

Approval  
*[Signature]*  
 Date  
 03/06/90

Vogtle Electric Generating Plant  
 NUCLEAR OPERATIONS



Georgia Power

Procedure No.  
 17006-1  
 Revision No.  
 11  
 Page No.  
 1 of 41

Unit 1

MIDLOOP

05-81-90

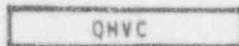
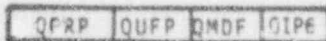
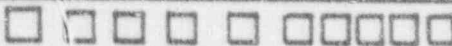
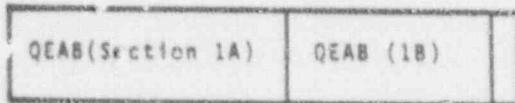
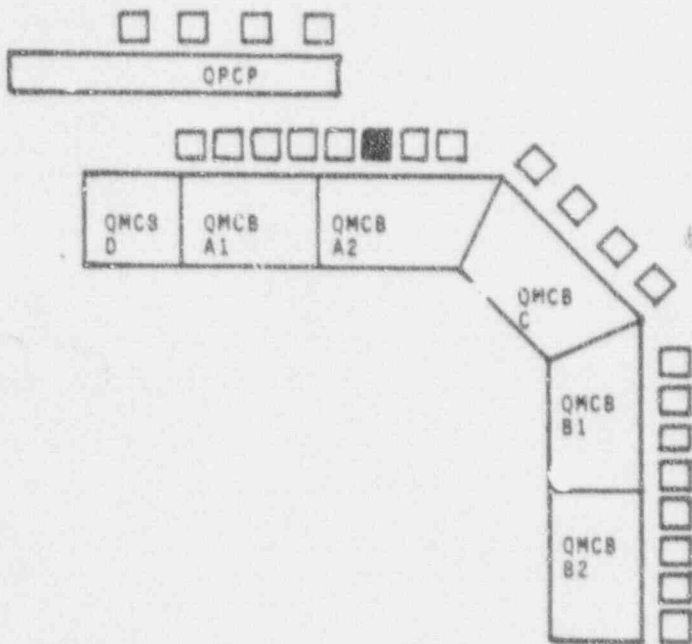
Windows A03 Pg 7  
 C01 Pg 21  
 E05 Pg 3

ANNUNCIATOR RESPONSE PROCEDURES FOR ALB 06  
ON PANEL 1A2 ON MCB

7

PURPOSE

These procedures describe alarm conditions annunciated on Annunciator Light Board (ALB) 06 located on the Main Control Board. They provide guidance for specific operator responses to given alarms and may not be appropriate for all plant conditions.



VEGP

17006-1

11

2 of 41

ALB 06

	(1)	(2)	(3)	(4)	(5)	(6)
A	RHR PMP 1 DISCH HI PRESS	FDP IN LOCAL CONTROL	ACCUM TANK 1 HI/LO LEVEL  (RCS LOW LEVEL)	ACCUM TANK 1 HI/LO PRESS	ACCUM TANK 1 ISO VLV 8808A NOT FULLY OPEN	CNMT HI-1 PRESS ALERT ADVERSE CNMT
B	RHR PMP 2 DISCH HI PRESS		ACCUM TANK 2 HI/LO LEVEL	ACCUM TANK 2 HI/LO PRESS	ACCUM TANK 2 ISO VLV 8808B NOT FULLY OPEN	CNMT HI-2 PRESS ALERT
C	RHR PMP OVERLOAD TRIP		ACCUM TANK 3 HI/LO LEVEL	ACCUM TANK 3 HI/LO PRESS	ACCUM TANK 3 ISO VLV 8808C NOT FULLY OPEN	CNMT HI-3 PRESS ALERT
D			ACCUM TANK 4 HI/LO LEVEL	ACCUM TANK 4 HI/LO PRESS	ACCUM TANK 4 ISO VLV 8808D NOT FULLY OPEN	CNMT SPRAY ACTUATION
E			RWST TO SI PMP ISO VLV 8806 NOT FULLY OPEN	RWST LO LEVEL	RWST EMPTY LEVEL	CNMT ISO PHASE A ACTUATION
F			RWST HI LEVEL	RWST LO-LO LEVEL	RWST LO-LO 2 LEVEL	SI PMP OVERLOAD TRIP

SUB-PROCEDURE INDEX

<u>ANNUNCIATOR WINDOW NO.</u>	<u>TITLE</u>	<u>PAGE</u>
A01	RHR PMP 1 DISCH HI PRESS	5
A02	PDP IN LOCAL CONTROL	6
A03	ACCUM TANK 1 HI/LO LEVEL *RCS LOW LEVEL	7
A04	ACCUM TANK 1 HI/LO PRESS	10
A05	ACCUM TANK 1 ISO VLV 8808A NOT FULLY OPEN	12
A06	CNMT HI-1 PRESS ALERT ADVERSE CNMT	13
B01	RHR PMP 2 DISCH HI PRESS	14
B02		
B03	ACCUM TANK 2 HI/LO LEVEL	15
B04	ACCUM TANK 2 HI/LO PRESS	17
B05	ACCUM TANK 2 ISO VLV 8808B NOT FULLY OPEN	19
B06	CNMT HI-2 PRESS ALERT	20
C01	RHR PMP OVERLOAD TRIP	21
C02		
C03	ACCUM TANK 3 HI/LO LEVEL	22
C04	ACCUM TANK 3 HI/LO PRESS	24
C05	ACCUM TANK 3 ISO VLV 8808C NOT FULLY OPEN	26
C06	CNMT HI-3 PRESS ALERT	27

\* INSTALLED/CONNECTED/OPERATIONAL ONLY DURING RCS MID-LOOP  
AND DRAIN DOWN LEVEL OPERATION

VEGP

17006-1

11

4 of 41

SUB-PROCEDURE INDEX (CONT'D.)

<u>ANNUNCIATOR WINDOW NO.</u>	<u>TITLE</u>	<u>PAGE</u>
D01		
D02		
D03	ACCUM TANK 4 HI/LO LEVEL	28
D04	ACCUM TANK 4 HI/LO PRESS	30
D05	ACCUM TANK 4 ISO VLV 3808D NOT FULLY OPEN	32
D06	CNMT SPRAY ACTUATION	33
E01		
E02		
E03	RWST TO SI PMP ISO VLV 8806 NOT FULLY OPEN	34
E04	RWST LO LEVEL	35
E05	RWST EMPTY LEVEL	36
E06	CNMT ISO PHASE A ACTUATION	37
F01		
F02		
F03	RWST HI LEVEL	38
F04	RWST LO-LO LEVEL	39
F05	PWST LO-LO 2 LEVEL	40
F06	SI PMP OVERLOAD TRIP	41

VEGP

17006-1

11

5 of 41

WINDOW A01

ORIGINSETPOINT

1-PT-0614

576 psig

RHR PMP 1  
DISCH HI PRESS

1.0

PROBABLE CAUSE

1. High Reactor Coolant System (RCS) pressure.
2. 1-FV-0610 and/or 1-HV-8809A misalignment.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If alarm is due to RCS pressure high, REDUCE RCS pressure.
2. ENSURE a flowpath available via 1-FV-0610 and/or 1-HV-8809A.
3. If Residual Heat Removal (RHR) Pump A discharge pressure cannot be reduced, PLACE Train B in service and STOP RHR Pump A per 13011-1, "Residual Heat Removal System".
4. If RHR Pump A was stopped, DETERMINE and CORRECT cause of alarm.
5. REFER to Technical Specifications 3.5.2 and 3.5.3.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB122, P.L.S.

WINDOW A02

ORIGIN

1-SHC-0459B

SETPOINT

N/A

PDP IN LOCAL CONTROL
----------------------------

1.0

PROBABLE CAUSE

Local Control 1-SHC-0459B in MAN position.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

If local operation of Positive Displacement Pump is not desired, DISPATCH an operator to Auxiliary Building, Level C to return Control Switch to AUTO position.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB116-1, 1X6AU01-265

## WINDOW A03

ORIGINSETPOINT

1-LT-0950  
OR  
1-LT-0951

Hi: 64%  
Low: 36%

ACCUM TANK 1  
HI/LO LEVEL

\*1-LT-11310

\*Low: 50%

\*  
RCS  
LEVEL LOW

1.0

PROBABLE CAUSEACCUM TANK 1 HI/LO LEVEL

## 1. High level:

- a. Overfilling of Accumulator,
- b. Leakage from the Reactor Coolant System (RCS) past 1-1204-U4-079.

## 2. Low level:

- a. Open Drain or Sample Valve,
- b. System leak.

RCS LEVEL LOW

1. System Leak.
2. Open drain or Letdown flow path.
3. Draining down too fast with the Upper Internals installed.
4. Excessive RHR Discharge flowrate.

2.0

AUTOMATIC ACTIONSACCUM TANK 1 HI/LO LEVEL

NONE

RCS LOW LEVEL

NONE

\* 1-LT-0950 disconnected and 1-LT-11310 installed/connected/operational only during RCS mid-loop and drain down level operation.

VEGP

17006-1

11

8 of 41

WINDOW A03  
(Continued)3.0 INITIAL OPERATOR ACTIONSACCUM TANK 1 HI/LO LEVEL

NONE

RCS LOW LEVEL

1. MONITOR the following RHR Pump parameters:
  - a. RHR Pump amps (ERF),
  - b. Discharge flow,
  - c. Discharge pressure.
2. CHECK RCS Level Indicators 1-LI-0950, 1-LI-0957 and 1-LG-10401 (Reference PTDB-1 Tab 8.2).
3. If a loss of RHR is indicated, INITIATE 18019-C, "Loss Of Residual Heat Removal".

4.0 SUBSEQUENT OPERATOR ACTIONSACCUM TANK 1 HI/LO LEVEL

1. If filling is in progress, STOP filling.
2. MONITOR Accumulator Tank 1 level on QMCB using 1-LI-0950 and 1-LI-0951.
3. If Accumulator Tank 1 level is high or low and stable, RETURN level to normal per 13105-1, "Safety Injection System".
4. If Accumulator Tank 1 level is high and increasing, DRAIN to Refueling Water Storage Tank as required, to restore level to normal per 13105-1. "Safety Injection System".

OR

ISOLATE the Accumulator Tank from the RCS by closing 1-HV-8808A and REFER to Technical Specification 3.5.1.

5. If Accumulator Tank 1 level is low and decreasing,
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE leak, and
  - c. RESTORE level to normal per 13105-1, "Safety Injection System."



WINDOW A03  
(Continued)

6. If addition is equal to or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
7. REFER to Technical Specification 3.5.1.

RCS LOW LEVEL

1. If draining is in progress, STOP draining
2. NOTIFY the Unit Shift Supervisor.
3. MONITOR RCS level on QMCB using 1-LI-0950 and 1-LI-0957, and locally using 1-LG-10401 (Reference PTDB-1 Tab 8.2).
4. If RCS level continues to decrease, DISPATCH an operator to locate and isolate any identified leaks.
5. RESTORE RCS level to greater than 188 ft. elevation.
6. If equipment failure is indicated, INITIATE maintenance as required.
7. REFER to Technical Specifications 3.4.1. 1 and 3.4.1.4.2.

5.0

COMPENSATORY OPERATOR ACTIONS

ACCUM TANK 1 HI/LO LEVEL

NONE

RCS LOW LEVEL

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S., 1X5DT0004, 1X4DB111, 1X4DB113  
PTDB-1 Tab 8.0

WINDOW A04

ORIGIN

1-PT-0960  
OR  
1-PT-0961

SETPOINT

Hi: 661 psig  
Low: 617 psig

ACCUM TANK 1 HI/LO PRESS
-----------------------------

1.0

PROBABLE CAUSE

1. High Pressure:
  - a. High level due to reactor coolant in leakage through 1-1204-U4-079 or overfilling.
  - b. 1-HV-8875A or 1-HV-8875E leaking or open.
2. Low Pressure:
  - a. Low level due to open or leaking sample line, drain line or system leak.
  - b. 1-1204-U4-055 or 1-PSV-8855A leaking.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. As applicable, STOP adding water or nitrogen to the Accumulator.
2. MONITOR both Accumulator Tank 1 pressure and level for changes.
3. If pressure is high and level is normal:
  - a. ENSURE Nitrogen Supply Valves are closed.
  - b. RESTORE pressure to normal per 13105-1, "Safety Injection System"
4. If pressure is high and level is high and stable, RETURN level and boron concentration to normal per 13105-1, "Safety Injection System".
5. If pressure is high and level is high and rising, DRAIN to Refueling Water Storage Tank, as required, to restore level to normal per 13105-1, "Safety Injection System".

WINDOW A04  
(Continued)

6. If pressure is low and level is normal and stable:
  - a. ISOLATE the source of nitrogen leakage, if possible,
  - b. RESTORE pressure to normal.
7. If pressure is low and level is low and stable RETURN level to normal per 13105-1, "Safety Injection System".
8. If pressure is low and level is low and falling:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE the leak, and
  - c. RESTORE level and boron concentration to normal per 13105-1, "Safety Injection System".
9. If addition is equal to or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
10. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S.

ORIGIN

1-HV-8808A

SETPOINT

Not Applicable

WINDOW A05

ACCUM TANK 1 ISO VLV 8808A NOT FULLY OPEN
---

1.0

PROBABLE CAUSE

NOTE

Annunciator blocked below P-11.

1. 1-HV-8808A mispositioned.
2. Operator closing valve 1-HV-8808A.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

1. CHECK valve position on ERF Computer.
2. DISPATCH an operator to restore power to 1-HV-8808A if necessary and OPEN fully using 1-HS-8808A on the QMCB.

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If equipment failure is indicated, INITIAT maintenance as required.
2. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, 1X3D-BD-D02R

VEGP

17006-1

11

13 of 41

ORIGINSETPOINT

WINDOW A06

1-PT-0934B  
1-PT-0935B  
1-PT-0936B

3.5 psig

CNMT HI-1  
PRESS ALERT  
ADVERSE CNMT

1.0 PROBABLE CAUSE

Instrument testing or malfunction.

2.0 AUTOMATIC ACTIONS

NONE

3.0 INITIAL OPERATOR ACTIONS

NONE

4.0 SUBSEQUENT OPERATOR ACTIONS

1. CHECK Containment pressure indications.
2. If equipment failure is indicated, INITIATE maintenance as required.
3. REFER to Technical Specification 3.3.2.

5.0 COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB131, 1X6AA02-232, P.L.S., 1X6AU01-178

VEGP

17006-1

11

14 of 41

ORIGINSETPOINT

WINDOW B01

1-PT-0615

576 psig

RHR PMP 2  
DISCH HI PRESS

1.0

PROBABLE CAUSE

1. High Reactor Coolant System (RCS) pressure.
2. 1-FV-0611 and/or 1-HV-8809B misalignment.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If alarm is due to RCS pressure high, REDUCE RCS pressure.
2. ENSURE a flowpath is available via 1-FV-0611 and/or 1-HV-8809B
3. If Residual Heat Removal (RHR) Pump B discharge pressure cannot be reduced, PLACE Train A in service and STOP RHR Pump B per 13011-1, "Residual Heat Removal System".
4. If RHR Pump B was stopped, DETERMINE and CORRECT cause of alarm.
5. REFER to Technical Specifications 3.5.2 and 3.5.3.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB122, P.L.S.

ORIGIN

1-LT-0952  
OR  
1-LT-0953

SETPOINT

Hi: 64%  
Low: 36%

WINDOW B03

ACCUM TANK 2 HI/LO LEVEL
-----------------------------

1.0

PROBABLE CAUSE

## 1. High Level:

- a. Overfilling of Accumulator,
- b. Leakage from the Reactor Coolant System (RCS) past 1-1204-U4-080.

## 2. Low Level:

- a. Open Drain or Sample Valve,
- b. System leak.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

WINDOW B03  
(Continued)

4.0 SUBSEQUENT OPERATOR ACTIONS

1. If filling is in progress, STOP filling.
2. MONITOR Accumulator Tank 2 level on QMCB using 1-LI-0952 and 1-LI-0953.
3. If Accumulator Tank 2 level is high or low and stable, RETURN level to normal per 13105-1, "Safety Injection System".
4. If Accumulator Tank 2 level is high and increasing, DRAIN to Refueling Water Storage Tank as required, to restore level to normal per 13105-1, "Safety Injection System".

OR

ISOLATE the Accumulator Tank from the RCS by closing 1-HV-8808B and REFER to Technical Specification 3.5.1.

5. If Accumulator Tank 2 level is low and decreasing:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE leak, and
  - c. RESTORE level to normal per 13105-1, "Safety Injection System."
6. If addition is equal to, or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
7. REFER to Technical Specification 3.5.1.

5.0 COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S., 1X5DT0038



ORIGIN

1-PT-0962  
OR  
1-PT-0963

SETPOINT

Hi: 661 psig  
Low: 617 psig

WINDOW B04

ACCUM TANK 2 HI/LO PRESS
-----------------------------

1.0

PROBABLE CAUSE

1. High Pressure:
  - a. High level due to reactor coolant in leakage through 1-1204-U4-080 or overfilling,
  - b. 1-HV-8875B or 1-HV-8875F leaking or open.
2. Low Pressure:
  - a. Low level due to open or leaking sample line, drain line or system leak,
  - b. 1-1204-U4-056 or 1-PSV-8855B leaking.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

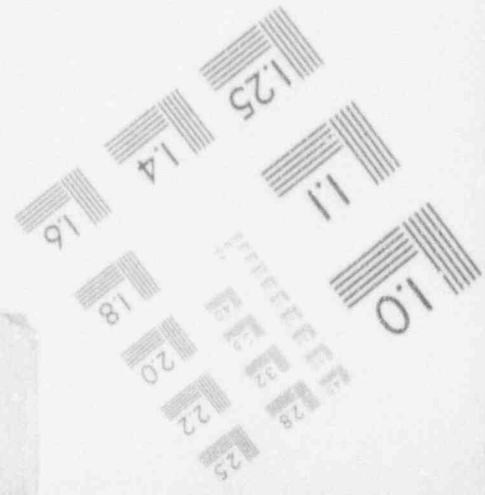
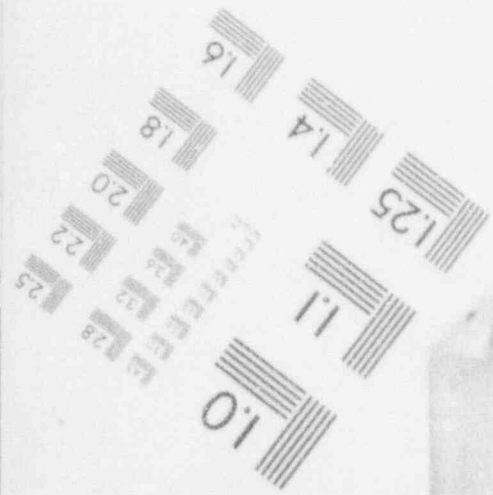
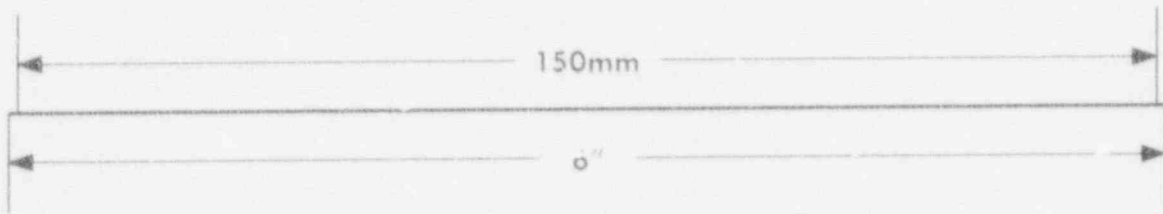
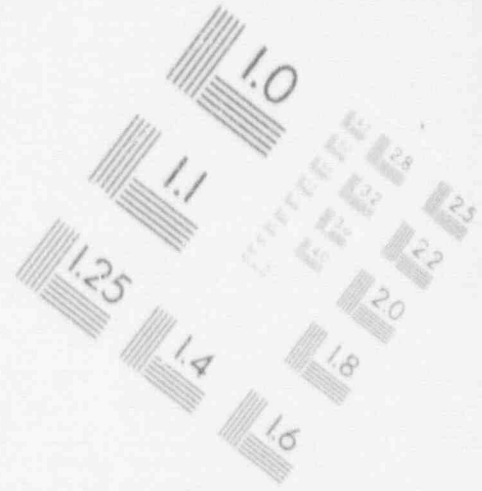
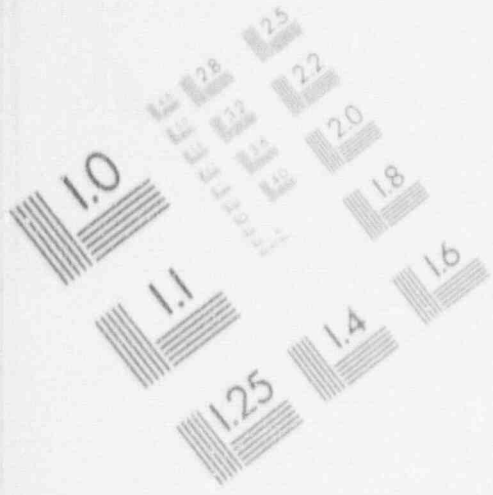
4.0

SUBSEQUENT OPERATOR ACTIONS

1. As applicable STOP adding water or nitrogen to the Accumulator.
2. MONITOR Accumulator Tank 2 pressure and level for changes.
3. If pressure is high and level is normal:
  - a. ENSURE Nitrogen Supply Valves are closed,
  - b. RESTORE pressure to normal per 13105-1, "Safety Injection System"
4. If pressure is high and level is high and stable, RETURN level and boron concentration to normal per 13105-1, "Safety Injection System."
5. If pressure is high and level is high and rising, drain to Refueling Water Storage Tank (RWST), as required, to restore level to normal per 13105-1, "Safety Injection System."

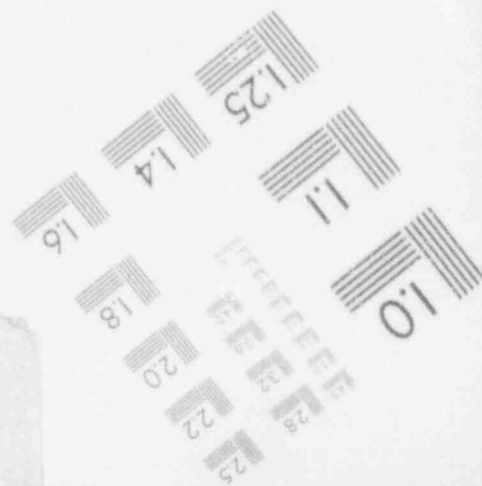
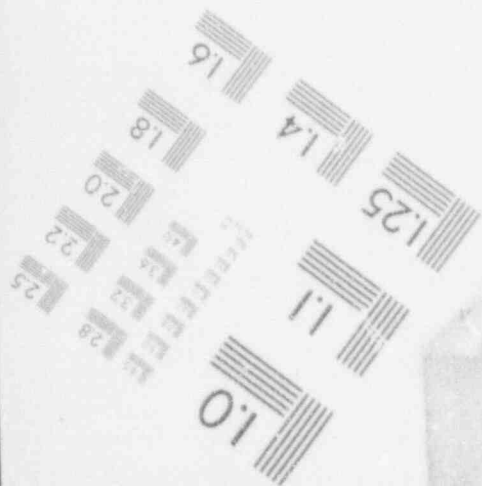
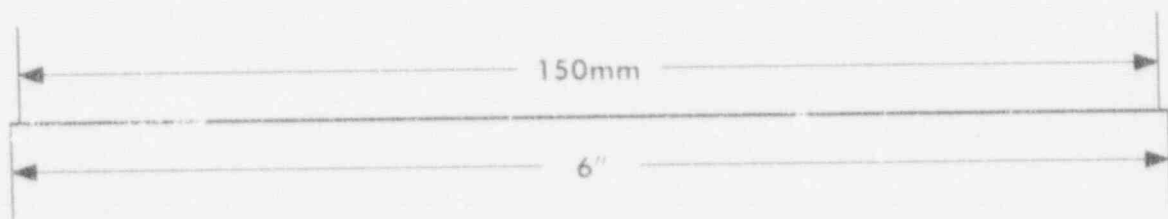
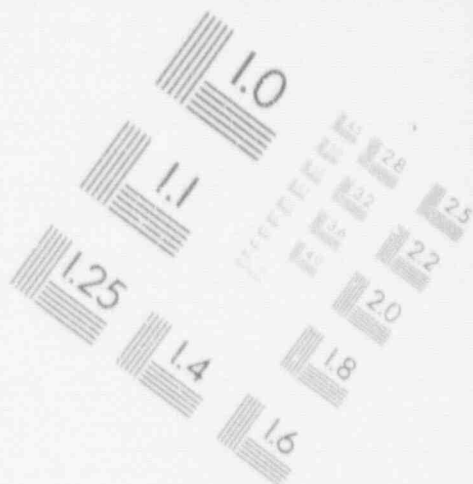
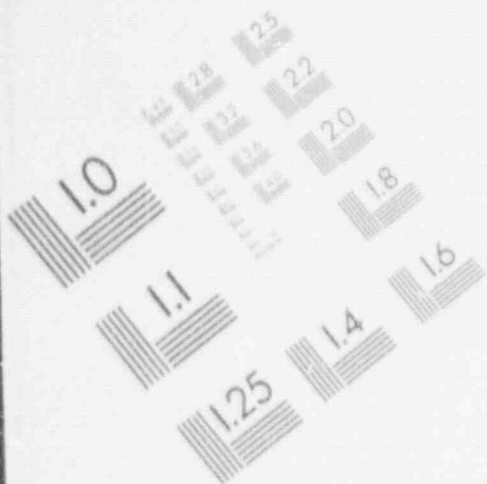
# 1

## IMAGE EVALUATION TEST TARGET (MT-3)



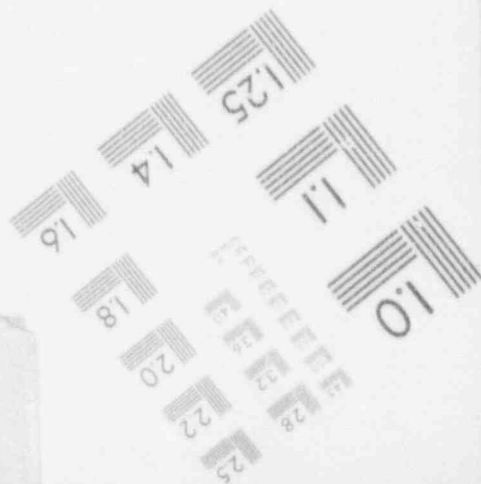
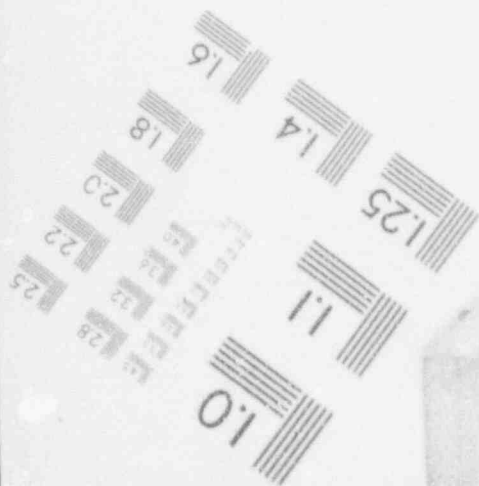
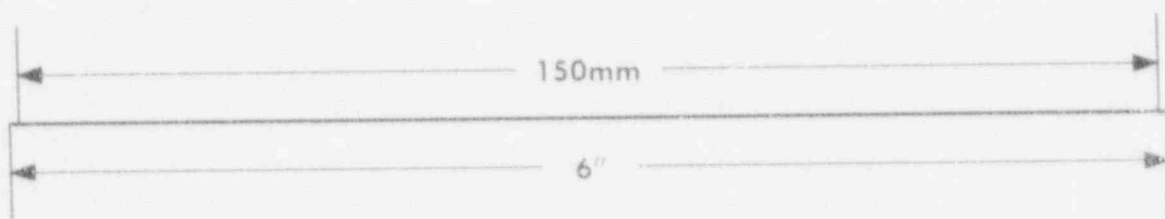
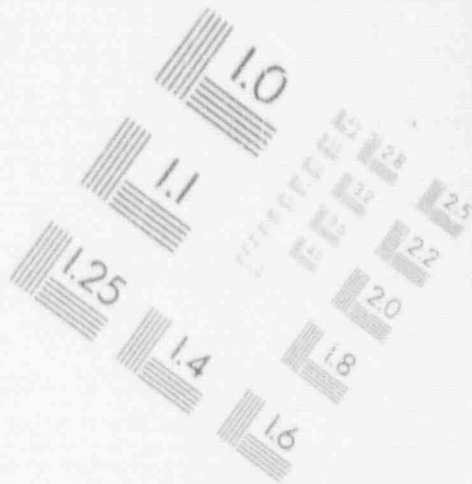
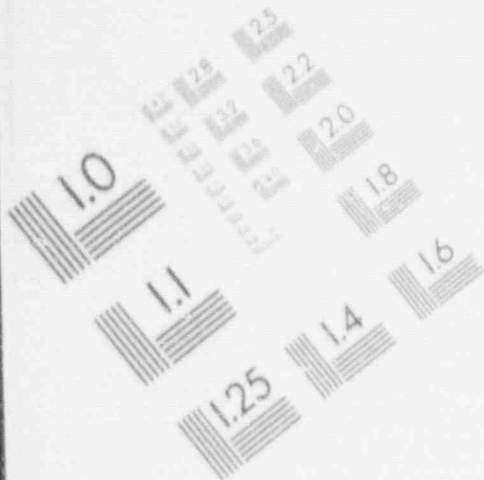
# 1

## IMAGE EVALUATION TEST TARGET (MT-3)



1

IMAGE EVALUATION  
TEST TARGET (MT-3)



WINDCW B04  
(Continued)

6. If pressure is low and level is normal and stable:
  - a. ISOLATE the source of nitrogen leakage, if possible,
  - b. RESTORE pressure to normal.
7. If pressure is low and level is low and stable, return level to normal per 13105-1, "Safety Injection System".
8. If pressure is low and level is low and falling:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE the leak, and
  - c. RESTORE level and boron concentration to normal per 13105-1, "Safety Injection System."
9. If addition is equal to or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
10. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S.

VEGP

17006-1

11

19 of 41

ORIGIN

1-HV-8808B

SETPOINT

Not Applicable

WINDOW B05

ACCUM TANK 2 ISO VLV 8808B NOT FULLY OPEN
---

1.0 PROBABLE CAUSENOTE

Annunciator blocked below P-11.

1. 1-HV-8808B mispositioned.
2. Operator closing 1-HV-8808B.

2.0 AUTOMATIC ACTIONS

NONE

3.0 INITIAL OPERATOR ACTIONS

1. CHECK valve position on ERF Computer.
2. DISPATCH an operator to restore power to valve 1-HV-8808B, if necessary and OPEN fully using 1-HS-8808B on the QMCB.

4.0 SUBSEQUENT OPERATOR ACTIONS

1. If equipment failure is indicated, INITIATE maintenance as required.
2. REFER to Technical Specification 3.5.1.

5.0 COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, 1X3D-BE-D02S

VECP

17006-1

11

20 of 41

ORIGINSETPOINT

WINDOW B06

1-PT-0934C  
 1-PT-0935C  
 1-PT-0936C

14.5 psig

CNMT HI-2  
 PRESS ALERT

1.0

PROBABLE CAUSE

Instrument testing or malfunction.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. CHECK Containment pressure indications.
2. If equipment failure is indicated, INITIATE maintenance as required.
3. REFER to Technical Specification 3.3.2.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB131, 1X6AA02-232, P.L.S., 1X6AU01-178

VEGP

17006-1

11

21 of 41

WINDOW C01

ORIGINSETPOINTRHR pump motor  
breakers.

Not Applicable

RHR PMP  
OVERLOAD TRIP1.0 PROBABLE CAUSE

1. Residual Heat Removal (RHR) Pump Motor trip due to overcurrent.
2. RHR Pump Breaker Test Switch placed in TRIP position.

2.0 AUTOMATIC ACTIONS

RHR Pump Breaker trips.

3.0 INITIAL OPERATOR ACTIONS

If RHR is Operating in Modes 4, 5 or 6, INITIATE 18019-C, "Loss Of Residual Heat Removal".

4.0 SUBSEQUENT OPERATOR ACTIONS

1. DETERMINE which RHR Pump tripped.
2. NOTIFY the Unit Shift Supervisor.
3. Do not restart the pump until the cause of the trip has been investigated and corrected.
4. If equipment failure is indicated, INITIATE maintenance as required.
5. REFER to Technical Specifications 3.5.2 and 3.5.3.1.

5.0 COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X3D-BD-E01A, 1X3D-BD-E01B



ORIGIN

1-LT-0954  
OR  
1-LT-0955

SETPOINT

Hi: 64%  
Low: 36%

WINDOW C03

ACCUM TANK 3 HI/LO LEVEL
-----------------------------

1.0

PROBABLE CAUSE

## 1. High Level:

- a. Overfilling of Accumulator,
- b. Leakage from the Reactor Coolant System (RCS) past 1-1204-U4-081.

## 2. Low Level:

- a. Open Drain or Sample Valve,
- b. System leak.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

WINDOW C03  
(Continued)

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If filling is in progress, STOP filling.
2. MONITOR Accumulator Tank 3 level on QMCB using 1-LI-0954 and 1-LI-0955.
3. If Accumulator Tank 3 level is high or low and stable, RETURN level to normal per 13105-1, "Safety Injection System".
4. If Accumulator Tank 3 level is high and increasing, DRAIN to Refueling Water Storage Tank as required, to restore level to normal per 13105-1, "Safety Injection System".

OR

ISOLATE the Accumulator Tank from the RCS by closing 1-HV-8808C and REFER to Technical Specification 3.5.1.

5. If Accumulator Tank 3 level is low and decreasing:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE leak, and
  - c. RESTORE level to normal per 13105-1, "Safety Injection System".
6. If addition is equal to, or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
7. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S., 2X5DT0039

VEGP

17006-1

11

24 of 41

ORIGINSETPOINT

WINDOW C04

1-PT-0964  
OR  
1-PT-0965

Hi: 661 psig  
Low: 617 psig

ACCUM TANK 3  
HI/LO PRESS

1.0

PROBABLE CAUSE

## 1. High Pressure:

- a. High level due to reactor coolant in leakage through 1-1204-U4-081 or overfilling,
- b. 1-HV-8875C or 1-HV-8875G leaking or open.

## 2. Low Pressure:

- a. Low level due to open or leaking sample line, drain line or system leak,
- b. 1-1204-U4-057 or 1-PSV-8855C leaking.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. As applicable, STOP adding water or nitrogen to the Accumulator.
2. MONITOR Accumulator Tank 3 pressure and level for changes.
3. If pressure is high and level is normal:
  - a. ENSURE Nitrogen Supply Valves are closed,
  - b. RESTORE pressure to normal per 13105-1, "Safety Injection System"
4. If pressure is high and level is high and stable, RETURN level and boron concentration to normal per 13105-1, "Safety Injection System".
5. If pressure is high and level is high and rising, DRAIN to Refueling Water Storage Tank, as required, to restore level to normal per 13105-1, "Safety Injection System".

WINDOW C04  
(Continued)

6. If pressure is low and level is normal and stable:
  - a. ISOLATE the source of nitrogen leakage, if possible.
  - b. RESTORE pressure to normal.
7. If pressure is low and level is low and stable, RETURN level to normal per 13105-1, "Safety Injection System".
8. If pressure is low and level is low and falling:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE leak, and
  - c. RESTORE level and boron concentration to normal per 13105-1, "Safety Injection System".
9. If addition is equal to or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
10. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S.

VEGP

17006-1

11

26 of 41

ORIGINSETPOINT

WINDOW C05

1-HV-8808C

Not Applicable

ACCUM TANK 3 ISO VLV 8808C NOT FULLY OPEN
---

1.0

PROBABLE CAUSENOTE

Annunciator blocked below P-11.

1. 1-HV-8808C mispositioned.
2. Operator closing 1-HV-8808C.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

1. CHECK valve position on ERF Computer.
2. DISPATCH an operator to restore power to 1-HV-8808C, if necessary and OPEN fully using 1-HS-8808C on the QMCB.

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If equipment failure is indicated, INITIATE maintenance as required.
2. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, 1X3D-BD-D02T

ORIGIN

1-PT-0934A  
 1-PT-0935A  
 1-PT-0936A  
 1-PT-0937A

SETPOINT

21.5 psig

WINDOW C06

CNMT HI-3  
 PRESS ALERT

1.0

PROBABLE CAUSE

Instrument testing or malfunction.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. CHECK Containment pressure indications.
2. If equipment failure is indicated, INITIATE maintenance as required.
3. REFER to Technical Specification 3.3.2.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB131, 1X6AA02-232, P.L.S., 1X6AU01-178

VEGP

17006-1

11

28 of 41

ORIGINSETPOINT

WINDOW D03

1-LT-0956

Hi: 64%

OR

Low: 36%

\*1-LT-0957

\*  
ACCUM TANK 4  
HI/LO LEVEL

1.0

PROBABLE CAUSE

## 1. High Level:

- a. Overfilling of Accumulator,
- b. Leakage from the Reactor Coolant System (RCS) past 1-1204-U4-082.

## 2. Low Level:

- a. Open Drain or Sample Valve, or
- b. System leak.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

\* 1-LT-0957 and ALB-06-D03 are disconnected during RCS mid-loop and drain down level operation.

WINDOW D03  
(Continued)

4.0 SUBSEQUENT OPERATOR ACTIONS

1. If filling is in progress, STOP filling.
2. MONITOR Accumulator Tank 4 level on QMCB using 1-LI-0956 and 1-LI-0957.
3. If Accumulator Tank 4 level is high or low and stable, RETURN level to normal per 13105-1, "Safety Injection System".
4. If Accumulator Tank 4 level is high and increasing, DRAIN to Refueling Water Storage Tank as required, to restore level to normal per 13105-1, "Safety Injection System".

OR

ISOLATE the Accumulator Tank from the RCS by closing 1-HV-8808D and REFER to Technical Specification 3.5.1.

5. If Accumulator Tank 4 level is low and decreasing:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE leak, and
  - c. RESTORE level to normal per 13105-1, "Safety Injection System".
6. If addition is equal to or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Log. (Technical Specification 4.5.1.1.B)
7. REFER to Technical Specification 3.5.1.

5.0 COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S., 1X5DT0040



ORIGIN

1-PT-0966  
OR  
1-PT-0967

SETPOINT

Hi: 661 psig  
Low: 617 psig

## WINDOW D04

ACCUM TANK 4  
HI/LO PRESS

1.0

PROBABLE CAUSE

1. High Pressure:
  - a. High level due to reactor coolant in leakage through 1-1204-U4-082 or overfilling,
  - b. 1-HV-8875D or 1-LV-8875H leaking or open.
2. Low Pressure:
  - a. Low level due to open or leaking sample line, drain line or system leak,
  - b. 1-1204-U4-058 or 1-PSV-8855D leaking.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. As applicable, STOP adding water or nitrogen to the Accumulator.
2. MONITOR Accumulator Tank 4 pressure and level for changes.
3. If pressure is high and level is normal:
  - a. ENSURE Nitrogen Supply Valves are closed,
  - b. RESTORE pressure to normal per 13105-1, "Safety Injection System"
4. If pressure is high and level is high and stable, RETURN level and boron concentration to normal per 13105-1, "Safety Injection System".
5. If pressure is high and level is high and rising, DRAIN to Refueling Water Storage Tank, as required, to restore level to normal per 13105-1, "Safety Injection System".

WINDOW D04  
(Continued)

6. If pressure is low and level is normal and stable:
  - a. ISOLATE the source of nitrogen leakage, if possible,
  - b. RESTORE pressure to normal.
7. If pressure is low and level is low and stable, return level to normal per 13105-1, "Safety Injection System".
8. If pressure is low and level is low and falling:
  - a. ENSURE sample and drain lines are closed, or
  - b. LOCATE and ISOLATE leak, and
  - c. RESTORE level and boron concentration to normal per 13105-1, "Safety Injection System".
9. If addition is equal to or greater than 67 gallons (approximately 7 percent indicated level), REQUEST Chemistry personnel to sample Accumulator and LOG the name of the person notified and the results in Control Room Lcg. (Technical Specification 4.5.1.1.B)
10. REFER to Technical Specification 3.5.1.

## 5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, P.L.S.

ORIGIN

1-HV-8808D

SETPOINT

Not Applicable

WINDOW D05

ACCUM TANK 4 ISO VLV 8808D NOT FULLY OPEN
---

1.0

PROBABLE CAUSENOTE

Annunciator blocked below P-11.

1. 1-HV-8808D mispositioned.
2. Operator closing 1-HV-8808D.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

1. CHECK valve position on ERF Computer.
2. DISPATCH an operator to restore power to valve 1-HV-8808D, if necessary and OPEN fully using 1-HS-8808D on QMCB.

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If equipment failure is indicated, INITIATE maintenance as required.
2. REFER to Technical Specification 3.5.1.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB120, 1X3D-BD-D02U

## WINDOW D06

CNMT SPRAY ACTUATION
-------------------------

ORIGINSETPOINT

2 out of 4  
1-PT-0934A  
1-PT-0935A  
1-PT-0936A  
1-PT-0937A

21.5 psig

or both  
1-HS-40010  
1-HS-40011

Not Applicable

or both  
1-HS-40004  
1-HS-40005

Not Applicable

1.0

PROBABLE CAUSE

1. Manual actuation of the Containment Spray System.
2. Containment HI-3 setpoint reached on 2 or more Containment pressure channels.

2.0

AUTOMATIC ACTIONS

1. Containment Spray Pumps start.
2. Containment Spray Isolation Valves 1-HV-9001A and 1-HV-9001B open.
3. Containment Spray Additive Isolation Valves 1-HV-8994A and 1-HV-8994B open.

3.0

INITIAL OPERATOR ACTIONSNOTE

Actions for a containment spray actuation are contained in 19000-C, "E-O Reactor Trip Or Safety Injection".

4.0

SUBSEQUENT OPERATOR ACTIONS

NONE

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB131, 1X6AA02-232, P.L.S., 1X6AU01-178

VEGP

17006-1

11

34 of 41

ORIGINSETPOINT

WINDOW E03

- 1-HV-8806

Not Applicable

RWST TO SI PMP ISO VLV 8806 NOT FULLY OPEN
--

1.0 PROBABLE CAUSE

1-HV-8806 mispositioned.

2.0 AUTOMATIC ACTIONS

NONE

3.0 INITIAL OPERATOR ACTIONSNOTE

If valve 1-HV-8806 is not fully open, both Emergency Core Cooling System trains are rendered inoperable, and Technical Specification 3.0.3 applies.

1. CHECK valve position with indications on the QMCB.
2. RESTORE power to valve 1-HV-8806 using 1-HS-8806A on the QMCB and OPEN fully using 1-HS-8806.

4.0 SUBSEQUENT OPERATOR ACTIONS

1. If equipment failure is indicated, INITIATE maintenance as required.
2. If necessary, LOCK OUT power to the valve using 1-HS-8806A and DISPATCH an operator to manually open the valve.

5.0 COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB121, 1X3D-BD-D02N

ORIGINSETPOINT

WINDOW E04

1-LT-0990  
 1-LT-0991  
 1-LT-0992  
 1-LT-0993

89%

RWST LO LEVEL
------------------

## 1.0

PROBABLE CAUSE

1. Filling of Accumulators.
2. Adding water to the Spent Fuel Pool.
3. Safety Injection (SI) actuation.
4. System leakage.

## 2.0

AUTOMATIC ACTIONS

Refueling Water Storage Tank (RWST) Sludge Mixing Isolation Valves 1-HV-10957 and 1-HV-10958 close.

## 3.0

INITIAL OPERATOR ACTIONS

NONE

## 4.0

SUBSEQUENT OPERATOR ACTIONS

1. If in Modes 1, 2, 3, or 4, and SI is not in progress, STOP any operation that could be removing water from the RWST.
2. If a system leak is indicated, DISPATCH personnel to locate and isolate the leak.
3. RESTORE RWST level to normal per 13701-1, "Boric Acid System".
4. REFER to Technical Specification 3.5.4.

## 5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB121, P.L.S., 1X5DT0066, 1X6AU01-201,  
 1X3D-BD-D05B

VEGP

17006-1

11

36 of 41

ORIGINSETPOINT

WINDOW E05

1-LT-0990  
1-LT-0991  
1-LT-0992  
1-LT-0993

10%

RWST EMPTY LEVEL
---------------------

1.0

PROBABLE CAUSE

1. Refueling Water Storage Tank (RWST) in use for Safety Injection (SI).
2. RWST in use for refueling.
3. System leakage.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONSNOTE

Actions for RWST empty level during SI are governed by 19013-C, "ES-1.3 Transfer to Cold Leg Recirculation".

4.0

SUBSEQUENT OPERATOR ACTIONS

1. While in Modes 5 or 6 and the RCS or Reactor cavity filling operations are not in progress, DISPATCH personnel to locate and isolate the leak.
2. While in Modes 5 or 6, RWST level should be maintained greater than 5%. Makeup to the RWST, if necessary, per 13701-2, "Boric Acid System".

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB121, P.L.S., 1X5DT0066, 1X6AU01-201

WINDOW E06

ORIGINSETPOINT

Safety Injection  
OR  
1-HS-40006 or  
1-HS-40009

Not Applicable  
Not Applicable

CNMT ISO PHASE A ACTUATION
----------------------------------

1.0

PROBABLE CAUSE

1. Safety Injection Actuation
2. Manual Actuation.

2.0

AUTOMATIC ACTIONS

Initiates Containment Phase A Isolation.

3.0

INITIAL OPERATOR ACTIONS

If a Safety Injection has occurred, INITIATE 19001-C, "E-O Reactor Trip Or Safety Injection".

4.0

SUBSEQUENT OPERATOR ACTIONS

1. If an inadvertent Phase A Isolation has occurred in Modes 1, 2 or 3, then PERFORM the following:
  - a. RESET Phase A by placing both 1-HS-40120 and 1-HS-40122 to RESET position,
  - b. OPEN Instrument Air to containment 1-HV-9378 using both 1-HS-9378A and 1-HS-9378B,
  - c. RESTORE normal letdown/charging per 13006-1, "Chemical And Volume Control System",
  - d. OPEN RCP Seal Return 1-HV-8100 and 1-HV-8112 using 1-HS-8100 and 1-HS-8112,
  - e. RESET Containment Ventilation Isolation by placig both 1-HS-40121 and 1-HS-40123 to RESET position.
2. COMPLETE the applicable portions of 11886-1, "Recovery From ESF Actuations", for CIA and CVI.

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X6AA02-232



VEGP

17006-1

11

38 of 41

ORIGINSETPOINT

WINDOW F03

1-LT-0990  
1-LT-0991  
1-LT-0992  
1-LT-0993

96%

RWST  
HI LEVEL

1.0

PROBABLE CAUSE

1. Overfilling from the Chemical and Volume Control System Boric Acid Blender.
2. Insufficient capacity for draining the refueling cavity.
3. Draining an Accumulator through the Accumulator Test Line.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

STOP any operation that is filling the Refueling Water Storage Tank (RWST).

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB121, P.L.S., 1X5DT0066, 1X6AU01-201

VEGP

17006-1

11

39 of 41

ORIGINSETPOINT

WINDOW F04

1-LT-0990  
 1-LT-0991  
 1-LT-0992  
 1-LT-0993

39%

RWST  
 LO-LO LEVEL

1.0

PROBABLE CAUSE

1. Refueling Water Storage Tank (RWST) in use for Safety Injection (SI).
2. RWST in use for refueling.
3. System leakage.

2.0

AUTOMATIC ACTIONS

Safety Injection transfers from injection to recirculation mode on a 2 out of 4 LO-LO level logic, if the SI signal has not been reset.

3.0

INITIAL OPERATOR ACTIONS

NONE

NOTE

Actions for RWST LO-LO level during SI are governed by 19013-C, "ES-1.3 Transfer to Cold Leg Recirculation".

4.0

SUBSEQUENT OPERATOR ACTIONS

1. While in Modes 5 or 6 and the RCS or Reactor cavity filling operations are not in progress, DISPATCH personnel to locate and isolate the leak.
2. Makeup to the RWST, if necessary, per 13701-1, "Boric Acid System".

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB121, P.L.S., 1X5DT0066, 1X6AU01-201

VEGP

17006-1

11

40 of 41

ORIGINSETPOINT

WINDOW F05

1-LT-0990  
 1-LT-0991  
 1-LT-0992  
 1-LT-0993

39%

RWST LO-LO 2 LEVEL
-----------------------

1.0

PROBABLE CAUSE

1. Refueling Water Storage Tank (RWST) in use for Safety Injection (SI).
2. RWST in use for refueling.
3. System leakage.

2.0

AUTOMATIC ACTIONS

NONE

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. While in Modes 5 or 6 and the RCS or Reactor cavity filling operations are not in progress, DISPATCH personnel to locate and isolate the leak.
2. Makeup to the RWST, if necessary, per 13701-1, "Boric Acid System."

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF SUB-PROCEDURE

REFERENCES: 1X4DB121, P.L.S., 1X5DT0066, 1X6AU01-201

VEGP

17006-1

11

41 of 41

WINDOW F06

ORIGINSETPOINTSI pump motor  
breakers

Not Applicable

SI PMP  
OVERLOAD TRIP

1.0

PROBABLE CAUSE

1. Safety Injection (SI) Pump Motor trip due to overcurrent.
2. SI Pump Breaker Test Switch placed in TRIP position.

2.0

AUTOMATIC ACTIONS

SI Pump Breaker trips.

3.0

INITIAL OPERATOR ACTIONS

NONE

4.0

SUBSEQUENT OPERATOR ACTIONS

1. DETERMINE which SI Pump tripped.
2. NOTIFY the Unit Shift Supervisor.
3. Do not restart the pump until the cause of the trip has been investigated and corrected.
4. If equipment failure is indicated, INITIATE maintenance as required.
5. REFER to Technical Specification 3.5.2

5.0

COMPENSATORY OPERATOR ACTIONS

NONE

END OF PROCEDURE TEXT

REFERENCES: 1X3D-BD-D01C, 1X3D-BD-D01D

\*\* COPY \*\* COPY \*\* COPY \*\* COPY \*\* COPY \*\* COPY \*\* COPY \*\* COPY \*\* COPY \*\* COPY  
NUCLEAR PLANT MAINTENANCE WORK ORDER (1 OF 1)

1. CONTROL NO. 18906587 00 2. DATE 12/23/89 3. UNIT 1 4. SYSTEM 1201  
5. MPL/TAG NO. 1120186004 STEAM GENERATOR NO. 4  
MPL/TAG(S) ASSOCIATED WITH SPECIAL INDICATORS  
6. PROB/ NOZZLE DAMS MUST BE INSTALLED IN AND LATER REMOVED IN  
WORK SUPPORT OF STEAM GENERATOR INSPECTIONS.  
REQ.

FOR INFORMATION ONLY

ORIGINAL

CONT. N

7. INITIATOR R.A. MULLINAX 8. SUPRV W. BARGERON LOC 1RB184-SG4-4S11W29  
9. MWO CLASS S EQP CLASS 111 10. UNIT STAT TRC 11. FIRE PROTECT NO  
12. DCR N 13. NCR/DR N 14. TYPE MAINT P 15. DURATION 80  
16. CRAFT MECH (EST/ACT) ELEC (EST/ACT) I&C (EST/ACT) CONT (EST/ACT) HP/OT (EST/ACT)  
CREW 0 0 0 0 0  
HRS. 0 0 0 0 0  
EXP. 0 0 0 0 0  
SCHD BEG [ ] [ ] [ ] [ ] [ ]  
SCHD END [ ] [ ] [ ] [ ] [ ]  
RESP FOREMAN  
17. CLR Y 1-90-15000 18. WELD PERM N RWP PERM N 90-6304  
~~HOLD POINT ATTENDED~~ 20. PROC 25270-C OUTSIDE  
QC REVIEWED BY R.A. Mullinax 1/3/90 21. PRI 44 22. LCO NA  
23. WORK

INST. - Install nozzle dams per 25270-C  
Remove nozzle dams per 25270-C at completion of S/G maintenance  
Maintain zone II cleanliness while working on platform. Maintain zone III below platform or  
work in accordance with 05259-C after system is sealed. REQ 26740  
Final Calc 1-7-90

CONT. N

----- 24. INITIATE REVIEW ----- 25. SPEC REV REQ N  
OPS SCP DATE 1/6/90 MNT RSH DATE 1/8/90 ----- 26. MWO RELEASE FOR WORK -----  
HP FMS DATE 1/5/90 ENG RSH DATE 1/4/90 SIG. JW Corcoran DATE 2/12/90  
27. ACT WE ORGANIZED AREAS IN THE HOT MACHINE SHOP IN THE T&I BUILDING TO REFURBISH THE  
WORK (8) EIGHT NOZZLE DAMS. WE VISUALLY INSPECTED THE GASKETS IN THE (4) FOUR HOT NOZZLE  
PERFORMED DAMS AND THEY ARE IN GOOD CONDITION. THE (4) FOUR HOT NOZZLE DAMS ARE  
STACKED AND READY TO BE HYDRO TESTED. WE VISUALLY INSPECTED THE GASKETS IN THE (4)  
FOUR CLEAN NOZZLE DAMS AND THEY ARE IN GOOD CONDITION. WE BLEW (4) FOUR DOWNOUT  
GASKETS ON TO THE (4) FOUR CLEAN NOZZLE DAMS USING PROCEDURE MFS 2.2.2 GFC 23  
REV 0. WE STACKED THE CLEAN LEAK DETECTION SYSTEMS IN THE CLEAN MAINTENANCE  
MACHINE SHOP FOR CHECK-OUT. NIGHT SHIFT - CHECKED OUT INSTALLATION TOOLING  
PUNCHED OUT GASKETS FOR BOLT HOLES IN (4) FOUR GASKETS - PERFORMED HYDRO  
ON (7) SEVEN NOZZLE DAMS - LOCKWIRED RETAINING CLIPS ~~ALL~~ 2/24/90

CONT. N

HIST SUM  
28. MTRL REQD NA  
29. PERSON PERFORMING WORK (NAME) DATE 30. MAINTENANCE FOREMAN DATE  
Mullinax 3/20/90 K. Rodwell 3/23/90  
31. INSPECTION PERFORMED BY P. Rodwell DATE 3/29/90  
32. METHOD OF F.T. None Required was to type work performed 3-25  
33. PROCEDURE # NA 34. PERFORMED BY NA 35. DATE NA  
36. PROVES OPERABILITY NA 37. METHOD USED TO PROVE OPERABILITY NA  
38. SATISF. / UNSATISF. IF UNSAT. CORR. ACTION NA  
40. UNIT STATUS AT TIME OF FAILURE A 41. TYPE FAIL NA 42. MODE OF FAIL NA  
43. CAUSE OF FAILURE NA 44. DETECT BY NA 45. EFFECT ON SYS NA  
46. EFF ON PLANT NA 47. MWO STAT D NA 48. CAUSE NA 49. CORR ACT. NA  
50. NEW MWO NA 51. OPER. ACCEPT BY NA DATE 3/6/90  
52. OSOS APPROVAL NA DATE NA  
53. SPEC REV COMP NA DATE NA 54. MEET. # NA DATE NA  
55. CLOSE OUT APPROVAL BY QC NA 3/28/90

N TRAIN

MPL No. 11201B4004

MWO No. 18904587

Work Description: Blk 26) JW Covington 2-25-90

WE BOXED NOZZLE DAM NUMBERS 7 AND 8 AND TRANSFERRED THEM TO THE EQUIPMENT HATCH TO BE STAGED FOR CONTAINMENT ENTRY. GPC-QC RICK FLAKES, EXT. 4347, WALKED THE PRE-INSTALLATION HYDRO HOLD/WITNESS POINT. Mill & Power 2/25/90

COMPLETED SLEWING OF THE BREATHING AIR LINES WITH COMMO LINES - MOVED ALL NOZZLE DAM EQUIPMENT INTO CONTAINMENT AND STAGED ON THE 171' ELEVATION RT 2-25-90

Blk 26) JW Covington 2-26-90

5/6" RAN BREATHING AIR HOSES, WITH COMMUNICATION CABLES ATTACHED, TO THE PLATFORM. SET-UP LEAK DETECTION SYSTEMS, RAN THE HOSES TO THE PLATFORM AND THE DISCHARGE TO A DRAIN. ESTABLISHED HAYDAM AREA. WE SUBMITTED MULTI-PHASE FORMS AND EXPOSURE EXTENSION FORMS. Mill & Power 2/26/90

COMMO CONSOLE AND ALL LINES ARE CHECKED OUT AND OPERATIONAL - CHECK OUT SERVICE AIR LINES. 5-50' SECTIONS ARE BEING MADE UP. RT 2-26-90

Blk 26) JW Covington 2-27-90

NO WORK WAS DONE ON 5/6" 4, WAITING FOR 5/6 TO BE TURNED OVER TO US. Mill & Power 2/27/90

Block 26: Jan Bar 2-28-90

NOZZLE DAMS INSTALLED IN THE C/L AND H/L ON 5/6" 4. INSTALLED THE LEAK DETECTION SYSTEM HEADERS IN THE H/L AND C/L AND CHECKED OUT THE SYSTEM - CLEARED THE PLATFORM OF ALL NOZZLE DAM INSTALLATION EQUIPMENT RT 2-28-90

Block 26: David Woodfin 3-01-90

INSPECTED NOZZLE DAMS FOR LEAKS WITH THE WATER LEVEL AT 192' LEVEL. 5/6" 4 C/L AND H/L DRY, NO LEAKS. Mill & Power 3/1/90

MPL No. 1120136004MWO No. 18906587Work Description OBSERVED LDS FOR NOZZLE DAM LEAKAGE AND FOUND NONE APPARENT AT ~~3-1-90~~ 3-1-90

Met w/HP & site maint. personnel to coordinate dam removal, bowl inspection & diaphragm installation. Agreed to clean bowls, remove dams & clear platform. QC will go to platform w/maint. to inspect bowl & maint. will install diaphragms. Waiting for draindown. CB Conder 3/17/90

Block 26

E.M. ~~Stewart~~

3/18/90

BOWLS cleaned and

ND's removed at 0330. Dams and tooling removed from the platform & stored in the laydown area. CB Conder 3/18/90

MOVED EQUIPMENT FROM 171'9" LEVEL IN CONTAINMENT TO THE HOT MACHINE SHOP IN THE FUEL HANDLING BUILDING, MADE A PACKING LIST AND GAVE IT TO K. HORNETT EXT. 3190. Mill & House 3/19/90

MAINTENANCE WORK ORDER REVISION SHEET

1 CONTROL NO. 18906587	2 REVISION NO. △	3 MPL TAG NO. 1-1201-B6-004	4 DATE 2-23-90
5 REASON FOR REVISION Westinghouse to Perform Work			
Block 23.			
Westinghouse to install and remove anti hydro nozzle dams under P.O. 6002428 using Westinghouse procedures approved by GPC.			
PROCEDURES: MRS 2.2.2 GPC-1 Rev. 0 MRS 2.2.2 GPC-21 Rev. 0 MRS 2.2.2 GPC-22 Rev. 0 MRS 2.2.2 GPC-23 Rev. 0 MRS 2.2.2 GPC-24 Rev. 0			6 INITIATOR Richard Anderson
REVIEW SIGNATURES			
7 MAINTENANCE ENG K. W. Caton 2-23-90	8 OPERATIONS JMM 2-23-90	9 CLEARANCE REQUIRED Y	
10 QC REVIEW [Signature] 2/23/90	11 HOLD POINTS 2/23/90	HOLD POINT ATTACHED	
12 HP REVIEW [Signature] 2/23/90	13 NEW RWP REQUIRED 90-6304		
14 ANII REVIEW NA RSH 2-23-90	15 HOLD POINTS NA		
16 WORK PLANNER RDA 2-23-90	17 PROCEDURES		
18 FIRE PROTECTION REVIEW No	19 SHIFT SUPERVISOR J.W. Conroy 2-24-90		
20 REMARKS			



FORM 1  
NOZZLE DAM HYDROTEST DATA SHEET

1.0 TEST RESULTS

The following Nozzle Dams were pressurized and stabilized to 26 psig. Pressure loss did not exceed 2 psig in 5 minutes. (Record only dams that successfully meet criteria and N/A all other lines.)

Nozzle Dam # 7

Nozzle Dam # 8

Nozzle Dam # \_\_\_\_\_

Nozzle Dam # \_\_\_\_\_

Nozzle Dam # \_\_\_\_\_

Nozzle Dam # \_\_\_\_\_

Nozzle Dam # \_\_\_\_\_

Nozzle Dam # \_\_\_\_\_

Pressure Gauge VP-2624

Torquemeter VP-3-2920

Calibration due 3/21/90

Calibration due 8/24/90

2.0 COMMENTS/RESOLUTIONS

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.0 CLOSE OUT

The Nozzle Dams identified above were hydrotested in accordance with WNSD Procedure MRS 2.2.2 GPC-21. Any exceptions/problems are noted above.

Test Engineer/Date William E Monroe 2/25/90

Quality Assurance/Date [Signature] 2/25/90

EFFECTIVE DATE	January 15, 1990	PAGE	5	REVISED DATE	
----------------	------------------	------	---	--------------	--



FORM 1  
PRE-INSTALLATION NOZZLE DAM CHECKOUT PROCESS CONTROL SHEET

Vogtle Unit # 1

(INITIAL NOTE N/A Acceptance, Exceptions, Unused)

Nozzle Dam # 2 8 \_\_\_\_\_

1.0 PRELIMINARY INSPECTION  
(9.1.1 - 9.1.9)

Nozzle dam assembly is complete per Dwg. 1501E07. All parts are positioned correctly and operating properly and gasket is in acceptable condition. Any exceptions/deviations are noted below.

2 8 \_\_\_\_\_

2.0 HYDROTEST (9.1.10)

Nozzle dam successfully hydrotested and copy of test results available.

2 8 \_\_\_\_\_

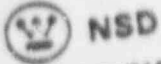
3.0 COMMENTS/RESOLUTIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4.0 SIGN-OFF

Above nozzle dams are ready for installation.

William G. Monroe 2/25/90  
(W) Coordinator/Date



7858A/813RB00104.50

MRS 2.2.2 GPC-22 REV D

# FORM 2 NOZZLE DAM INSTALLATION/REMOVAL PROCESS CONTROL SHEET

Vogtle Unit F1

S/G F4

(Date/Initial)

C/L	H/L
Dam # <u>7</u>	Dam # <u>8</u>

## 1.0 NOZZLE DAM INSTALLATION (9.3)

- 1.1 Nozzle dam installed
- 1.2 Leak detection system installed and operational

<del>2-28-90 ALZ</del>	<del>2-28-90 ALZ</del>
<del>2-28-90-ALZ</del>	<del>2-28-90-ALZ</del>

## 2.0 NOZZLE DAM REMOVAL (9.4)

- 2.1 Leak detection system removed
- 2.2 All debris removed from C/H
- 2.3 Nozzle dam removed
- 2.4 C/H inspected and verified to be clean of foreign material
- 2.5 All parts accounted for

<del>3/18/90 CAC</del>	<del>3/18/90 CAC</del>
<del>3/18/90 CAC</del>	<del>3/18/90 CAC</del>
<del>3/18/90 CAC</del>	<del>3/18/90 CAC</del>
<del>3/18/90 CAC</del>	<del>3/18/90 CAC</del>
<del>3/18/90 CAC</del>	<del>3/18/90 CAC</del>
<del>3/18/90 CAC</del>	<del>3/18/90 CAC</del>

## 3.0 COMMENTS/RESOLUTIONS:

Torque meter VP-3-2820

Calibration Due 8/24/90

## 4.0 CLOSE OUT

[Signature] 3/19/90  
(H) Coordinator/Date

[Signature] 3/20/90  
(H) Quality Assurance/Date

REVISED  
DATE

FORM 1  
MAINTENANCE HISTORY LOG SHEET

Equipment Name: LEAK DETECTION SYSTEM  
Assy Dwg's: N/A  
Inventory No. N/A

Maintenance Task Description Completed By  
Technician/Date

NO MAINTENANCE REQUIRED Wen 2/25/90

Multiple horizontal lines for recording maintenance tasks.

FORM 1  
PROCESS CONTROL SHEET

Georgia Power GAE  
Vogtle Unit # 1

NOTE: If item or section does not apply, mark N/A.

	<u>Westinghouse</u>	<u>Georgia Power</u>
I. Component		
A. All Surfaces Cleaned of Work Residue (see Paragraph 4.1.6)	<u>Done 3/19/90</u>	<u>ALR 3/19/90</u>
II. Eddy Current Inspection <i>NOT PART OF THIS JOB</i>		
A. All Equipment Removed		
B. Channel Head Cleaned of Debris:		
S/G A	<u>N/A</u>	<u>N/A</u>
S/G B	<u>N/A</u>	<u>N/A</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
C. Platform Clear of Debris:		
S/G A	<u>N/A</u>	<u>N/A</u>
S/G B	<u>N/A</u>	<u>N/A</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
D. Debris Packaged for Disposal	<u>N/A</u>	<u>N/A</u>
E. Data Station Area Clean	<u>N/A</u>	<u>N/A</u>
III. Mechanical Plugging <i>NOT PART OF THIS JOB</i>		
A. All Equipment Removed		
S/G A	<u>N/A</u>	<u>N/A</u>
S/G B	<u>N/A</u>	<u>N/A</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
B. Debris Packaged for Disposal	<u>N/A</u>	<u>N/A</u>

FORM 1 (CONT)  
PROCESS CONTROL SHEET

	<u>Westinghouse</u>	<u>Georgia Power</u>
IV. Nozzle Ring Inspection <i>* No e/e ring inspection not performed.</i>		
A. All Tools and Equipment Removed	<i>* N/A</i>	<i>* N/A</i>
B. Channel Head Cleaned of Debris:		
S/G A	<i>N/A</i>	<i>N/A</i>
S/G B	<i>N/A</i>	<i>N/A</i>
S/G C	<i>N/A</i>	<i>N/A</i>
S/G D	<i>N/A</i>	<i>N/A</i>
C. Debris Packaged for Disposal	<i>N/A</i>	<i>N/A</i>
V. Nozzle Dam Installation		
A. All Tools and Equipment Removed	<i>was 3/1/90</i>	<i>* AKR 3/1/90</i>
B. Channel Head Cleaned of Debris:		
S/G <del>A</del> 1 <i>was 3/1/90 * Bowl cleaning performed as part of no. dam removal.</i>	<i>* N/A</i>	<i>* N/A</i>
S/G <del>B</del> 2 <i>was 3/1/90</i>	<i>N/A</i>	<i>N/A</i>
S/G <del>C</del> 3 <i>was 3/1/90</i>	<i>N/A</i>	<i>N/A</i>
S/G <del>D</del> 4 <i>was 3/1/90</i>	<i>N/A</i>	<i>N/A</i>
C. Debris Packaged for Disposal	<i>N/A</i>	<i>N/A</i>
VI. Nozzle Dam Removal		
A. All Tools and Equipment Removed	<i>DK 3/8/90</i>	<i>AKR 3/12/90</i>
B. Channel Head Cleaned of Debris:		
S/G <del>A</del> 1 <i>was 3/1/90 * This work order for S/G 9 only.</i>	<i>* N/A</i>	<i>* N/A</i>
S/G <del>B</del> 2 <i>was 3/1/90</i>	<i>N/A</i>	<i>N/A</i>
S/G <del>C</del> 3 <i>was 3/1/90</i>	<i>N/A</i>	<i>N/A</i>
S/G <del>D</del> 4 <i>was 3/1/90</i>	<i>DK 3/8/90</i>	<i>AKR 3/1/90</i>
C. Debris Packaged for Disposal	<i>DK 3/10/90</i>	<i>was 3/1/90</i>
VII. Temporary Nozzle Covers Removed		
S/G A <i>* Temporary covers not used.</i>	<i>* N/A</i>	<i>* N/A</i>
S/G B	<i>N/A</i>	<i>N/A</i>



FORM 1 (CONT)  
PROCESS CONTROL SHEET

	<u>Westinghouse</u>	<u>Georgia Power</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
VIII. Tube Removal <i>NOT PERFORMED</i>		
A. All Equipment Removed	<u>N/A</u>	<u>N/A</u>
B. Channel Head Cleaned of Debris:		
S/G A	<u>N/A</u>	<u>N/A</u>
S/G B	<u>N/A</u>	<u>N/A</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
C. Debris Packaged for Disposal	<u>N/A</u>	<u>N/A</u>
IX. Vent Hole Plugging <i>NOT PERFORMED</i>		
A. All Tools and Equipment Removed	<u>N/A</u>	<u>N/A</u>
B. Channel Head Cleaned of Debris:		
S/G A	<u>N/A</u>	<u>N/A</u>
S/G B	<u>N/A</u>	<u>N/A</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
C. Debris Packaged for Disposal	<u>N/A</u>	<u>N/A</u>
X. Weld Repair <i>NOT PERFORMED</i>		
A. All Equipment Removed	<u>N/A</u>	<u>N/A</u>
B. Channel Head Cleaned of Debris:		
S/G A	<u>N/A</u>	<u>N/A</u>
S/G B	<u>N/A</u>	<u>N/A</u>
S/G C	<u>N/A</u>	<u>N/A</u>
S/G D	<u>N/A</u>	<u>N/A</u>
C. Debris Packaged for Disposal	<u>N/A</u>	<u>N/A</u>

EFFECTIVE  
DATE February 20, 1990

PAGE

8 of 9

REVISED  
DATE February 20, 1990

FORM 1 (CONT)  
PROCESS CONTROL SHEET

Westinghouse      Georgia Power

XI. Other Process Operations      \* No other operations performed.

Specify: \*N/A

A. All Equipment Removed      \*N/A      \*N/A

B. Channel Head Cleaned of Debris:

S/G A      H/L      N/A      N/A

S/G A      C/L      N/A      N/A

S/G B      H/L      N/A      N/A

S/G B      C/L      N/A      N/A

S/G C      H/L      N/A      N/A

S/G C      C/L      N/A      N/A

S/G D      H/L      N/A      N/A

S/G D      C/L      N/A      N/A

FINAL SIGN-OFF

Westinghouse Electric Corporation

CB Condu      3/18/90  
Name      Date

Georgia Power

Condu KR      3/14/90  
Name      Date



Customer Reference No(s).

Westinghouse Reference No(s).MRS 2.2.2 GPC-1 Revision 0

WESTINGHOUSE  
NUCLEAR SAFETY EVALUATION CHECK LIST

- 1) NUCLEAR PLANT(S) Vogtle Unit 1
- 2) CHECK LIST APPLICABLE TO: Post activity sign-off for area cleanliness  
(Subject of Change) \_\_\_\_\_
- 3) The written safety evaluation of the revised procedure, design change or modification required by 10CFR50.59 has been prepared to the extent required and is attached. If a safety evaluation is not required or is incomplete for any reason, explain on Page 2.

Parts A and B of this Safety Evaluation Check List are to be completed only on the basis of the safety evaluation performed.

## CHECK LIST - PART A - 10CFR50.59(a)(1)

- (3.1) Yes \_\_\_ No X A change to the plant as described in the FSAR?  
 (3.2) Yes \_\_\_ No X A change to procedures as described in the FSAR?  
 (3.3) Yes \_\_\_ No X A test or experiment not described in the FSAR?  
 (3.4) Yes \_\_\_ No X A change to the plant technical specifications  
 (See Note on Page 2)

- 4) CHECK LIST - PART B - 10CFR50.59(a)(2) (Justification for Part B answers must be included on Page 2.)

- (4.1) Yes \_\_\_ No X Will the probability of an accident previously evaluated in the FSAR be increased?  
 (4.2) Yes \_\_\_ No X Will the consequences of an accident previously evaluated in the FSAR be increased?  
 (4.3) Yes \_\_\_ No X May the possibility of an accident which is different than any already evaluated in the FSAR be created?  
 (4.4) Yes \_\_\_ No X Will the probability of a malfunction of equipment important to safety previously evaluated in the FSAR be increased?  
 (4.5) Yes \_\_\_ No X Will the consequences of a malfunction of equipment important to safety previously evaluated in the FSAR be increased?  
 (4.6) Yes \_\_\_ No X May the possibility of a malfunction of equipment important to safety different than any already evaluated in the FSAR be created?  
 (4.7) Yes \_\_\_ No X Will the margin of safety as defined in the bases to any technical specification be reduced?



Vogtle Unit 1  
Post Activity Sign-Off for Area Cleanliness  
(Field Procedure Number MRS 2.2.2 GPC-1 Revision 0)

SAFETY EVALUATION

INTRODUCTION

The procedure MRS 2.2.2 GPC-1 Revision 0 prepared for Vogtle Unit 1 establishes the format and guideline for an effective sign-off for cleanliness and equipment removal from the designated plant site work area. This procedure is to be implemented upon completion of scheduled work activities performed by the Westinghouse Steam Generator Primary Services Group.

LICENSING APPROACH AND SCOPE

The use of procedure MRS 2.2.2 GPC-1 Revision 0 will be reviewed against the criteria of 10CFR50.59. 10CFR50.59 allows the holder of a license authorizing operation of a nuclear power facility to use such procedures without prior NRC approval provided that the proposed change does not involve an unreviewed safety question or result in a change to the plant technical specifications incorporated in the license. The licensee must maintain a record of the change to the facility, to the extent that such a change impacts the FSAR. While the operation of the plant with the implementation of this procedure does not involve a change to the FSAR, 10CFR 50.59 stipulates that these records shall include a written safety evaluation which provides the basis for the determination that the use of this procedure does not involve an unreviewed safety question. It is the purpose of this document to support the requirement for a written safety evaluation.

Section 17.2.5 of the Vogtle FSAR describes the elements required to be included in procedures. Paragraphs 5A and 5B of part 17.2 of NUREG-800, Standard Review Plan, establishes the NRC position on information required to be included affecting quality.

Section 12.1 of the FSAR describes the program and procedures to maintain occupational radiation exposure as low as reasonably achievable (ALARA). The NRC position on the requirements of an ALARA program is outlined in section 12.5 of the Standard Review Plan.

The scope of this document is limited to the an evaluation of the post activities sign-off for area cleanliness, centering on any effects the use of this procedure may have on existing plant equipment or any unreviewed safety questions that may be identified.

## EVALUATION

Field procedure MRS 2.2.2 GPC-1 Revision 0 is implemented to ensure that the work area is cleaned of all debris/consumables and that all equipment has been removed from the designated work area upon completion of any of the following scheduled work activities:

- o Eddy Current Inspection
- o Mechanical Plugging
- o Nozzle Ring Inspection
- o Nozzle Dam Installation
- o Nozzle Dam Removal
- o Temporary Nozzle Covers Removed
- o Tube Removal
- o Vent Hole Plugging
- o Weld Repair
- o Other Specified Work Activities

This procedure requires that Westinghouse and Georgia Power jointly inspect the designated work areas after completion of the above work activities. Both parties are required to sign off the Process Control Sheet included in the procedure. Any unsatisfactory inspection results will be the responsibility of Westinghouse and a second inspection will be conducted to confirm compliance with the procedure.

The procedure ensures that all equipment utilized by Westinghouse for the performance of the work activities is removed from the work area, including removal of any debris/consumables generated as a result of the work activities. The debris/consumables are to be properly packaged and presented to the utility for final disposal, which is the responsibility of Georgia Power.

The criteria of 10CFR50.59 is addressed in this procedure by eliminating unreviewed safety questions via the implementation of proper surveillance, loose part material control, exposure control or ALARA and procedural sign-offs required while executing this procedure.

## Surveillance Control

To assure procedural control and assure traceability of inspection records, this procedure has Georgia Power and Westinghouse sign-off blocks for the recording and verification that the work area has been properly cleaned of all debris and that all tools and equipment used have been completely removed from the work area.

This procedure is in conformance with the Westinghouse Quality Assurance Program Plan (Reference 1). Resolution of all nonconformance issues (identification/resolution), field change notices and field service activities outlined in this procedure are in conformance with Westinghouse's Service Division operating procedures (Reference 2 and 3).

### Foreign/Loose Parts Assessment

The introduction of foreign debris into the RCS is minimized by the final inspection performed jointly by Westinghouse and Georgia Power. This procedure, when properly implemented, provides that no breach of the RCS is made by ensuring via inspection that any loose part(s) or debris has been removed and thus is prevented from entering the system.

### ALARA

Radiological protection of personnel is addressed by the requirement that there be continuous coverage by the utility's health physics staff and Westinghouse's adherence to site radiological rules. Additionally, by providing qualified personnel and procedures to perform the work, Westinghouse is committed to keeping occupational radiation exposure to a minimum during all phases of work thus minimizing exposure to radiation and limiting the possible spread of contamination. This is accomplished by reducing the worker's length of exposure; using shielding where practical; securing and containing the work area; and maximizing the worker's distance from any radiation source.

### CONCLUSIONS

Based on the above evaluation the use of procedure MRS 2.2.2 GPC-1 Revision 0, "Post-Activity Sign-Off for Area Cleanliness", does not require a change to plant technical specifications nor does it constitute an unreviewed safety question based on the criteria of 10 CFR 50.59 (a) (2). A proposed change, test or experiment involves an unreviewed safety question if any of the following conditions are not satisfied:

- (i) if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the SAR is increased:

The procedure has no impact on probability of occurrence of an accident since its use does not initiate an accident and it does not have any impact on the performance of any safety-related systems.

Use of this procedure has no impact on the safety analyses since the work area is returned to its previously analyzed condition.

The consequences of an accident are not increased as dose calculations are unaffected by this change; there is no increase in potential for fuel degradation.

- (ii) if a possibility for an accident or malfunction of a different type than any evaluated previously in the SAR may be created:

No new failure mode or limiting single failure is created as a result of this change. It is expected that the use of the procedure would preclude introduction of loose parts and subsequent degradation of the RCS primary pressure boundary.

(iii) if the margin of safety as defined in the basis for any technical specification is reduced:

The change does not impact any physical parameters or conditions, which are addressed in the plant Technical Specifications.

All acceptance criteria continues to be met including the integrity of the RCS pressure boundary.

#### REFERENCES

- (1) Westinghouse Quality Assurance Program (WCAP-9245).
- (2) Westinghouse Control of Field Service Activities Operating Procedure Number WNSD OPR 610-3.
- (3) Westinghouse Control of Nonconformance on Items and Services Operating Procedure Number WNSD OPR 210-4.

EQ EVALUATION CHECKLIST

FOR USE ON PROJECT CLASSES Q111, Q212,  
Q313, Q013, Q015, Q11E, Q11J, Q12E, 61J

MWO NO. 29402-C

SECTION I

PART A ORIGINAL PART

- 1. DESCRIPTION S/C
- 2. TAG NO. 1-1201-20-1007
- 3. PROJECT CLASS 111
- 4. SPECIFICATION (EQDP) NO. 10001
- 5. MANUFACTURER Westinghouse
- 6. MODEL NO. N/A
- 7. PART NO. N/A

PART B REPLACEMENT PART

- 1. DESCRIPTION /
- 2. MFR NO. /
- 3. STOCK NO. /
- 4. SPECIFICATION (EQDP) NO. A
- 5. MANUFACTURER N
- 6. MODEL NO. /
- 7. PART NO. /
- 8. PO NO. /

COMMENTS \* NO MAT'L USED

SECTION II WORK PLANNING

1. ARE PROCEDURES, VENDOR MANUALS, DRAWINGS OR INSTRUCTIONS AVAILABLE TO DISASSEMBLE/REWORK COMPONENT?

YES  NO  
Red / 1-7-93  
(Init. Date)

2. ARE SPECIFICATION NUMBERS FOR ORIGINAL AND REPLACEMENT ITEMS THE SAME?

YES  NO

3. ARE MANUFACTURER MODEL/PART NUMBERS OF THE ORIGINAL AND REPLACEMENT PARTS THE SAME?

YES  NO  
N A

4. IS BULK MATERIAL LISTED ON ATTACHMENT ACCEPTABLE? LIST ITEM NO. FROM ATTACHMENT IF "NO" IS CHECKED.

YES  NO

(Item No.)

(Init. Date)

NOTE

If items 2, 3, or 4 are checked No, the Checklist must be reviewed by the EQ Group.

N/A PART(S) ARE ACCEPTABLE FOR USE  
SEND TO EQ GROUP

\* [Signature] / 3/24/93  
WPG DATE

SECTION III EQ GROUP EVALUATION

[ ] PART IS ACCEPTABLE FOR USE [ ] PART IS UNACCEPTABLE FOR USE

JUSTIFICATION FOR ACCEPTANCE:

EQ ENGINEER

DATE

N/A  
FIGURE 3

Quality Control Inspection Report

VOGTLE GENERATING PLANT—UNITS 1 & 2

33829

MWO/ODR/DR No. <u>18906587</u>	Building <u>CTMT</u>	Procedure/Spec. No./Rev. <u>N/A</u>
Room No./Level No. <u>C, LOOP 4</u>	Sys./Start-Up Designator <u>1201</u>	Tag No. <u>1120136004</u>
Drawing No./Rev. <u>N/A</u>	Vendor Manual Log No. <u>N/A</u>	Other <u>N/A</u>

1. Inspector will use separate forms for each completed inspection function(s) and insert original with work package, use continuation sheets when needed.
2. Use simple narrative type report procedure. Reference all applicable drawing numbers, specifications, special instructions, etc., connected with your inspection. Use sketches, when applicable, showing dimensions checked, alignment, physical location of defects found, etc. N/A all blocks not used.
3. Upon completion of the inspection activity, enter results below and sign and date.

Remarks VISUALLY VERIFIED NUZZEL DAM REMOVAL AND INTERNAL CLEANLINESS HOT/COLD LEGS PER Q/C HOLD POINT SHEET.

Sketch N/A

Inspection Results  
 SAT.     UNSAT—ODR/DR NO.(s):

70516A MC5191    Inspector Andrew K. Poon    Date 3/25/90



WFO No: 18906537

PROCEDURE & REV No: N/A

NOTIFY QUALITY CONTROL PRIOR TO PERFORMING THE WORK ACTIVITY OR STEP ASSOCIATED WITH THE HOLD (H) OR WITNESS (W) POINT

DO NOT BYPASS QC HOLD OR WITNESS POINTS

STEP NO.	H/W	HOLD POINT / WITNESS POINT DESCRIPTION	ASSIGNED BY		NOTIFIED		QC ACTION	
			INIT	DATE	INIT	DATE	INIT	I-W-N/A
1	W	Notify QC PRIOR TO RECOMM- ING PAI-INSTALLATION HYDRO	Jub	2/25/90	man	2/25/90	RAT	W*
					man	2/25/90		
2	H	Notify QC TO VERIFY WORK DATA REMOVAL, ALL ITEMS REMOVED AND PROPER CLEANLINESS IS MAINTAINED.	Jub	2/25/90				
		HOT LIC			CBC	3/15/90	AKR	I
		Cold LIC			CBC	3/15/90	AKR	I

COMMENTS & IR NUMBERS: (initial and date entries)  
 \* Work performed under Westinghouse  
 QA/RC. RAT 2/24/90

CLOSED VESSEL/CONFINED SPACE TOOLS, EQUIPMENT, MATERIAL  
INVENTORY

S/G # 4 C/L

ITEM IN	MODEL NO., SERIAL NO., OR ID MARK	ITEM REMOVED OR ACCOUNTED FOR SUPV. INTLS. DATE
1 4' LIGHT	* N/A	ITEM REMOVED WEN 2/28/90
2 NOZZLE DRUM FOLDING SECTION	# 2	ACCOUNTED FOR. ADDED TO NOZZLE WEN 2/28/90
3 NOZZLE DRUM CENTER SECTION	# 2	ACCOUNTED FOR. ADDED TO NOZZLE, WEN 2/28/90
4 PNEUMATIC SCREW DRIVER	* N/A	ITEM REMOVED WEN 2/28/90
5 SPEED WRENCH	* N/A	ITEM REMOVED WEN 2/28/90
6		
7		
8		
9		
10		
11		
12		
13		

LIST CONTINUED ON AN ADDITIONAL SHEET? ( ) YES (X) NO

\* FILE W/COMPLETED MWO

\* Serial numbers not applicable to these tools.

FIGURE 3 - (EXAMPLE)

CLOSED VESSEL/CONFINED SPACE TOOLS, EQUIPMENT, MATERIAL  
INVENTORY

SIG #4 H/L

ITEM IN	MODEL NO., SERIAL NO., OR ID MARK	ITEM REMOVED OR ACCOUNTED FOR SUPV. INTLS./DATE
1 4' LIGHT	* N/A	Item Removed was 2/28/90
2 NOZZLE DAM FOLDING SECTION	# 8	ACCOUNTED FOR. RETURN TO NOZZLE was 2/28/90
3 NOZZLE DAM CENTER SECTION	# 8	ACCOUNTED FOR. RETURN TO NOZZLE was 2/28/90
4 PNEUMATIC SCREW DRIVER	* N/A	Item Removed was 2/28/90
5 JEEP WRENCH	* N/A	Item Removed was 2/28/90
6		
7		
8		
9		
10		
11		
12		
13		

LIST CONTINUED ON AN ADDITIONAL SHEET? ( ) YES  NO

\* FILE W/COMPLETED MWO

\* Serial numbers not applicable.

FIGURE 3 - (EXAMPLE)

## VEGP FIRE PROTECTION CHECKLIST

1. MWO NO. \_\_\_\_\_ 2. MPL/TAG NO. \_\_\_\_\_  
 3. LOCATION \_\_\_\_\_

4. WILL THE WORK INSTALL, IMPAIR, MODIFY, ISOLATE, DEFEAT, OR REMOVE ANY OF THE FOLLOWING? IF THE ANSWER IS "YES" CHECK THE BOX, AND INDICATE APPROPRIATE DETAILS.

- SPRINKLER SYSTEM \_\_\_\_\_  
 INTERIOR HOSE STATION \_\_\_\_\_  
 HALON SYSTEM \_\_\_\_\_  
 DETECTION SYSTEM \_\_\_\_\_  
 EMERGENCY LIGHTING SYSTEM \_\_\_\_\_  
 PERMANENT COMBUSTIBLES (CABLE, WOOD, PLASTIC, ETC.) \_\_\_\_\_  
 STRUCTURAL STEEL, OR RACEWAY FIREPROOFING \_\_\_\_\_  
 FIRE SUPPRESSION SUPPLY SYSTEM (PUMPS, TANKS, ETC.) \_\_\_\_\_  
 CONDUIT SEALS OR EQUIPMENT ENCLOSURE (CABINET HOUSING) \_\_\_\_\_  
 FIRE EXTINGUISHER \_\_\_\_\_  
 COMMUNICATIONS SYSTEM \_\_\_\_\_  
 RCP OIL COLLECTION SYSTEM \_\_\_\_\_  
 SEISMIC STANDPIPE SYSTEM \_\_\_\_\_

5. WILL THE WORK DEFEAT, MODIFY OR IMPAIR ANY OF THE FOLLOWING FIRE SEPARATION FEATURES? IF THE ANSWER IS "YES" CHECK THE BOX, AND INDICATE APPROPRIATE DETAILS.

- A. FIRE AREA BOUNDARY (WALL, ETC.) \_\_\_\_\_  
 B. PASSIVE AREA BOUNDARY PENETRATION SEAL ASSEMBLY.  
     PENETRATION SEAL \_\_\_\_\_  
     WALL BLOCKOUT \_\_\_\_\_  
     FLOOR PLUG OR HATCH \_\_\_\_\_  
     CABLE TRAY OR CONDUIT WRAP \_\_\_\_\_  
     RADIANT ENERGY SHIELD \_\_\_\_\_  
 C. ACTIVE FIRE AREA BOUNDARY PENETRATION SEAL.  
     FIRE DOOR \_\_\_\_\_  
     FIRE DAMPER \_\_\_\_\_

6. IF ALL THE ANSWERS IN BLOCKS 4 and 5 ARE "NO", STOP THE EVALUATION HERE, AND ENTER "NO" IN BLOCK 11 OF THE MWO FORM. IF ANY QUESTIONS WERE ANSWERED "YES", ENTER "YES" IN BLOCK 11 OF THE MWO FORM.

EVALUATOR: W. C. Cole DATE 1-4-90

POST WORK REVIEW (COMPLETE "A, B, OR C" BELOW)

- (A) THE CONDITION IMPACTING THE FIRE PROTECTION COMPONENTS LISTED ABOVE HAS BEEN REMOVED. FPE \_\_\_\_\_ DATE \_\_\_\_\_  
 (B) THE FIRE PROTECTION COMPONENT IS STILL IMPAIRED. FPE \_\_\_\_\_ DATE \_\_\_\_\_  
 (C) RESTORATION OF THE IMPAIRMENT HAS BEEN TRANSFERRED (Ref: \_\_\_\_\_) AND THE FIRE PROTECTION LCO LOG HAS BEEN CHANGED TO REFERENCE THE NEW MWO FOR THIS IMPAIRMENT. FPE \_\_\_\_\_ DATE \_\_\_\_\_

# OVERSIZE DOCUMENT PAGE PULLED

## SEE APERTURE CARDS

NUMBER OF OVERSIZE PAGES FILMED ON APERTURE CARDS

7

APERTURE CARD/HARD COPY AVAILABLE FROM  
RECORDS AND REPORTS MANAGEMENT BRANCH

9202210340

" 350

" 355

" 360

" 370

9202190403 - Dupe

9202200359 - Dupe