2/3 LOGIC EMER INJ GP2 | ACT |
| 15:31:58 | CONT | 2845 | ES ACT B 2/3 LOGIC EMER INJ GP3 | ACT |
| 15:31:58 | CONT | 2848 | ES ACT B EMER INJ CH3 BYPASSED | NORM |
| 15:32:21 | CONT | 2935 | DWP B MTR STATUS | TRIP |
| 15:32:22 | CONT | 3242 | INH REMOVAL IMP 1B | OFF |
| 15:33:44 | CONT | 2871 | RP CH A POWER SUPPLY | NORM |
| 15:33:44 | CONT | 2875 | RP CH A FAN | NORM |
| 15:33:44 | CONT | 2951 | DWP A MTR COOLING WTR | NORM |
| 15:33:45 | CONT | 3161 | ES ACT A EMER INJ BT1 CH TRIP | TRIP |
| 15:33:45 | CONT | 3164 | ES ACT B EMER INJ BT1 CH TRIP | TRIP |
| 15:33:58 | BAD | 0475 | SP STARTUP FLOWTR FLOW A (IN/120) | -???.? |
| 15:33:59 | BAD | 0466 | SP FLOWTR VLV TRAIN B DP (PSI) | -???.? |
| 15:34:03 | NORM | 0581 | RP FWR CH N15 IMBALANCE(PCT) | - .18 |
| 15:34:04 | NORM | 0607 | RP CH A POS SUPPLY OUTPUT(VOLTS) | 15.02 |
| 15:34:04 | NORM | 0611 | RP CH A NEG SUPPLY OUTPUT(VOLTS) | -14.99 |
| 15:34:10 | HIGH | 0770 | CH BUR WTR TANK LVL 2 (FTH20) | 54.72 |
| 15:38:32 | BAD | 0369 | RP SRCE RANGE N11 LVL (LOG CPS) | -7.??? |
| 15:38:42 | CONT | 2726 | RS SUMP PUMP WDL-P-2A | ON |
| 15:38:49 | CONT | 2821 | ES ACT A EMER INJ CH1 BYPASSED | NORM |
| 15:38:50 | CONT | 2846 | ES ACT B EMER INJ CH1 BYPASSED | NORM |
| 15:39:18 | CONT | 3247 | DECAY HT CL CLG WTR FMP DC-P-1A | OFF |
| 15:39:19 | CONT | 3248 | DECAY HT CL CLG WTR FMP DC-P-1B | OFF |
| 15:39:24 | LOW | 0113 | DECAY HT CL CLG FMP 1A DISCH | 22.2 |
| 15:39:24 | LOW | 0114 | DECAY HT CL CLG FMP 1B DISCH | 23.2 |
| 15:41:09 | CONT | 2740 | D-G ROOM AIR CRRSR DE-P-2C | TRIP |
| 15:41:23 | NORM | 0466 | SP FLOWTR VLV TRAIN B DP (PSI) | 183.2 |

| | | | | |
|----------|--------|----------------------|---------------------------------|--------|
| 15:42:33 | CONT | 3158 | DIESEL GEN DF-X-1A FAULT | NORM |
| 14:51:01 | SYSTEM | DATE AND TIME SET TO | 03/29/78 14:51:00 | |
| 14:51:08 | FLAG | 3575 | SP10A-PT3 INSTR CONDITION | GOOD |
| 14:51:08 | FLAG | 3577 | SP10B-PT3 INSTR CONDITION | GOOD |
| 14:51:08 | FLAG | 3579 | RC3A-PT1 INSTR CONDITION | BAD |
| 14:51:08 | FLAG | 3582 | RC3B-PT2 INSTR CONDITION | BAD |
| 14:51:08 | FLAG | 3583 | RC4A-M5 INSTR CONDITION | BAD |
| 14:51:08 | FLAG | 3586 | RC4B-M5 INSTR CONDITION | BAD |
| 14:51:08 | FLAG | 3587 | RC4B-TE2 INSTR CONDITION | BAD |
| 14:51:08 | FLAG | 3589 | RC14-DPT1 INSTR CONDITION | BAD |
| 14:51:15 | CONT | 3159 | DIESEL GEN DF-X-1B FAULT | NORM |
| 14:51:42 | CONT | 3158 | DIESEL GEN DF-X-1A FAULT | FAULT |
| 14:52:24 | CONT | 3159 | DIESEL GEN DF-X-1B FAULT | FAULT |
| 14:55:14 | CONT | 2726 | RS SUMP PUMP WDL-P-2A | OFF |
| 14:56:34 | BAD | 0040 | MSR 1D DR TO 3510A NO FL(KLD/H) | -???.? |

15:00:01 03/29/78

April 29, 1978 Transient 70-3

Electromotive Pul of Valve Opened due to loss of Utility Bus 2-1V



Event Number _____

Time of Event 1437Was a critique held? ☒ Yes ☐ NoCritique Minutes attached? ☐ Yes ☒ NoSubject of Event: Blew fuse on 2-1V inverter

1. Description of event and apparent cause:

(Personnel _____ Procedure _____ Equipment ☒ Other _____)

While performing RB Isol & Cooling Surveillance, fuse blew on 2-1V. Alternate source was up per ES procedure, RPS "A" power was de-energized. Pump power monitor lost power, this made RPS A think 1st RCP stopped, 2A RCP was already stopped, 2 pumps are loop off RPS trip. Also lost power to electro-matic relief B/S which opened relief. No indication on console that electro-matic opened. Most primary inst. fed from 2-1V. Had ~~some~~ ES Act due to Electro-matic opening. All ES equipment started. Injected some BWST and NaOH tank to RPS. Stopped MW-P-1C and closed NaOH valves. Also closed DW-V-5A.

2. Plant status at time of event:

532° , 4×10^{-9} amps

Not Zero power physics tests in progress

3. Immediate evaluation/corrective action taken and results:

Brought plant back to Mode 5 status after securing all ES equipment.

4. Is further evaluation/corrective action necessary ☒ Yes ☐ No
(Define as necessary)

Perform ECM to remove ES contact on alternate supply to Inverters

5. Temporary corrective action:

Write above ECM

6. Permanent corrective action:

Change ES procedures to reflect not opening alternate supply to Inverters while performing ES surveillance

Evaluators: M. Z. Bera 3/27/28
Supervisor/Foreman Date

Department Head Date

Approved: Unit 1 Superintendent and/or Date
Unit 1 Superintendent Technical Support

Unit 2 Superintendent and/or Date
Unit 2 Superintendent Technical Support

Station Superintendent Date

All necessary action completed: _____
Date

cc: Station Superintendent
Unit 1 Superintendent and/or Unit 1 Superintendent Technical Support
Unit 2 Superintendent and/or Unit 2 Superintendent Technical Support
Supervisor of Operations - Unit 1
Supervisor of Operations - Unit 2
Supervisor of Maintenance
Supervisor of Radiation Protection/Chemistry
File 519
1-TASK System Coordinator
Quality Control