



UNIT 2

DUTY OFFICER REQUIREMENTS AFTER A TRIP OR ESF ACTUATION

PAGE NO.

1-3

EFF. REV.

1

1. OBJECTIVE

- 1.1 To provide a procedure outlining the duties and responsibilities of the Duty Officer in the event of an actuation of the Reactor Protection System or the Engineered Safety Features System.

2. ACCEPTANCE CRITERIA

- 2.1 The cause of the Reactor Trip or ESF Actuation must be determined.  
2.2 All safety systems functioned as designed.  
2.3 Debriefing of involved personnel is completed.

3. REFERENCES

N/A

4. PREREQUISITES

- 4.1 An actuation of the Reactor Protection System or the Engineered Safety Features System has occurred.

5. INITIAL CONDITIONS

None.

6. PRECAUTIONS

N/A

7. PROCEDURE

- 7.1 In the event of a reactor trip, review the following to determine the cause and to verify that all safety systems functioned as required. Complete Ops Form 2671-1.
- a) Pre-Post Trip Report
  - b) Trip Buffer Printout
  - c) Control Room Recorder Charts
  - d) Appropriate Safety Function Status Check Ops Form
  - e) Plant Incident Report
- 7.2 In the event of an ESF Actuation, complete the appropriate ESF Actuation Checklist, Ops Form 2671-2, 3 or 4. Use the Trip

Buffer printout to verify all safety system components functioned as required.

- 7.3 Conduct with the Shift Supervisor, a complete debriefing of involved personnel before they leave the site.
- 7.4 Complete an initial Plant Incident Report to include:
  - a) A chronological description of the pertinent events leading up to the trip (or actuation) and after the trip (or actuation) until stable plant condition is reached.
  - b) A Comparison of plant response after a trip to the ranges for those parameters given in EOP 2525. Comment on any deviations.
  - c) the cause of the event
  - d) a determination as whether all safety equipment functioned properly
  - e) corrective action, if any
  - f) action taken to prevent recurrence, if any.
- 7.5 Attach all completed Ops Forms to the PIR. Include the completed Safety Function Status Check Forms.
- 7.6 Attach a copy of the prepost trip report, trip buffer printouts and copies of any pertinent strip charts.
- 7.7 Return computer printouts to Reactor Engineering.
- 7.8 Forward the PIR to the OPS Supervisor/Unit Superintendent.

## 8. RESTORATION

- 8.1 If the cause of the event has been determined and all safety equipment functioned properly, then obtain permission to start up or continue operation in accordance with the Operations Supervisor or Unit Superintendent instructions.
- 8.2 If the cause of the trip is not known, the Duty Officer will convene a meeting of the Plant Operations Review Committee (PORC) prior to restart to review the trip and transient data. The PORC review will consider the following:
  - 8.2.1 The actual or most probable cause of the trip.

- 8.2.2 The maintenance and testing necessary before reactor restart including additional measures to verify the most probable cause.
- 8.2.3 Additional monitoring or trending required during and/or after reactor restart.
- 8.2.4 Necessary briefings to operations and/or maintenance personnel concerning specific equipment indications or possible malfunctions.
- 8.2.5 The conditions necessary for a reactor restart.
- 8.3 If any safety related equipment failed to function properly, the Duty Officer will verify safety related equipment is operable per Technical Specification Requirements for appropriate Mode changes.

9. CHECKLISTS

- 9.1 Unit 2 Duty Officer Trip Determination Checklist, Ops Form 2671-1.
- 9.2 ESF Actuation Checklist, Facility 1, Ops Form 2671-2.
- 9.3 ESF Actuation Checklist, Facility 2, Ops Form 2671-3.
- 9.4 ESF Actuation Checklist, Facility 5, Ops Form 2671-4.

JB:ejz



APPROVED BY: Joe Hillery DATE: 5/10/85 PORC MTG NO 2-85-87

UNIT 2 DUTY OFFICER TRIP DETERMINATION CHECKLIST

- |  | <u>Initials</u> |
|--|-----------------|
| 1. Complete debriefing of involved personnel   | _____           |
| Debriefing Comments: (Attach additional sheets as necessary.)                            |                 |
| SS: _____  | _____           |
| SCO: _____   | _____           |
| PPO: _____   | _____           |
| SPO: _____   | _____           |
| OTHERS: _____  | _____           |
|  |                 |
| 2. The cause of the trip (or actuation) is determined.                                   | _____           |
| 3. All safety related equipment functioned as desired.                                   | _____           |
| 4. All plant parameters responded as expected (within the range of the EOP 2525 limits). | _____           |
| 5. PORC review (if required).  | _____           |
| 6. Plant Incident Report complete.   | _____           |
| a. Copy of Pre-Post Trip Report attached.  | _____           |
| b. Copy of the Sequence/Events Report (Trip Buffer) attached.                            | _____           |
| c. Recorder charts (attach copies as appropriate).                                       | _____           |
| d. Safety Function Status Check Form attached.   | _____           |
| e. Appropriate 2671 OPS Form.  | _____           |

Unit 2 Duty Officer: \_\_\_\_\_ Date \_\_\_\_\_

APPROVED BY: Joe Hull DATE: 5/10/85 PORC MTG. NO. 2-85-87

# ESF ACTUATION CHECKLIST

## SIAS CHANNEL I

| EQUIPMENT NUMBER | NAME                                 | ACTION |       |
|------------------|--------------------------------------|--------|-------|
| F-14A            | "A" Containment Air Recirc Fan       | SH     | _____ |
| F-14C            | "C" Containment Air Recirc Fan       | SH     | _____ |
| P5A              | "A" Service Water Pump               | ST     | _____ |
| 2-CH-196         | VCT Makeup Bypass                    | C      | _____ |
| P-41A            | "A" HPSI Pump                        | ST     | _____ |
| F-112A           | "A" Battery Room Vent Fan            | *      | _____ |
| P-11A            | "A" RBCCW Pump                       | ST     | _____ |
| P-18A            | "A" Charging Pump                    | ST     | _____ |
| P-42A            | "A" LPSI Pump                        | ST     | _____ |
| 2-SW-102         | Service Water to Chiller X170        | C      | _____ |
| 2-CHW-3          | Chill Water Supply to DC Swgr Rm "A" | O      | _____ |
| 2-CHW-11         | Chill Water Pumps Supply X-tie       | C      | _____ |
| 2-CHW-13         | Chill Water Pumps Return X-tie       | C      | _____ |
| P-122A           | "A" Vital Chill Water Pump           | ST     | _____ |
| F-54A            | "A" Vital Swgr Fan                   | ST     | _____ |
| 2-CH-508         | "B" BAST Gravity Feed Valve          | O      | _____ |
| 2-CH-509         | "A" BAST Gravity Feed Valve          | O      | _____ |
| 2-CH-512         | VCT Makeup Valve                     | C      | _____ |
| F-15A            | "A" Safeguards Room Recirc Fan       | ST     | _____ |
| 2-SI-615         | "1A" LPSI Injection Valve            | O      | _____ |
| 2-SI-625         | "1B" LPSI Injection Valve            | O      | _____ |
| 2-SI-617         | "1A" HPSI Injection Valve            | O      | _____ |
| 2-SI-627         | "1B" HPSI Injection Valve            | O      | _____ |
| 2-SI-637         | "2A" HPSI Injection Valve            | O      | _____ |
| 2-SI-647         | "2B" HPSI Injection Valve            | O      | _____ |
| 2-SI-618         | "A" SIT Leak Stop Check Valve        | C      | _____ |
| 2-SI-628         | "B" SIT Leak Stop Check Valve        | C      | _____ |

\*Starts on loss of power only

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2  
Rev. 1  
Page 1 of 10

# SIAS CHANNEL I

| EQUIPMENT NUMBER | NAME                              | ACTION |       |
|------------------|-----------------------------------|--------|-------|
| F-13A            | "A" CEA Cooling Fan               | *      | _____ |
| F-13C            | "C" CEA Cooling Fan               | *      | _____ |
| 2-SW-3.2B        | "B" Service Water Isolation TBCCW | C      | _____ |
| 2-SW-8.1A        | "A" RBCCW Hx TCV                  | O      | _____ |
| 2-SW-8.1B        | "B" RBCCW Hx TCV                  | O      | _____ |
| 2-CH-515         | Inboard Letdown Isolation Valve   | O      | _____ |
| 2-SI-614         | "A" SIT Outlet Valve              | O      | _____ |
| 2-SI-624         | "B" SIT Outlet Valve              | O      | _____ |
| 2-CH-501         | VCT Outlet Valve                  | C      | _____ |
| 2-RB-68.1A       | "A" Safeguards Room Cooler Outlet | O      | _____ |
| 2-RB-28.3A       | "A" CAR Emergency Outlet Valve    | O      | _____ |
| 2-RB-28.3C       | "C" CAR Emergency Outlet Valve    | O      | _____ |
| 2-RB-8.1A        | "A" SFPC Hx RBCCW Outlet Valve    | C      | _____ |
| 15G-12U          | "A" Diesel Generator              | ST     | _____ |

\*Starts on loss of power only

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2  
Rev. 1  
Page 2 of 10  
MAY 10 1985



CIAS CHANNEL I

| EQUIPMENT NUMBER | NAME                                   | ACTION |       |
|------------------|--|--------|-------|
| 2-MS-220A        | *1 S/G Blowdown Control Valve          | C      | _____ |
| 2-CH-505         | RCP Bleedoff to EDST                   | C      | _____ |
| 2-CH-198         | RCP Bleedoff to VCT                    | C      | _____ |
| 2-RC-45          | RCS Sample Isolation                   | C      | _____ |
| 2-AC-8           | Enclosure Building Purge Exhaust       | O      | _____ |
| 2-EB-88          | H <sub>2</sub> Monitor Emergency Isol. | C      | _____ |
| 2-MS-191A        | #1 S/G Sample Isolation Valve          | C      | _____ |
| 2-LRR-43.2       | PDT Pump Outside Isolation             | C      | _____ |
| 2-AC-47          | Containment Rad Monitor Isol.          | C      | _____ |
| 2-EB-99          | H <sub>2</sub> Purge Outside Isolation | C      | _____ |
| 2-PMW-43C        | PMW to Containment Isolation           | C      | _____ |
| 2-GR-11.2        | Waste Gas Outside Isolation            | C      | _____ |
| 2-AC-3           | Enclosure Building Purge Supply        | O      | _____ |
| 2-EB-100         | H <sub>2</sub> Purge Inside Isolation  | C      | _____ |
| 2-AC-1           | Containment and E.B. Purge Fan Disch.  | O      | _____ |
| 2-SSP-16.2       | CTMT Sump Pump Disch. Outside Isol     | C      | _____ |
| F-39A            | "A" CTMT Rad. Monitor Fan              | SP     | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2  
Rev. 1  
Page 3 of 10  
MAY 10 1966

EBFAS CHANNEL I

| EQUIPMENT NUMBER | NAME                                  | ACTION  |       |
|------------------|---------------------------------------|---------|-------|
| F-32A            | "A" Control Room Filter Fan           | ST      | _____ |
| 2-EB-51          | "A" EBFS Inlet Damper                 | O       | _____ |
| 2-EB-60          | Fuel Handling to EBFS Supply          | C       | _____ |
| 2-EB-52          | "A" EBFS Fan Disch. Damper            | O       | _____ |
| 2-HV-107         | Safeguard Rooms Supply Damper         | C       | _____ |
| F-25A            | "A" EBFS Fan                          | ST      | _____ |
| 2-HV-116         | Safeguard Rooms Exhaust Damper        | C       | _____ |
| 2-EB-72          | Purge System Supply to EBFS           | C       | _____ |
| 2-EB-50          | Enclosure Building to EBFS Supply     | O       | _____ |
| 2-EB-56          | Air Removal to EBFS Discharge         | C       | _____ |
| -                | Control Room Air Conditioning Dampers | Various | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2  
Rev. 1  
Page 4 of 10

REV 1.0 1000

AEAS CHANNEL I

| EQUIPMENT NUMBER | NAME                                  | ACTION  |       |
|------------------|---------------------------------------|---------|-------|
| 2-EB-51          | "A" EBFS Filter Inlet                 | O       | _____ |
| F-20             | Fuel Handling Area Fan                | SP      | _____ |
| 2-EB-52          | "A" EBFS Fan Disch. Damper            | O       | _____ |
| F-25A            | "A" EBFS Fan                          | ST      | _____ |
| 2-HV-171         | Fuel Handling Area Exhaust Damper     | C       | _____ |
| 2-EB-72          | Purge System Supply to EBFS           | C       | _____ |
| 2-EB-60          | Fuel Handling to EBFS Supply          | O       | _____ |
| 2-EB-56          | Air Removal to EBFS Discharge         | C       | _____ |
| 2-EB-50          | Enclosure Building to EBFS Supply     | C       | _____ |
| F-32A            | "A" Control Room Filter Fan           | SP      | _____ |
| -                | Control Room Air Conditioning Dampers | Various | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2

Rev. 1

Page 5 of 10

MAY 10 1965

CSAS CHANNEL I

EQUIPMENT NUMBER

NAME

ACTION

P-43A

"A" Containment Spray Pump

ST

\_\_\_\_\_

2-CS-4.1A

"A" Containment Spray Isol. Valve

O

\_\_\_\_\_

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2

Rev. 1

Page 6 of 10

MAY 1 1966

SRAS CHANNEL I

| EQUIPMENT NUMBER | NAME                           | ACTION |       |
|------------------|--------------------------------|--------|-------|
| 2-SI-659         | Recirc Header Isolation Valve  | C      | _____ |
| 2-RB-13.1A       | "A" Shutdown Cooling Hx Outlet | O      | _____ |
| 2-CS-16.1A       | "A" CTMT Sump Outlet Isolation | O      | _____ |
| P-42A            | "A" LPSI Pump                  | SP     | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2

Rev. 1

Page 7 of 10

MAY 10 1985



MSI - CHANNEL I

| EQUIPMENT NUMBER | NAME                       | ACTION |       |
|------------------|----------------------------|--------|-------|
| 2-MS-64A         | #1 S/G MSIV                | C      | _____ |
| 2-MS-64B         | #2 S/G MSIV                | C      | _____ |
| 2-MS-65A         | #1 S/G MSIV Bypass         | C      | _____ |
| H-5A             | "A" SGFP Turbine           | Trip   | _____ |
| 2-FW-51A         | "A" Feed Reg. Valve        | C      | _____ |
| 2-FW-5A          | "A" Main Feed Stop Check   | C      | _____ |
| 2-FW-12A         | "A" Aux Feed Stop Check    | C      | _____ |
| 2-MS-265B        | "A" Steam Lead Drain Valve | C      | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2  
Rev. 1  
Page 8 of 10

MAY 10 1987

# PURGE VALVE ISOLATION CHANNEL I

| EQUIPMENT NUMBER | NAME                  | ACTION |       |
|------------------|-----------------------|--------|-------|
| 2-AC-4           | CTMT Purge (Outboard) | C      | _____ |
| 2-AC-7           | CTMT Purge (Outboard) | C      | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2  
Rev. 1  
Page 9 of 10

UNDERVOLTAGE CHANNEL I

Complete and attach OPS Form 2528-2.

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-2

Rev. 1

Page 10 of 10

1005

APPROVED BY: Ja. G. Kelly DATE: 5/10/85 PORC MTG. NO. 2-85-87

SIAS CHANNEL II

| EQUIPMENT NUMBER | NAME                             | ACTION   |
|------------------|----------------------------------|----------|
| F-14B            | "B" Containment Air Recirc Fan   | SH _____ |
| F-14D            | "D" Containment Air Recirc Fan   | SH _____ |
| 2-CH-514         | Boric Acid Pump to Charging      | O _____  |
| P-5C             | "C" Service Water Pump           | ST _____ |
| P-41C            | "C" HPSI Pump                    | ST _____ |
| F-112B           | "B" Battery Room Vent Fan        | * _____  |
| P-11C            | "C" RBCCW Pump                   | ST _____ |
| P-18C            | "C" Charging Pump                | ST _____ |
| P42B             | "B" LPSI Pump                    | ST _____ |
| F-54B            | Vital Swgr Room Cooling Fan      | ST _____ |
| 2-SW-104         | Service Water to Chiller X170    | C _____  |
| 2-CHW-33         | Chill Water to DC Swgr Rm "B"    | O _____  |
| 2-CHW-12         | Chill Water Pumps Supply X-tie   | C _____  |
| 2-CHW-14         | Chill Water Pumps Return X-tie   | C _____  |
| 2-CH-510         | "B" Boric Acid Pump Recirc Valve | C _____  |
| 2-CH-511         | "A" Boric Acid Pump Recirc Valve | C _____  |
| F-15B            | "B" Safeguard Room Recirc Fan    | ST _____ |
| 2-SI-635         | 2A LPSI Injection Valve          | O _____  |
| 2-SI-645         | 2B LPSI Injection Valve          | O _____  |
| 2-SI-616         | 1A HPSI Injection Valve          | O _____  |
| 2-SI-626         | 1B HPSI Injection Valve          | O _____  |
| 2-SI-636         | 2A HPSI Injection Valve          | O _____  |
| 2-SI-646         | 2B HPSI Injection Valve          | O _____  |
| 2-SI-638         | "C" SIT Leak Stop Check Valve    | C _____  |
| 2-SI-648         | "D" SIT Leak Stop Check Valve    | C _____  |
| F-13B            | "B" CEA Cooling Fan              | * _____  |
| 2-SW-8.1C        | "C" RBCCW Hx TCV                 | O _____  |
| 2-SW-8.1B        | "B" RBCCW Hx TCV                 | O _____  |

\*Starts on loss of power only

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 1 of 10

SIAS CHANNEL II

| EQUIPMENT NUMBER | NAME                                 | ACTION |       |
|------------------|--------------------------------------|--------|-------|
| 2-SW-3.2A        | "A" Service Water Isolation to TBCCW | C      | _____ |
| 2-SI-634         | "C" SIT Outlet Valve                 | O      | _____ |
| 2-SI-644         | "D" SIT Outlet Valve                 | O      | _____ |
| 2-RB-68.1B       | "B" Safeguards Room Cooler Outlet    | O      | _____ |
| 2-RB-28.3B       | "B" CAR Emergency Outlet Valve       | O      | _____ |
| 2-RB-28.3D       | "D" CAR Emergency Outlet Valve       | O      | _____ |
| 2-RB-8.1B        | "B" SFPC Hx RBCCW Outlet Valve       | C      | _____ |
| 2-RB-210         | Degas Effluent Cooler Letdown Isol.  | C      | _____ |
| P-19A            | "A" Boric Acid Pump                  | ST     | _____ |
| P-19B            | "B" Boric Acid Pump                  | ST     | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3

Rev. 1

Page 2 of 10

MAY 10 1995



CIAS CHANNEL II

| EQUIPMENT NUMBER | NAME                                       | ACTION |       |
|------------------|--|--------|-------|
| 2-MS-220B        | #2 S/G Blowdown Control Valve              | C      | _____ |
| 2-RC-001         | Hot Leg Sample Isolation                   | C      | _____ |
| 2-LRR-43.1       | PDT Pump Inside Isolation                  | C      | _____ |
| 2-CH-516         | Letdown Isolation Valve                    | C      | _____ |
| 2-AC-11          | Purge Exhaust Discharge Damper             | C      | _____ |
| F-23             | CTMT Purge Supply Fan                      | SP     | _____ |
| 2-MS-191B        | #2 S/G Sample Isolation                    | C      | _____ |
| 2-SI-312         | N <sub>2</sub> to CTMT Isolation Valve     | C      | _____ |
| 2-LRR-61.1       | PDT Sample Isolation                       | C      | _____ |
| 2-EB-89          | H <sub>2</sub> Monitor Emergency Isolation | C      | _____ |
| F-39B            | "B" CTMT Rad. Monitor                      | SP     | _____ |
| 2-RC-003         | Pressurizer Steam Space Sample Isol.       | C      | _____ |
| 2-CH-506         | RCP Bleedoff Inside Isolation              | C      | _____ |
| 2-GR-11.1        | Waste Gas Header Inside Isolation          | C      | _____ |
| 2-EB-92          | H <sub>2</sub> Purge Inside Isolation      | C      | _____ |
| 2-AC-20          | H <sub>2</sub> Monitor Sample Isolation    | C      | _____ |
| 2-RC-002         | Surge Line Sample Isolation                | C      | _____ |
| 2-CH-089         | Regen Hx Outlet Outside Isol.              | C      | _____ |
| 2-SSP-16.1       | CTMT Sump Inside Isolation                 | C      | _____ |
| 2-AC-12          | CTMT Rad Monitor Isolation                 | C      | _____ |
| 2-EB-91          | H <sub>2</sub> Purge Inside Isolation      | C      | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 3 of 10  
MAY 16 1968

# EBFAS CHANNEL II

| EQUIPMENT NUMBER | NAME                                  | ACTION  |       |
|------------------|---------------------------------------|---------|-------|
| 2-EB-41          | "B" EBFS Filter Damper                | O       | _____ |
| 2-EB-61          | Fuel Handling to EBFS Supply          | C       | _____ |
| 2-EB-42          | "B" EBFS Fan Disch. Damper            | O       | _____ |
| 2-HV-106         | Safeguards Rooms Supply Damper        | C       | _____ |
| F-25B            | "B" EBFS Fan                          | ST      | _____ |
| 2-HV-117         | Safeguard Rooms Exhaust Damper        | C       | _____ |
| 2-EB-73          | Purge System Supply to EBFS           | C       | _____ |
| F-32B            | "B" Control Room Filter Fan           | ST      | _____ |
| 2-EB-40          | Enclosure Building Supply to EBFS     | O       | _____ |
| 2-EB-55          | Air Removal to EBFS Discharge         | C       | _____ |
| -                | Control Room Air Conditioning Dampers | Various | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 4 of 10  
MAY 10 1985

AEAS CHANNEL II

| EQUIPMENT NUMBER | NAME                                  | ACTION  |       |
|------------------|---------------------------------------|---------|-------|
| 2-EB-40          | Enclosure Building to EBFS Supply     | C       | _____ |
| 2-EB-73          | Purge System Supply to EBFS           | C       | _____ |
| 2-EB-42          | "B" EBFS Discharge Damper             | O       | _____ |
| 2-HV-165         | Fuel Handling Fan Disch. Damper       | C       | _____ |
| 2-EB-55          | Air Removal Disch. to EBFS            | C       | _____ |
| 2-EB-41          | "B" EBFS Filter Inlet                 | O       | _____ |
| 2-HV-170         | Fuel Handling Area Exhaust Damper     | C       | _____ |
| F-25B            | "B" EBFS Fan                          | ST      | _____ |
| 2-EB-61          | Fuel Handling to EBFS Supply          | O       | _____ |
| F-32B            | "B" Control Room Filter Fan           | SP      | _____ |
| -                | Control Room Air Conditioning Dampers | Various | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 5 of 10

Mar 19 1966

CSAS CHANNEL II

| EQUIPMENT NUMBER | NAME                              | ACTION |       |
|------------------|-----------------------------------|--------|-------|
| P-43B            | "B" Containment Spray Pump        | ST     | _____ |
| 2-CS-4.1B        | "B" Containment Spray Isol. Valve | 0      | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

0 - Open

OPS Form 2671-3  
Rev. 1  
Page 6 of 10

SRAS CHANNEL II

| EQUIPMENT NUMBER | NAME                           | ACTION |       |
|------------------|--------------------------------|--------|-------|
| 2-SI-660         | Recirc Header Isolation Valve  | C      | _____ |
| 2-RB-13.1B       | "B" Shutdown Cooling Hx Outlet | O      | _____ |
| 2-CS-16.1B       | "B" CTMT Sump Outlet Isolation | O      | _____ |
| P-42B            | "B" LPSI Pump                  | SP     | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 7 of 10  
MAY 10 1985



MSI CHANNEL II

| EQUIPMENT NUMBER | NAME                       | ACTION     |
|------------------|----------------------------|------------|
| 2-MS-64B         | #2 S/G MSIV                | C _____    |
| 2-MS-64A         | #1 S/G MSIV                | C _____    |
| 2-MS-65B         | #2 S/G MSIV Bypass         | C _____    |
| H-5B             | "B" SGFP Turbine           | Trip _____ |
| 2-FW-51B         | "B" Feed Reg. Valve        | C _____    |
| 2-FW-5B          | "B" Main Feed Stop Check   | C _____    |
| 2-FW-12B         | "B" Aux Feed Stop Check    | C _____    |
| 2-MS-266B        | "B" Steam Lead Drain Valve | C _____    |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3

Rev. 1

Page 8 of 10

MAY 10 1985

# PURGE VALVE ISOLATION CHANNEL II

| EQUIPMENT NUMBER | NAME                 | ACTION |       |
|------------------|----------------------|--------|-------|
| 2-AC-05          | CTMT Purge (Inboard) | C      | _____ |
| 2-AC-06          | CTMT Purge (Inboard) | C      | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 9 of 10  
MAY 10 1966

UNDERVOLTAGE CHANNEL II

Complete and attach OPS Form 2528-2.

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS Form 2671-3  
Rev. 1  
Page 10 of 10  
March 1, 1960

APPROVED BY: *J. Haller*

DATE: 1-3-84

PORC MTG. NO. 2-83-240

SIAS CHANNEL V

| EQUIPMENT NUMBER | NAME                   | ACTION |       |
|------------------|------------------------|--------|-------|
| P-41B            | "B" HPSI Pump          | ST     | _____ |
| P-18B            | "B" Charging Pump      | ST     | _____ |
| P-5B             | "B" Service Water Pump | ST     | _____ |
| P-11B            | "B" RBCCW Pump         | ST     | _____ |

SH - Start Half Speed  
SP - Stop

ST - Start  
C - Close

O - Open

OPS FORM 2671-4  
Rev. 0  
Page 1 of 1