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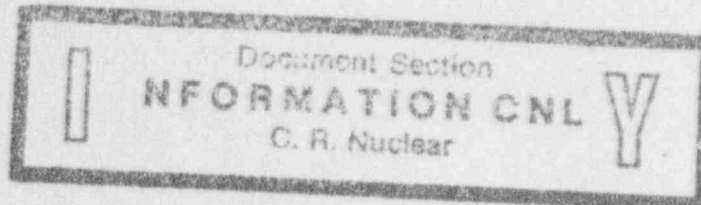
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Rev. 10 09/09/93

Effective Date

10/4/93



ANNUNCIATOR RESPONSE

AR-401

FLORIDA POWER CORPORATION

CRYSTAL RIVER UNIT 3

PSA F ANNUNCIATOR RESPONSE

THIS PROCEDURE ADDRESSES SAFETY RELATED COMPONENTS

APPROVED BY: Interpretation Contact

[Signature]
9-30-93

DATE:

INTERPRETATION CONTACT: Manager, Nuclear Plant
Operations

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1.0 PURPOSE

- 1.1 Establish a reference document for each Annunciator Window on the PSA-X Lampbox.
- 1.2 Establish operator status for valid Annunciator alarms on the PSA-X Lampbox.
- 1.3 Establish a reference to other procedures which address operator action for valid Annunciator alarms on the PSA-X Lampbox.

2.0 REFERENCES

2.1 IMPLEMENTING REFERENCES

- 2.1.1 OP-409 - Plant Ventilation
- 2.1.2 OP-417 - Containment Operating Procedure
- 2.1.3 OP-703 - Plant Distribution System
- 2.1.4 AP-250 - Radiation Monitor Actuation
- 2.1.5 AP-513 - Toxic Gas
- 2.1.6 AP-880 - Fire Protection

2.2 DEVELOPMENTAL REFERENCES

- 2.2.1 INPO 90-021, Good Practice OP-217, Alarm Response Procedures
- 2.2.2 Annunciator Window Engraving Drawing E-224-048

3.0 PERSONNEL INDOCTRINATION

- 3.1 The Annunciator System is powered from VBDP-5 Breaker 28.

4.0 INSTRUCTIONS

- 4.1 Respond to alarms on the PSA-X Lampbox as indicated on Enclosure 1, Annunciator Response.

5.0 FOLLOW-UP ACTIONS

None

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0466

INDICATED CONDITION:

- o AHF-17A MOTOR IS NOT ENERGIZED WITH CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON CONTROL STATION
- o RADIATION HIGH RAD ALARM RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o START AHF-17B
- o RESTORE VENTILATION PER OP-409
- o REFER TO AP-250

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-80

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0467

INDICATED CONDITION:

- o AHF-17B MOTOR IS NOT ENERGIZED WITH CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON CONTROL STATION
- o RADIATION HIGH RAD ALARM RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o REFER TO AP-250
- o START AHF-17A
- o RESTORE VENTILATION PER OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-81

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0470

INDICATED CONDITION:

- AHF-18A MOTOR IS NOT ENERGIZED WITH CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-18A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF TRIP
- START AHF-18B
- RESTORE VENTILATION PER OP-409

DISCUSSION:

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-82

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0471

INDICATED CONDITION:

- o AHF-18B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-18B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o START AHF-18A
- o RESTORE VENTILATION PER OP-409

DISCUSSION:

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS

REFERENCES: DRAWING 208-005 SHEET AH-83

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUN	ATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0478

INDICATED CONDITION:

- AHF-19A MOTOR IS NOT ENERGIZED WITH CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-19A CONTROL STATION
- RADIATION HIGH RAD ALARM RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF TRIP
- REFER TO AP-250
- START AHF-19B
- RESTORE VENTILATION PER OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-86

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT PCINT 0479

INDICATED CONDITION:

- o AHF-19B MOTOR IS NOT ENERGIZED WITH CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-19B CONTROL STATION
- o RADIATION HIGH RAD ALARM RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o START AHF-19A
- o RESTORE VENTILATION PER OP-409
- o REFER TO AP-250

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-87

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0482

INDICATED CONDITION:

- o AHF-20A MOTOR FAST SPEED WINDINGS ARE NOT ENERGIZED, CONTROL HANDLE IN THE PUSHED IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN FAST SPEED LIGHT ON WITH A RED FLAG ON AHF-20A CONTROL STATION
- o RADIATION HIGH RAD ALARM RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o NOTIFY CHEMISTRY SAMPLE HOOD VENTILATION IS SECURED
- o REFER TO OP-409
- o REFER TO AP-250

DISCUSSION:

IT MAY BE POSSIBLE TO OPERATE AHF-20A/B IN SLOW SPEED WITH AHF-44A/B IN OPERATION TO PROVIDE CHEMISTRY SAMPLE HOOD VENTILATION

REFERENCES: DRAWING 208-005 SHEET AH-86

SENSING ELEMENT: CS/SC, CS/O, NC/LAT, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0483

INDICATED CONDITION:

- AHF-20A MOTOR SLOW SPEED WINDINGS ARE NOT ENERGIZED, CONTROL HANDLE IN THE PULLED OUT NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN SLOW SPEED LIGHT ON WITH A RED FLAG ON AHF-20A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF TRIP
- NOTIFY CHEMISTRY SAMPLE HOOD VENTILATION IS SECURED
- REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-88

SENSING ELEMENT: CS/SC, CS/O, NC/LAT, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0484

INDICATED CONDITION:

- o AHF-20B MOTOR FAST SPEED WINDINGS ARE NOT ENERGIZED, CONTROL HANDLE IN THE PUSHED IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN FAST SPEED LIGHT ON WITH A RED FLAG ON AHF-20B CONTROL STATION
- o RADIATION HIGH RAD ALARM RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o NOTIFY CHEMISTRY SAMPLE HOOD VENTILATION IS SECURED
- o REFER TO OP-409
- o REFER TO AP-250

DISCUSSION:

IT MAY BE POSSIBLE TO OPERATE AHF-20A/B IN SLOW SPEED WITH AHF-44A/B IN OPERATION TO PROVIDE CHEMISTRY SAMPLE HOOD VENTILATION

REFERENCES: DRAWING 208-005 SHEET AH-89

SENSING ELEMENT: CS/SC, CS/O, NC/LAT, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0485

INDICATED CONDITION:

- o AHF-20B MOTOR SLOW SPEED WINDINGS ARE NOT ENERGIZED, CONTROL HANDLE IN THE PULLED OUT NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN SLOW SPEED LIGHT ON WITH A RED FLAG ON AHF-20B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o NOTIFY CHEMISTRY SAMPLE HOOD VENTILATION IS SECURED
- o REFER TO OP-409

DISCUSSION:

IT MAY BE POSSIBLE TO OPERATE AHF-20A/B IN SLOW SPEED WITH AHF-44A/B IN OPERATION TO PROVIDE CHEMISTRY SAMPLE HOOD VENTILATION

REFERENCES: DRAWING 208-005 SHEET AH-89

SENSING ELEMENT: CS/SC, CS/O, NC/LAT, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0489

INDICATED CONDITION:

- o AHF-21A MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-21A CONTROL STATION
- o RADIATION HIGH RAD RM-A-5

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF TRIP
- o REFER TO AP-250
- o START AHF-21B
- o RESTORE VENTILATION PER OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-91

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0490

<p>INDICATED CONDITION:</p> <ul style="list-style-type: none"> o AHF-21B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION
<p>REDUNDANT INDICATION WHICH WILL VERIFY ALARM:</p> <ul style="list-style-type: none"> o GREEN LIGHT ON WITH A RED FLAG ON AHF-21B CONTROL STATION o RADIATION HIGH RAD RM-A-5
<p>OPERATOR ACTIONS FOR A VALID ALARM:</p> <ul style="list-style-type: none"> o INVESTIGATE THE CAUSE OF TRIP o REFER TO AP-250 o START AHF-21A o RESTORE VENTILATION PER OP-409
<p>DISCUSSION:</p>
<p>REFERENCES: DRAWING 208-005 SHEET AH-92</p>
<p>SENSING ELEMENT: CS/SC, CS/O, 42B</p>

PSA ANNUNCIATOR RESPONSE	PSA-X-01-01	F-01-01
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CNTRL COMPLEX
FAN
TRIP

EVENT POINT 0491

INDICATED CONDITION:

- AHF-30 MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-30 CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF TRIP
- REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-93

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0308

INDICATED CONDITION:

- AIR FLOW FROM "A" BATTERY ROOM IS LOW AS SENSED BY AH-734-FS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- POSSIBLE FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF ALARM
- CHECK FOR FIRE DAMPER OPERATION
- HAVE CHEMISTRY SAMPLE BATTERY ROOM FOR H_2 CONCENTRATIONS

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE DAMPER ACTUATION, CHECK FIRE DAMPERS IN THE CORRECT POSITION. THIS LOSS OF FLOW FROM THE BATTERY ROOM COULD RESULT IN A BUILD UP OF HYDROGEN INSIDE THE BATTERY ROOM. CONSIDERATION SHOULD BE GIVEN TO VENTILATING THE AREA TO PREVENT THE POSSIBILITY OF AN EXPLOSIVE MIXTURE DEVELOPING.

REFERENCES: DRAWING 208-005 SHEET AH-131

SENSING ELEMENT: AH-734-FS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0309

INDICATED CONDITION:

- AIR FLOW FROM "B" BATTERY ROOM IS LOW AS SENSED BY AH-735-FS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- POSSIBLE FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF ALARM
- CHECK FOR FIRE DAMPER OPERATION
- HAVE CHEMISTRY SAMPLE BATTERY ROOM FOR H_2 CONCENTRATIONS

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE DAMPER ACTUATION, CHECK FIRE DAMPERS IN THE CORRECT POSITION. THIS LOSS OF FLOW FROM THE BATTERY ROOM COULD RESULT IN A BUILD UP OF HYDROGEN INSIDE THE BATTERY ROOM. CONSIDERATION SHOULD BE GIVEN TO VENTILATING THE AREA TO PREVENT THE POSSIBILITY OF AN EXPLOSIVE MIXTURE DEVELOPING.

REFERENCES: DRAWING 208-005 SHEET AH-131

SENSING ELEMENT: AH-735-FS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0442

INDICATED CONDITION:

- o AHF-16A CONTROL HANDLE IN NORMAL AFTER START, AND DIFFERENTIAL PRESSURE ACROSS AHHE-10A IS $<0.063''\text{H}_2\text{O}$ AS SENSED BY AH-123-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-16A TRIPPED
- o FIRE DAMPER ALERTS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF ALARM
- o CHECK FOR FIRE DAMPER OPERATION
- o START AHF-16B TO SUPPLY SWITCHGEAR ROOMS

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE DAMPER ACTUATION, CHECK FIRE DAMPER POSITION.

REFERENCES: DRAWING 208-005 SHEET AH-058, DRAWING 308846

SENSING ELEMENT: AH-123-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0446

INDICATED CONDITION:

- o AHF-16B CONTROL HANDLE IN NORMAL AFTER START, AND DIFFERENTIAL PRESSURE ACROSS AHHE-10B IS $<0.050''\text{H}_2\text{O}$ AS SENSED BY AH-124-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-16B TRIPPED
- o FIRE DAMPER ALERTS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF ALARM
- o CHECK FOR FIRE DAMPER OPERATION
- o START AHF-16A TO SUPPLY SWITCHGEAR ROOMS

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE DAMPER ACTUATION, CHECK FIRE DAMPER POSITION.

REFERENCES: DRAWING 208-005 SHEET AH-059, DRAWING 308846

SENSING ELEMENT: AH-124-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0468

INDICATED CONDITION:

- AHF-17A, OR AHF-18A CONTROL HANDLE IN NORMAL AFTER START AND A LOW FLOW CONDITION EXISTS IN DUCT WORK OF <15"H₂O AS SENSED BY AH-34-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOW FLOW INDICATION ON AH-32-FIR
- POSSIBLE FAN TRIP ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF ALARM
- ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FLOW BLOCKAGE. ALTERNATING VENTILATION EQUIPMENT SHOULD CORRECT THE CONDITION.

REFERENCES: DRAWING 208-005 SHEET AH-080, DRAWING 308847

SENSING ELEMENT: AH-34-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0480

INDICATED CONDITION:

- AHF-19A CONTROL HANDLE IN NORMAL AFTER START AND A LOW FLOW CONDITION EXISTS IN DUCT WORK OF $<10^{\circ}\text{H}_2\text{O}$ AS SENSED BY AH-176-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- POSSIBLE FAN TRIP ALARMS
- FIRE DAMPER ALERTS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF ALARM
- CHECK FOR TRIPPED FIRE DAMPERS
- ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FIRE DAMPER ACTUATION. IF ALTERNATING VENTILATION EQUIPMENT DOES NOT CORRECT THE CONDITION THERE IS PROBABLY A FIRE DAMPER TRIPPED.

REFERENCES: DRAWING 208-005 SHEET AH-086, DRAWING 308847

SENSING ELEMENT: AH-176-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 0486

INDICATED CONDITION:

- o AHF-20A CONTROL HANDLE IN NORMAL AFTER START AND A LOW FLOW CONDITION EXISTS IN DUCT WORK OF $<0.08''\text{H}_2\text{O}$ AS SENSED BY AH-36-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o POSSIBLE FAN TRIP ALARMS
- o FIRE DAMPER ALERTS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF ALARM
- o CHECK FOR TRIPPED FIRE DAMPERS
- o ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- o REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FIRE DAMPER ACTUATION. IF ALTERNATING VENTILATION EQUIPMENT DOES NOT CORRECT THE CONDITION THERE IS PROBABLY A FIRE DAMPER TRIPPED.

REFERENCES: DRAWING 208-005 SHEET AH-088, DRAWING 308847

SENSING ELEMENT: AH-36-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 1545

INDICATED CONDITION:

- o AHF-17B, OR AHF-18B CONTROL HANDLE IN NORMAL AFTER START AND A LOW FLOW CONDITION EXISTS IN DUCT WORK OF $<15''\text{H}_2\text{O}$ AS SENSED BY AH-546-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOW FLOW INDICATION ON AH-32-FIR
- o POSSIBLE FAN TRIP ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF ALARM
- o ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- o REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FLOW BLOCKAGE. ALTERNATING VENTILATION EQUIPMENT SHOULD CORRECT THE CONDITION.

REFERENCES: DRAWING 208-005 SHEET AH-081, DRAWING 308847

SENSING ELEMENT: AH-546-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 1546

INDICATED CONDITION:

- o AHF-19B CONTROL HANDLE IN NORMAL AFTER START AND A LOW FLOW CONDITION EXISTS IN DUCT WORK OF $<10''\text{H}_2\text{O}$ AS SENSED BY AH-547-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o POSSIBLE FAN TRIP ALARMS
- o FIRE DAMPER ALERTS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF ALARM
- o CHECK FOR TRIPPED FIRE DAMPERS
- o ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- o REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FIRE DAMPER ACTUATION. IF ALTERNATING VENTILATION EQUIPMENT DOES NOT CORRECT THE CONDITION THERE IS PROBABLY A FIRE DAMPER TRIPPED.

REFERENCES: DRAWING 208-005 SHEET AH-086, DRAWING 308847

SENSING ELEMENT: AH-547-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-02	F-01-02
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CNTRL COMPLEX
AIR FLOW
LOW

EVENT POINT 1547

INDICATED CONDITION:

- o AHF-20B CONTROL HANDLE IN NORMAL AFTER START AND A LOW FLOW CONDITION EXISTS IN DUCT WORK OF $<0.08''\text{H}_2\text{O}$ AS SENSED BY AH-548-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o POSSIBLE FAN TRIP ALARMS
- o FIRE DAMPER ALERTS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF ALARM
- o CHECK FOR TRIPPED FIRE DAMPERS
- o ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- o REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FIRE DAMPER ACTUATION. IF ALTERNATING VENTILATION EQUIPMENT DOES NOT CORRECT THE CONDITION THERE IS PROBABLY A FIRE DAMPER TRIPPED.

REFERENCES: DRAWING 208-005 SHEET AH-089, DRAWING 308847

SENSING ELEMENT: AH-548-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-03	F-01-03
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AH FLTR 4A/B
PRESS
HIGH

EVENT POINT 0476

INDICATED CONDITION:

- o A HIGH DIFFERENTIAL PRESSURE EXISTS ACROSS AHFL-4A OF $<5.20''\text{H}_2\text{O}$ AS SENSED BY AH-205-PS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o DIFFERENTIAL PRESSURE INDICATOR AH-205-DPI-1 ON REAR OF MCB
- o POSSIBLE FAN TRIP ALARMS
- o FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- o ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- o REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FIRE DAMPER ACTUATION. IF ALTERNATING VENTILATION EQUIPMENT DOES NOT CORRECT THE CONDITION THERE IS PROBABLY A FIRE DAMPER TRIPPED.

REFERENCES: DRAWING 208-005 SHEET AH-131, DRAWING 308847

SENSING ELEMENT: AH-205-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-03	F-01-03
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AK FLTR 4A/B
PRESS
HIGH

EVENT POINT 0477

INDICATED CONDITION:

- A HIGH DIFFERENTIAL PRESSURE EXISTS ACROSS AHFL-4B OF $<5.20''\text{H}_2\text{O}$ AS SENSED BY AH-206-PS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- DIFFERENTIAL PRESSURE INDICATOR AH-206-DPI-1 ON REAR OF MCB
- POSSIBLE FAN TRIP ALARMS
- FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- ALTERNATE VENTILATION EQUIPMENT TO CLEAR ALARM
- REFER TO OP-409

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FAN TRIP, OR A FIRE DAMPER ACTUATION. IF ALTERNATING VENTILATION EQUIPMENT DOES NOT CORRECT THE CONDITION THERE IS PROBABLY A FIRE DAMPER TRIPPED.

REFERENCES: DRAWING 208-005 SHEET AH-131, DRAWING 308847

SENSING ELEMENT: AH-206-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-04	F-01-04
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CNTRL COMPLEX
DUCT TEMP
HIGH

EVENT POINT 0469

INDICATED CONDITION:

- ◊ HIGH TEMPERATURE OF >135°F EXISTS IN THE CONTROL COMPLEX SUPPLY DUCT AS SENSED BY AH-207-TS,

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- ◊ POSSIBLE FAN TRIP ALARMS
- ◊ FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- ◊ INVESTIGATE HIGH TEMPERATURE ALARM
- ◊ REFER TO OP-409
- ◊ REFER TO AP-880

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE IN THE DUCT. IF SO A FIRE DAMPER ACTUATION IS AN INDICATION OF A VALID ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-080, DRAWING 308847

SENSING ELEMENT: AH-207-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-04	F-01-04
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CNTRL COMPLEX
DUCT TEMP
HIGH

EVENT POINT 0487

INDICATED CONDITION:

- HIGH TEMPERATURE OF $>135^{\circ}\text{F}$ EXISTS IN THE DISCHARGE OF AHF-20A DUCT AS SENSED BY AH-258-TS,

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- POSSIBLE FAN TRIP ALARMS
- FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE HIGH TEMPERATURE ALARM
- REFER TO OP-409
- REFER TO AP-880

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE IN THE DUCT. IF SO A FIRE DAMPER ACTUATION IS AN INDICATION OF A VALID ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-088, DRAWING 308847

SENSING ELEMENT: AH-258-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-04	F-01-04
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CNTRL COMPLEX
DUCT TEMP
HIGH

EVENT POINT 0517

INDICATED CONDITION:

- HIGH TEMPERATURE EXISTS OF $>135^{\circ}\text{F}$ IN THE DISCHARGE OF AHF-20B DUCT AS SENSED BY AH-543-TS,

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- POSSIBLE FAN TRIP ALARMS
- FIRE DAMPER ALARMS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE HIGH TEMPERATURE ALARM
- REFER TO OP-409
- REFER TO AP-880

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE IN THE DUCT. IF SO A FIRE DAMPER ACTUATION IS AN INDICATION OF A VALID ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-089, DRAWING 308847

SENSING ELEMENT: AH-543-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-04	F-01-04
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CNTRL COMPLEX
DUCT TEMP
HIGH

EVENT POINT 0493

INDICATED CONDITION:

- o HIGH TEMPERATURE OF $>135^{\circ}\text{F}$ EXISTS IN THE CONTROL COMPLEX RETURN DUCT ON ELEVATION 124' AS SENSED BY AH-191-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o POSSIBLE LOW AIR FLOW ALARMS
- o FIRE DAMPERS FD-28, AND FD-29 ACTUATE

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE HIGH TEMPERATURE ALARM
- o REFER TO OP-409
- o REFER TO AP-880

DISCUSSION:

THIS CONDITION MAY BE THE RESULT OF A FIRE IN THE DUCT. IF SO A FIRE DAMPER ACTUATION IS AN INDICATION OF A VALID ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-101, DRAWING 308847

SENSING ELEMENT: AH-191-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-05	F-01-05
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CNTRL COMPLEX
INST AIR PRESS
LOW

EVENT POINT 1690

INDICATED CONDITION:

- AIR PRESSURE IN THE RECEIVER OF AHP-1A/1B AS SENSED BY AH-507-PS IS <55 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL PRESSURE INDICATOR AH-896C-PI ON JOHNSON CONTROL PANEL 25A

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE THAT AHP-1A/1B ARE RUNNING
- VERIFY SAV-406 AND SAV-405 (CC STATION AIR SUPPLY VALVES) OPEN
- DEENERGIZE AH-517-SV (CC CONTROL AIR SUPPLY VALVE)
- ENERGIZE AH-518-SV (CC CONTROL AIR SUPPLY VALVE)

DISCUSSION:

THIS CONDITION MAY RESULT IN THE LOSS OF CONTROL AIR TO CONTROL COMPLEX VENTILATION SYSTEM "A" COMPONENTS AND A LOSS OF "A" SYSTEM AIR TO "AB" SYSTEM COMPONENTS.

REFERENCES: DRAWING 208-005 SHEET AH-148

SENSING ELEMENT: AH-507-PS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-05	F-01-05
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CNTRL COMPLEX
INST AIR PRESS
LOW

EVENT POINT 1691

INDICATED CONDITION:

- AIR PRESSURE IN THE RECEIVER OF AHP-1C/1D AS SENSED BY AH-509-PS IS <55 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL PRESSURE INDICATOR AH-894C-PI ON JOHNSON CONTROL PANEL 25B

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE THAT AHP-1C/1D ARE RUNNING
- VERIFY SAV-406 AND SAV-405 (CC STATION AIR SUPPLY VALVES) OPEN
- DEENERGIZE AH-517-SV (CC CONTROL AIR SUPPLY VALVE)
- ENERGIZE AH-518-SV (CC CONTROL AIR SUPPLY VALVE)

DISCUSSION:

THIS CONDITION MAY RESULT IN THE LOSS OF CONTROL AIR TO CONTROL COMPLEX VENTILATION SYSTEM "B" COMPONENTS AND A LOSS OF "B" SYSTEM AIR TO "AB" SYSTEM COMPONENTS.

REFERENCES: DRAWING 208-005 SHEET AH-149

SENSING ELEMENT: AH-509-PS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-05	F-01-05
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CNTRL COMPLEX
INST AIR PRESS
LOW

EVENT POINT 1692

INDICATED CONDITION:

- AIR PRESSURE IN THE RECEIVER OF AHP-1A/1B AS SENSED BY AH-512-PS IS <17 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL PRESSURE INDICATOR AH-896B-PI ON JOHNSON CONTROL PANEL 25A

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE THAT AHP-1A/1B ARE RUNNING
- VERIFY SAV-406 AND SAV-405 (CC STATION AIR SUPPLY VALVES) OPEN
- DEENERGIZE AH-517-SV (CC CONTROL AIR SUPPLY VALVE)
- ENERGIZE AH-518-SV (CC CONTROL AIR SUPPLY VALVE)

DISCUSSION:

THIS CONDITION MAY RESULT IN THE LOSS OF CONTROL AIR TO CONTROL COMPLEX VENTILATION SYSTEM "A" COMPONENTS AND A LOSS OF "A" SYSTEM AIR TO "AB" SYSTEM COMPONENTS.

REFERENCES: DRAWING 208-005 SHEET AH-150

SENSING ELEMENT: AH-512-PS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-05	F-01-05
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CNTRL COMPLEX
INST AIR PRESS
LOW

EVENT POINT 1693

INDICATED CONDITION:

- AIR PRESSURE FOR DAMPER CONTROL AS SENSED BY AH-513-PS IS <17 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL PRESSURE INDICATOR AH-895B-PI ON JOHNSON CONTROL REL 25AB

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE THAT AHP-1A/1B ARE RUNNING
- VERIFY SAV-406 AND SAV-405 (CC STATION AIR SUPPLY VALVES) OPEN
- DEENERGIZE AH-517-SV (CC CONTROL AIR SUPPLY VALVE)
- ENERGIZE AH-518-SV (CC CONTROL AIR SUPPLY VALVE)

DISCUSSION:

THIS CONDITION MAY RESULT IN THE LOSS OF CONTROL AIR TO CONTROL COMPLEX VENTILATION SYSTEM COMPONENTS

REFERENCES: DRAWING 208-005 SHEET AH-150

SENSING ELEMENT: AH-513-PS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-05	F-01-05
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CNTRL COMPLEX
INST AIR PRESS
LOW

EVENT POINT 1694

INDICATED CONDITION:

- AIR PRESSURE IN THE RECEIVER OF AHP-1C/1D AS SENSED BY AH-514-PS IS <17 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL PRESSURE INDICATOR AH-894B-PI ON JOHNSON CONTROL PANEL 25B

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE THAT AHP-1C/1D ARE RUNNING
- VERIFY SAV-406 AND SAV-405 (CC STATION AIR SUPPLY VALVES) OPEN
- DEENERGIZE AH-517-SV (CC CONTROL AIR SUPPLY VALVE)
- ENERGIZE AH-518-SV (CC CONTROL AIR SUPPLY VALVE)

DISCUSSION:

THIS CONDITION MAY RESULT IN THE LOSS OF CONTROL AIR TO CONTROL COMPLEX VENTILATION SYSTEM "B" COMPONENTS AND A LOSS OF "B" SYSTEM AIR TO "AB" SYSTEM COMPONENTS.

REFERENCES: DRAWING 208-005 SHEET AH-150

SENSING ELEMENT: AH-514-PS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-06	F-01-06
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CNTRL COMPLEX
AIR DRYER TEMP
HIGH

EVENT POINT 1695

INDICATED CONDITION:

- AIR TEMPERATURE ON THE OUTLET OF AHDR-1A IS >45°F AS SENSED BY AH-510-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- NOTIFY HVAC PERSONNEL TO INSPECT AHDR-1A FOR PROPER OPERATION

DISCUSSION:

AHDR-1A IS REFRIGERATED AIR DRYER WHICH UTILIZES A REFRIGERANT CYCLE TO DRY CONTROL COMPLEX CONTROL AIR SUPPLY. HIGH AIR TEMPS CAN BE CAUSED BY LOW REFRIGERANT CHARGE OR A DIRTY CONDENSER COIL.

REFERENCES: DRAWING 208-005 SHEET AH-150

SENSING ELEMENT: AH-510-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-06	F-01-06
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[illegible]

CNTRL COMPLEX
AIR DRYER TEMP
HIGH

EVENT POINT 1696

INDICATED CONDITION:

- 0 AIR TEMPERATURE ON THE OUTLET OF AHDR-1B IS >45°F AS SENSED BY AH-511-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- o NOTIFY HVAC TO INSPECT AHDR-1B FOR PROPER OPERATION

DISCUSSION:

AHDR-1B IS REFRIGERATED AIR DRYER WHICH UTILIZES A REFRIGERANT CYCLE TO DRY CONTROL COMPLEX CONTROL AIR SUPPLY. HIGH AIR TEMPS CAN BE CAUSED BY LOW REFRIGERANT CHARGE OR A DIRTY CONDENSER COIL.

REFERENCES: DRAWING 208-005 SHEET AH-150

SENSING ELEMENT: AH-511-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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CHILLED WATER SYSTEM TROUBLE

EVENT POINT 0518

INDICATED CONDITION:

- o CHP-1A MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON THE CHP-1A CONTROL STATION
RUNNING CHILLER TRIPS ON LOW CHILLED WATER FLOW

OPERATOR ACTIONS FOR A VALID ALARM:

- o START CHP-1B AND CHHE-1B PER OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET CH-03

SENSING ELEMENT: AH-511-TS

PSA ANNUNCIATOR RESPONSEPSA-X-01-07

F-01-07

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 0519

INDICATED CONDITION:

- 0 CHP-1B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON THE CHP-1B CONTROL STATION
- o RUNNING CHILLER TRIPPED ON LOW CHILLED WATER FLOW

OPERATOR ACTIONS FOR A VALID ALARM:

- o START CHP-1A AND CHHE-1A PER OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET CH-04

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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A 10x10 grid with a black square in the bottom-left corner.

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 0520

INDICATED CONDITION:

- o CHHE-1A BREAKER IS OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

- 0 CHHE-1A BREAKER IS OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON CHHE-1A CONTROL STATION

- 0 GREEN LIGHT ON WITH A RED FLAG ON CHHE-1A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o HAVE BREAKER CUBICLE CHECKED FOR DROPPED TARGETS
- o SWAP CHILLERS PER OP-409

- o HAVE BREAKER CUBICLE CHECKED FOR DROPPED TARGETS
- o SWAP CHILLERS PER OP-409

DISCUSSION:

AN ES BUS UNDERVOLTAGE CONDITION WILL CAUSE THIS CONDITION, THE BREAKER WILL NOT BE ABLE TO BE RECLOSED UNTIL THE UNDERVOLTAGE LOCK OUT HAS BEEN RESET.

AN ES BUS UNDERVOLTAGE CONDITION WILL CAUSE THIS CONDITION, THE BREAKER WILL NOT BE ABLE TO BE RECLOSED UNTIL THE UNDERVOLTAGE LOCK OUT HAS BEEN RESET.

REFERENCES: DRAWING 208-076 SHEET CH-01

SENSING ELEMENT: CS/SC, CS/O, R/B CONTACT

F-01-07

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 0521

INDICATED CONDITION:

- 0 CHHE-1B BREAKER IS OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON CHHE-1B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o HAVE BREAKER CUBICLE CHECKED FOR DROPPED TARGETS
- o SWAP CHILLERS PER OP-409

DISCUSSION:

AN ES BUS UNDERVOLTAGE CONDITION WILL CAUSE THIS CONDITION, THE BREAKER WILL NOT BE ABLE TO BE RECLOSED UNTIL THE UNDERVOLTAGE LOCK OUT HAS BEEN RESET.

REFERENCES: DRAWING 208-076 SHEET CH-02

SENSING ELEMENT: CS/SC, CS/O, R/B CONTACT

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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[illegible]

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1526

INDICATED CONDITION:

- o CHT-1 LEVEL IS $< 180' \pm 2"$, OR $< 12"$ BELOW CENTER LINE OF TANK

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL LEVEL INDICATOR ON CHT-1

OPERATOR ACTIONS FOR A VALID ALARM:

- o CONTACT CHEMISTRY AND REFILL CHT-1 REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWING 208-076 SHEET CH-06

SENSING ELEMENT: CH-660-LSS

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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[illegible]

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1554

INDICATED CONDITION:

- Q CHHE-1A BREAKER HAS NO DC CONTROL POWER

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 NO INDICATING LIGHTS ON CHHE-1A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o VERIFY "PULL OUT" FUSE BLOCK FOR CHHE-1A BREAKER IS INSTALLED
- o VERIFY DPDP-5A BREAKER 9 CLOSED

DISCUSSION:

THIS CONDITION DISABLES REMOTE BREAKER OPERATION AND PROTECTIVE RELAYING.
REFER TO OP-703 FOR INSTRUCTIONS ON LOCAL BREAKER OPERATION.
THIS IS AN EXPECTED ALARM FOR BREAKER TAGGING OPERATIONS.

REFERENCES: DRAWING 208-076 SHEET CH-01

SENSING ELEMENT: 27C RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1555

INDICATED CONDITION:

- Q CHHE-1B BREAKER HAS NO DC CONTROL POWER

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 NO INDICATING LIGHTS ON CHHE-1B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o VERIFY PULL OUT FUSE BLOCK FOR CHHE-1B BREAKER IS INSTALLED
- o VERIFY DPDP-5B BREAKER 9 CLOSED

DISCUSSION:

THIS CONDITION DISABLES REMOTE BREAKER OPERATION AND PROTECTIVE RELAYING.
REFER TO OP-703 FOR INSTRUCTIONS ON LOCAL BREAKER OPERATION.
THIS IS AN EXPECTED ALARM FOR BREAKER TAGGING OPERATIONS.

REFERENCES: DRAWING 208-076 SHEET CH-02

SENSING ELEMENT: 27C RELAY

F-01-07

CHILLED WATER SYSTEM TROUBLE

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F-01-07

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1557

INDICATED CONDITION:

- 0 CHHE-1A REFRIGERANT PRESSURE IS <17.9"HGA

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "LOW PRESSURE"

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-05

SENSING ELEMENT: 7R, 2/A

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1558

INDICATED CONDITION:

- 0 CHHE-1A REFRIGERANT PRESSURE IS >9 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "HIGH PRESSURE"

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-05

SENSING ELEMENT: 8R, 2/A

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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A 10x10 grid with a thick black bar in the bottom-left corner. The bar is 2 units high and 2 units wide, covering the bottom-left 2x2 area of the grid.

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1559

INDICATED CONDITION:

- 0 CHHE-1A OIL PRESSURE IS < 27 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "LOW OIL PRESS"

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-05

SENSING ELEMENT: 9R, 2/A

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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CHILLED WATER
SYSTEM
TROUBLE

EVENT POINT 1560

INDICATED CONDITION:

- CHHE-1A DOES NOT HAVE ANY POWER TO THE CONTROL PANEL OR COMPRESSOR MOTOR AS SENSED BY RELAY 14/R

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AMBER "POWER FAILURE" LIGHT ON LOCAL CONTROL PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF POWER LOSS

DISCUSSION:

REFERENCES: DRAWING 208-076 SHEET CH-05

SENSING ELEMENT: 14R, 2/A

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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[illegible]

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1561

INDICATED CONDITION:

- 0 CHHE-1B MOTOR WINDING TEMPERATURE IS $>105^{\circ}\text{C}$, OR CHHE-1B OIL TEMPERATURE IS $>170^{\circ}\text{F}$.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "OIL/MOTOR TEMP"

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-06

SENSING ELEMENT: 6R, 2/B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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A 10x10 grid with a black square in the bottom-left corner. The grid is composed of 10 columns and 10 rows. The bottom-left square (row 10, column 1) is filled with black. All other squares are white.

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1562

INDICATED CONDITION:

- o CHHE-1B REFRIGERANT PRESSURE IS <17.9"HGA

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "LOW PRESSURE"

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-06

SENSING ELEMENT: 7R, 2/B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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[illegible]

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1563

INDICATED CONDITION:

- 0 CHHE-1B REFRIGERANT PRESSURE IS >9 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "HIGH PRESSURE"

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-06

SENSING ELEMENT: 8R, 2/B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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CHILLED WATER
SYSTEM
TROUBLE

EVENT POINT 1564

INDICATED CONDITION:

- CHHE-1B OIL PRESSURE IS < 27 PSIG

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL CONTROL PANEL - RED INDICATOR LIGHT IS ON FOR "LOW OIL PRESS"

OPERATOR ACTIONS FOR A VALID ALARM:

- SWAP CHILLERS PER OP-409

DISCUSSION:

THIS CONDITION WILL CAUSE THE CHILLER TO TRIP, THE CONDITION SEALS IN UNTIL THE RESET PUSHBUTTON IS DEPRESSED

REFERENCES: DRAWING 208-076 SHEET CH-06

SENSING ELEMENT: 9R, 2/B

PSA ANNUNCIATOR RESPONSE	PSA-X-01-07	F-01-07
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[illegible]

CHILLED WATER SYSTEM TROUBLE

EVENT POINT 1565

INDICATED CONDITION:

- CHHE-1B DOES NOT HAVE ANY POWER TO THE CONTROL PANEL OR COMPRESSOR MOTOR AS SENSED BY RELAY 14/R

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AMBER "POWER FAILURE" LIGHT ON LOCAL CONTROL PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- Q INVESTIGATE THE CAUSE OF POWER LOSS

DISCUSSION:

REFERENCES: DRAWING 208-076 SHEET CH. 06

SENSING ELEMENT: 14R, 2/B

PSA ANNUNCIATOR RESPONSE	PSA-X-02-01	F-02-01
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TOXIC GAS
MONITOR
TROUBLE

EVENT POINT 0314

INDICATED CONDITION:

- ONE OR MORE OF THE FOLLOWING MONITORS' LOCAL TROUBLE ALARMS HAS ACTUATED: AH-648-CE AH-652-CE AH-649-CE AH-653-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- LOCAL TROUBLE ALARMS ON AH-648-CE, AH-649-CE, AH-652-CE, OR AH-653-CE
- COMPUTER POINTS S263, S297, S298, S299 FOR TOXIC GAS CONCENTRATION

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF TROUBLE
- NOTIFY I&C TO TROUBLE SHOOT MONITORS

DISCUSSION:

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-84

SENSING ELEMENT: AH-648-CE, AH-652-CE, AH-649-CE, AH-653-CE

PSA ANNUNCIATOR RESPONSE	PSA-X-02-01	F-02-01
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TOXIC GAS
MONITOR
TROUBLE

EVENT POINT 0432

INDICATED CONDITION:

- TOXIC GAS >5 PPM CL AS SENSED BY AH-648-CE AND/OR AH-649-CE OR,
>2 PPM SO₂ SENSED BY AH-652-CE AND/OR AH-653-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- COMPUTER POINTS S263, S297, S298, OR S299

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO AP-513
- REFER TO SP-300

DISCUSSION:

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-84

SENSING ELEMENT: AH-648-CE, AH-652-CE, AH-649-CE, AH-653-CE

PSA ANNUNCIATOR RESPONSE	PSA-X-02-01	F-02-01
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TOXIC GAS
MONITOR
TROUBLE

EVENT POINT 0800

INDICATED CONDITION:

- TOXIC GAS >20PPM SO₂ SENSED DETECTORS AT UNITS 1&2

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- NOTIFICATION OF A SPILL FROM UNITS 1&2

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO AP-513

DISCUSSION:

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-84

SENSING ELEMENT:

PSA ANNUNCIATOR RESPONSE	PSA-X-02-06	F-02-06
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CI CIRC PUMP
2A/B 3A/B
TRIP

EVENT POINT 0524

INDICATED CONDITION:

- o CIP-2A BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON CIP-2A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o START CIP-2B
- o HAVE BREAKER CUBICLE CHECKED FOR DROPPED TARGETS

DISCUSSION:

REFERENCES: DRAWING 208-077 SHEET CI-03

SENSING ELEMENT: CS/SC, CS/O, R/B

PSA ANNUNCIATOR RESPONSE	PSA-X-02-06	F-02-06
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[illegible]

CI CIRC PUMP
2A/B 3A/B
TRIP

EVENT POINT 0526

INDICATED CONDITION:
<ul style="list-style-type: none">o CIP-2B BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:
<ul style="list-style-type: none">o GREEN LIGHT ON WITH A RED FLAG ON CIP-2B CONTROL STATION
OPERATOR ACTIONS FOR A VALID ALARM:
<ul style="list-style-type: none">o START CIP-2Ao HAVE BREAKER CUBICLE CHECKED FOR DROPPED TARGETS
DISCUSSION:
REFERENCES: DRAWING 208-077 SHEET CI-04
SENSING ELEMENT: CS/SC, CS/O, R/B

PSA ANNUNCIATOR RESPONSE	PSA-X-02-06	F-02-06
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[illegible]

CI CIRC PUMP
2A/B 3A/B
TRIP

EVENT POINT 0528

INDICATED CONDITION:

- o CIP-3A CONTROL HANDLE IN NORMAL AFTER START POSITION WITH THE MOTOR NOT ENERGIZED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 2 GREEN LIGHT ON WITH A RED FLAG ON CIP-3A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP REACTOR CAVITY COOLING TO "B" SIDE PER OP-409
- o MONITOR REACTOR CAVITY TEMPS ON AH-1003-TIR PER OP-409

DISCUSSION:

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWING 208-077 SHEET CI-18

SENSING ELEMENT: CS/SC, CS/O, 42B

F-02-06

CI CIRC PUMP
2A/B 3A/B
TRIP

EVENT POINT 0529

INDICATED CONDITION:

- 0 CIP-3B CONTROL HANDLE IN NORMAL AFTER START POSITION WITH THE MOTOR NOT ENERGIZED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON CIP-3B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP REACTOR CAVITY COOLING TO "A" SIDE PER OP-409
- o MONITOR REACTOR CAVITY TEMPS ON AH-1003-TIR PER OP-409

DISCUSSION:

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWING 208-077 SHEET CI-19

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSEPSA-X-02-07

F-02-07

CI CIRC PUMP
2A/B
OVERLOAD

EVENT POINT 0525

INDICATED CONDITION:

- o CIP-2A MOTOR AMPS >115% RATED LOAD

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH LOCAL TEMPERATURES ON PUMP AND OR MOTOR

OPERATOR ACTIONS FOR A VALID ALARM:

- o SHUTDOWN CIP-2A AND START CIP-2B
- o INVESTIGATE THE OPERATION OF THE PUMP MOTOR TO DETERMINE THE CAUSE OF THE ALARM

DISCUSSION:

THIS ALARM INDICATES THAT THE INTERNAL OVERCURRENT DEVICE HAS ACTUATED AND THAT THE MOTOR MAY TRIP AT ANY TIME.

REFERENCES: DRAWING 208-077 SHEET CI-03

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-02-07	F-02-07
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[illegible]

CI CIRC PUMP
2A/B
OVERLOAD

EVENT POINT 0527

INDICATED CONDITION:

- 0 CIP-2B MOTOR AMPS >115% RATED LOAD

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH LOCAL TEMPERATURES ON PUMP AND OR MOTOR

OPERATOR ACTIONS FOR A VALID ALARM:

- o SHUTDOWN CIP-2B AND START CIP-2A
- o INVESTIGATE THE OPERATION OF THE PUMP MOTOR TO DETERMINE THE CAUSE OF THE ALARM

DISCUSSION:

THIS ALARM INDICATES THAT THE INTERNAL OVERCURRENT DEVICE HAS ACTUATED AND THAT THE MOTOR MAY TRIP AT ANY TIME.

REFERENCES: DRAWING 208-077 SHEET C1-04

SENSING ELEMENT: CS/SC, CS/O, 42B

PSA ANNUNCIATOR RESPONSE	PSA-X-02-08	F-02-08
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[illegible]

CI PUMP
SUCT PRESS
LOW

EVENT POINT 1702

INDICATED CONDITION:

- 0 CIP-2A BREAKER IS CLOSED AND SUCTION PRESSURE IS < 5 PSIG AS SENSED BY
CI-72B-PS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOW LOCAL PRESSURES ON PUMP SUCTION GAUGE CI-99-PI

OPERATOR ACTIONS FOR A VALID ALARM:

- o CHECK CIT-1 LEVEL
- o INVESTIGATE THE CAUSE OF LOW SUCTION PRESSURE

DISCUSSION:

THIS CONDITION COULD BE CAUSED BY A LOW LEVEL IN THE EXPANSION TANK, OR BY EXCESSIVE PRESSURE DROP ACROSS THE TOWER OR THE LEAK RATE TEST COOLER. THE LINE UP OF THE SYSTEM SHOULD BE VERIFIED.

REFERENCES: DRAWING 208-077 SHEET CI-03

SENSING ELEMENT: CI-728-PS, R/A

PSA ANNUNCIATOR RESPONSE	PSA-X-02-08	F-02-08
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A large rectangular area containing a grid of small squares, intended for drawing a picture.

CI PUMP
SUCT PRESS
LOW

EVENT POINT 1703

INDICATED CONDITION:

- 0 CIP-2B BREAKER IS CLOSED AND SUCTION PRESSURE IS < 5 PSIG AS SENSED BY
CI-729-PS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOW LOCAL PRESSURES ON PUMP SUCTION GAUGE CI-101-P1

OPERATOR ACTIONS FOR A VALID ALARM:

- o CHECK CIT-1 LEVEL
- o INVESTIGATE THE CAUSE OF LOW SUCTION PRESSURE

DISCUSSION:

THIS CONDITION COULD BE CAUSED BY A LOW LEVEL IN THE EXPANSION TANK, OR BY EXCESSIVE PRESSURE DROP ACROSS THE TOWER OR THE LEAK RATE TEST COOLER. THE LINE UP OF THE SYSTEM SHOULD BE VERIFIED.

REFERENCES: DRAWING 208-077 SHEET CI-04

SENSING ELEMENT: CI-729-PS, R/A

PSA ANNUNCIATOR RESPONSE

PSA-X-02-08

F-02-08

CI PUMP
SUCT PRESS
LOW

INDICATED CONDITION:

- REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- OPERATOR ACTIONS FOR A VALID ALARM:

- DISCUSSION:

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWING 208-077 SHEET CI-18

SENSING ELEMENT: CI-730-PS, CS/SC, CS/O

PSA ANNUNCIATOR RESPONSE	PSA-X-02-08	F-02-08
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A 10x10 grid with a black square at the bottom left.

CI PUMP
SUCT PRESS
LOW

EVENT POINT 1705

INDICATED CONDITION:

- 0 CIP-3B CONTROL SWITCH IS IN NORMAL AFTER START, AND SUCTION PRESSURE IS
< 45 PSIG AS SENSED BY CI-731-PS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOW LOCAL PRESSURES ON PUMP SUCTION GAUGE CI-733-PI

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 CHECK CIT-1 LEVEL
- 0 INVESTIGATE THE CAUSE OF LOW SUCTION PRESSURE
- 0 MONITOR REACTOR CAVITY TEMPERATURES ON AH-1003-TIR PER OP-409

DISCUSSION:

THIS CONDITION COULD BE CAUSED BY A LOW LEVEL IN THE EXPANSION TANK, OR BY EXCESSIVE PRESSURE DROP ACROSS THE TOWER OR THE LEAK RATE TEST COOLER. THE LINE UP OF THE SYSTEM SHOULD BE VERIFIED.

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWING 208-077 SHEET CI-19

SENSING ELEMENT: CI-731-PS, CS/SC, CS/O

PSA ANNUNCIATOR RESPONSE	PSA-X-03-01	F-03-01
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TURBINE BLDG
FIRE ALERT

EVENT POINT 0427

INDICATED CONDITION:

- DUCT TEMPERATURE AT DISCHARGE OF AHF-46 IS $> 125^{\circ}\text{F}$ AS SENSED BY AH-667-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-46 TRIPS DUE TO INTERLOCK

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE AHF-46 IS SHUTDOWN
- INVESTIGATE CAUSE OF ALARM

DISCUSSION:

THIS ALARM IS AN INDICATION OF A POSSIBLE FIRE IN THE DUCT WORK. CONSIDERATION SHOULD BE GIVEN TO CONSULTING FIRE PLANS FOR THE APPROPRIATE ACTIONS.

AHF-46 IS THE RUSTY BUILDING RECIRC FAN.

REFERENCES: DRAWING 208-005 SHEET AH-142

SENSING ELEMENT: AH-667-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-01	F-03-01
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TURBINE BLDG
FIRE ALERT

EVENT POINT 0512

INDICATED CONDITION:

- o DUCT TEMPERATURE AT DISCHARGE OF AHU-7 IS $> 125^{\circ}\text{F}$ AS SENSED BY AH-670-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHU-7 TRIPS DUE TO INTERLOCK

OPERATOR ACTIONS FOR A VALID ALARM:

- o ENSURE AHU-7 IS SHUTDOWN
- o INVESTIGATE CAUSE OF ALARM

DISCUSSION:

THIS ALARM IS AN INDICATION OF A POSSIBLE FIRE IN THE DUCT WORK. CONSIDERATION SHOULD BE GIVEN TO CONSULTING FIRE PLANS FOR THE APPROPRIATE ACTIONS.

AHU-7 IS THE RUSTY BUILDING AIR CONDITIONING UNIT.

REFERENCES: DRAWING 208-005 SHEET AH-144

SENSING ELEMENT: AH-670-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0006

INDICATED CONDITION:

- PENETRATION COOLING DUCT TEMPERATURE UPSTREAM OF FD-278 IS >165°F AS SENSED BY AH-1004-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- PENETRATION COOLING FANS AHF-9A/9B TRIP ON INTERLOCK

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE AHF-9A/9B ARE SHUTDOWN
- INVESTIGATE CAUSE OF ALARM

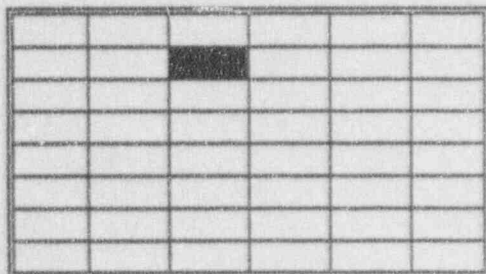
DISCUSSION:

THIS ALARM IS AN INDICATION OF A POSSIBLE FIRE IN THE DUCT WORK. CONSIDERATION SHOULD BE GIVEN TO CONSULTING FIRE PLANS FOR THE APPROPRIATE ACTIONS. AH-1004-TS IS A MANUAL RESET TEMPERATURE SWITCH LOCATED AT INT. BLDG. 95' ELEV. NEXT TO THE LOCAL CONTROL STATION FOR AHF-9A AND 9B.

REFERENCES: DRAWING 208-005 SHEET AH-056, DRAWING 308849

SENSING ELEMENT: AH-1004-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0380

INDICATED CONDITION:

- RB PURGE SUPPLY DUCT TEMP IS $>135^{\circ}\text{F}$ AS SENSED BY AH-23-TS, OR PRODUCTS OF COMBUSTION HAVE BEEN SENSED BY AH-23-CE AND/OR AH-24-CE, OR RELAY 3PSFP HAS ACTUATED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- PURGE SUPPLY FANS AHF-6A/6B TRIP
- PURGE SUPPLY DAMPER AHV-1D CLOSES ON LOW PURGE SUPPLY FLOW

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- SECURE RB PURGE PER OP-417
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE PURGE SUPPLY FAN DISCHARGE DUCT THE TEMPERATURE AND PRODUCT OF COMBUSTION DETECTORS SENSE THE DISCHARGE UPSTREAM OF THE RECIRCULATION DAMPER.

REFERENCES: DRAWING 208-005 SHEETS AH-020, AND AH-15, DRAWING 308849

SENSING ELEMENT: AH-23-TS, AH-23-CE, AH-24-CE, AND RELAY 3PSFP

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0387

INDICATED CONDITION:

- RB PURGE EXHAUST DUCT TEMP IS $>135^{\circ}\text{F}$ AS SENSED BY AH-295-TS, OR PRODUCTS OF COMBUSTION HAVE BEEN SENSED BY AH-295-CE, OR RELAY 3PEFP HAS ACTUATED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- PURGE EXHAUST FANS AHF-7A/7B TRIP

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- SECURE THE RB PURGE REFER TO OP-417
- REFER TO AP-880.

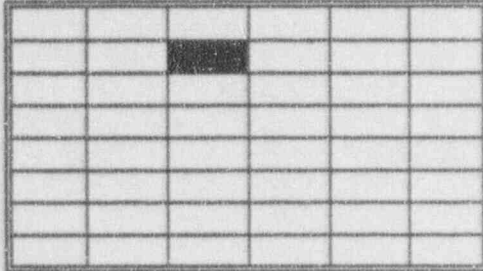
DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE PURGE EXHAUST DISCHARGE DUCT THE TEMPERATURE AND PRODUCT OF COMBUSTION DETECTORS SENSE THE DISCHARGE OF THE FANS

REFERENCES: DRAWING 208-005 SHEETS AH-020, AND AH-15, DRAWING 308849

SENSING ELEMENT: AH-295-CE, AH-295-TS, AND RELAY 3PEFP

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0391

INDICATED CONDITION:

- TEMPERATURE IS >135°F IN SPENT FUEL AIR HANDLING FAN AHF-8A DISCHARGE DUCT WORK AS SENSED BY AH-314-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-8A TRIPS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE SPENT FUEL COOLING UNIT DISCHARGE DUCT CONSIDERATION SHOULD BE GIVEN TO CONSULTING THE FIRE PLANS FOR ADDITIONAL HELP IN DETERMINING A COURSE OF ACTION

REFERENCES: DRAWING 208-005 SHEETS AH-026, DRAWING 308849

SENSING ELEMENT: AH-314-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0394

INDICATED CONDITION:

- TEMPERATURE IS >135°F IN SPENT FUEL AIR HANDLING FAN AHF-8B DISCHARGE DUCT WORK AS SENSED BY AH-409-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-8B TRIPS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE SPENT FUEL COOLING UNIT DISCHARGE DUCT CONSIDERATION SHOULD BE GIVEN TO CONSULTING THE FIRE PLANS FOR ADDITIONAL HELP IN DETERMINING A COURSE OF ACTION

REFERENCES: DRAWING 208-005 SHEETS AH-027 DRAWING 308849

SENSING ELEMENT: AH-409-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0403

INDICATED CONDITION:

- TEMPERATURE IS >135°F IN SPENT FUEL AREA AIR HANDLING FAN AHF-10 DISCHARGE DUCT WORK AS SENSED BY AH-377-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-10 TRIPS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE SPENT FUEL FLOOR AIR HANDLING UNIT DISCHARGE DUCT CONSIDERATION SHOULD BE GIVEN TO CONSULTING THE FIRE PLANS FOR ADDITIONAL HELP IN DETERMINING A COURSE OF ACTION

REFERENCES: DRAWING 208-005 SHEETS AH-044 DRAWING 308849

SENSING ELEMENT: AH-377-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0410

INDICATED CONDITION:

- TEMPERATURE IS $>135^{\circ}\text{F}$ IN AUXILIARY BUILDING SUPPLY FAN DISCHARGE DUCT WORK AS SENSED BY AH-318-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-11A/11B FANS TRIP

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE AUXILIARY BUILDING SUPPLY FANS DISCHARGE DUCT CONSIDERATION SHOULD BE GIVEN TO CONSULTING THE FIRE PLANS FOR ADDITIONAL HELP IN DETERMINING A COURSE OF ACTION

REFERENCES: DRAWING 208-005 SHEETS AH-045 DRAWING 308849

SENSING ELEMENT: AH-318-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0416

INDICATED CONDITION:

- TEMPERATURE IS >135°F IN AUXILIARY BUILDING RECIRC FAN SUCTION DUCT WORK AS SENSED BY AH-375-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-13 TRIPS

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE AUXILIARY BUILDING RECIRC FAN DISCHARGE DUCT CONSIDERATION SHOULD BE GIVEN TO CONSULTING THE FIRE PLANS FOR ADDITIONAL HELP IN DETERMINING A COURSE OF ACTION

REFERENCES: DRAWING 208-005 SHEETS AH-048 DRAWING 308849

SENSING ELEMENT: AH-375-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0426

INDICATED CONDITION:

- TEMPERATURE IS >135°F IN AUXILIARY BUILDING EXHAUST DUCT WORK AS SENSED BY AH-354-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AUXILIARY BUILDING EXHAUST FANS AHF-14A, AHF-14B, AHF-14C, & AHF-14D TRIP

OPERATOR ACTIONS FOR A VALID ALARM:

- INVESTIGATE THE CAUSE OF THE ALARM
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A FIRE IN THE AUXILIARY BUILDING EXHAUST DISCHARGE DUCT, CONSIDERATION SHOULD BE GIVEN TO CONSULTING THE FIRE PLANS FOR ADDITIONAL HELP IN DETERMINING A COURSE OF ACTION

REFERENCES: DRAWING 208-005 SHEETS AH-001, AND AH-005, DRAWING 308849

SENSING ELEMENT: AH-354-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0431

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-156-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-156-CE
- o TEMPERATURE > 135°F AS SENSED BY AH-156-TS EXISTS AT THE 95' LEVEL INTERMEDIATE BUILDING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH TEMPERATURE WILL RESULT IN THE TRIP OF AHF-24A/B IF RUNNING
- o HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-42, AND FD-43

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER A TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE OR A HIGH TEMPERATURE IN THE ROOM.

REFERENCES: DRAWING 208-005 SHEETS AH-51, AND AH-55. DRAWING 308846

SENSING ELEMENT: AH-156-CE, AH-156-TS, RELAY 3AH-156-TS/RR1A

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0433

INDICATED CONDITION:

- TEMPERATURE > 135°F AS SENSED BY AH-157-TS EXISTS AT THE 95' LEVEL INTERMEDIATE BUILDING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-42, AND FD-43

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THE IS CONDITION IS INDICATIVE OF A FIRE OR A HIGH TEMPERATURE IN THE 95' INTERMEDIATE BUILDING.

REFERENCES: DRAWING 208-005 SHEETS AH-51, AND AH-55. DRAWING 308846

SENSING ELEMENT: AH-157-TS,

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0435

INDICATED CONDITION:

- PENETRATION COOLING SUPPLY AIR DUCT TEMPERATURE UPSTREAM OF FD-32 IS >135°F AS SENSED BY AH-737-TS. OR AH-737-TS TROUBLE CIRCUIT HAS ACTUATED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- FD-32 FIRE DAMPER CLOSES
- LOCAL TROUBLE ALARM ON AH-737-TS

OPERATOR ACTIONS FOR A VALID ALARM:

- VERIFY FD-32 CLOSED
- REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A HIGH TEMPERATURE CONDITION IN THE TURBINE BUILDING ADJACENT TO THE FAN INTAKE, OR A PROBLEM WITH THE DETECTOR.

REFERENCES: DRAWING 208-005 SHEET AH-056, DRAWING 308849

SENSING ELEMENT: AH-737-CE, AH-737-CE TROUBLE CIRCUIT

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0437

INDICATED CONDITION:

- 0 PENETRATION COOLING SUPPLY AIR DUCT TEMPERATURE UPSTREAM OF FD-33 IS
>135°F AS SENSED BY AH-738-TS. OR AH-738-TS TROUBLE CIRCUIT HAS
ACTUATED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o FD-33 FIRE DAMPER CLOSES
- o LOCAL TROUBLE ALARM ON AH-738-TS

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 VERIFY FD-33 CLOSED

DISCUSSION:

THIS IS INDICATIVE OF A HIGH TEMPERATURE CONDITION IN THE OUTSIDE AIR INTAKE, OR OF A PROBLEM WITH THE DETECTOR

REFERENCES: DRAWING 208-005 SHEET AH-057, DRAWING 308849

SENSING ELEMENT: AH-738-TS AND AH-38-TS TROUBLE

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0439

INDICATED CONDITION:

- o PENETRATION COOLING FAN DISCHARGE DUCT TEMPERATURE IS >135°F AS SENSED BY AH-305-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL TROUBLE ALARM ON AH-305-TS

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE THE CAUSE OF THE HIGH TEMPERATURE ALARM
- o REFER TO AP-880

DISCUSSION:

THIS IS INDICATIVE OF A HIGH TEMPERATURE CONDITION IN THE DISCHARGE OF THE PENETRATION COOLING FANS, OR OF A PROBLEM WITH THE DETECTOR.

REFERENCES: DRAWING 208-005 SHEET AH-056, DRAWING 308849

SENSING ELEMENT: AH-305-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0449

INDICATED CONDITION:

- ONE OF THE FOLLOWING TEMPERATURE SWITCHES HAS ACTUATED AT >135°F
AH-153-TS AH-523-TS AH-524-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- FIRE DAMPERS FD-52, FD-53, AND FD-54 TRIP
- AHF-25A, AHF-25B, AND AHF-25C TRIP IF OPERATING

OPERATOR ACTIONS FOR A VALID ALARM:

- NOTIFY TURBINE BUILDING OPERATOR TO INVESTIGATE THESE TURBINE BUILDING SUPPLY FANS
- REFER TO AP-880

DISCUSSION:

THIS ALARM INDICATES THAT THE FIRE DAMPERS FOR AHF-25A/B/C HAVE ACTUATED. AHF-25A/B/C SHOULD SHUTDOWN AUTOMATICALLY.

REFERENCES: DRAWING 208-005 SHEET AH-061, AH-70, DRAWING 308846

SENSING ELEMENT: AH-153-TS, AH-523-TS, AH-524-TS, AND RELAY 3HBT1A

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0450

INDICATED CONDITION:

- ONE OF THE FOLLOWING TEMPERATURE SWITCHES HAS ACTUATED AT >135°F
AH-155-TS AH-527-TS AH-528-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-26A, AHF-26B, AND AHF-26C TRIP IF OPERATING

OPERATOR ACTIONS FOR A VALID ALARM:

- NOTIFY TURBINE BUILDING OPERATOR TO INVESTIGATE THESE TURBINE BUILDING SUPPLY FANS
- REFER TO AP-880

DISCUSSION:

THIS ALARM INDICATES THAT THE FIRE DAMPERS FOR AHF-25A/B/C HAVE ACTUATED. AHF-26A/B/C SHOULD ALSO SHUTDOWN AUTOMATICALLY.

REFERENCES: DRAWING 208-005 SHEET AH-064, AH-70, DRAWING 308846

SENSING ELEMENT: AH-155-TS, AH-527-TS, AH-528-TS, AND RELAY 3HBT2

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0451

INDICATED CONDITION:

- ONE OF THE FOLLOWING TEMPERATURE SWITCHES HAS ACTUATED AT >135°F
AH-155-TS AH-527-TS AH-528-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AHF-26A, AHF-26B, AND AHF-26C TRIP IF OPERATING

OPERATOR ACTIONS FOR A VALID ALARM:

- NOTIFY TURBINE BUILDING OPERATOR TO INVESTIGATE THESE TURBINE BUILDING SUPPLY FANS
- REFER TO AP-880

DISCUSSION:

THIS ALARM INDICATES THAT THE FIRE DAMPERS BETWEEN THE AUXILIARY BUILDING AND THE TURBINE ROOM HAVE ACTUATED. AHF-26A/B/C SHOULD ALSO SHUTDOWN AUTOMATICALLY.

REFERENCES: DRAWING 208-005 SHEET AH-067, AH-70, DRAWING 308846

SENSING ELEMENT: AH-154-TS, AH-525-TS, AH-526-TS, AND RELAY 3HBT2

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0455

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-386-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-386-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o

OPERATOR ACTIONS FOR A VALID ALARM:

- o NOTIFY TURBINE BUILDING OPERATOR TO INVESTIGATE THE FIRE PUMP HOUSE.

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-072

SENSING ELEMENT: AH-386-CE

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0500

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-220-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-220-CE
- o TEMPERATURE > 135°F AS SENSED BY AH-220-TS EXISTS IN "A" BATTERY CHARGER ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-42 AND FD-43

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

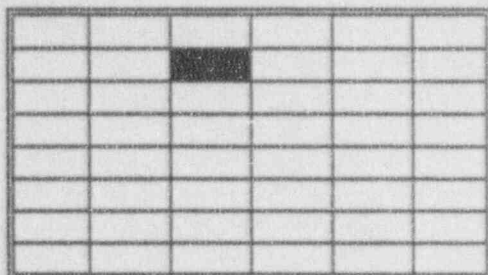
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER A TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE, OR A HIGH TEMPERATURE IN THE ROOM.

REFERENCES: DRAWING 208-005 SHEET AH-104

SENSING ELEMENT: AH-220-TS, AH-220-CE,

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0501

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-217-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-217-CE
- TEMPERATURE > 135°F AS SENSED BY AH-217-TS EXISTS IN "B" BATTERY CHARGER ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-19

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER A TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE OR A HIGH TEMPERATURE IN THE ROOM.

REFERENCES: DRAWING 208-005 SHEETS AH-103, AH-109, AND DRAWING 308847

SENSING ELEMENT: AH-217-TS, AH-217-CE,

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0502

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-219-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-219-CE
- TEMPERATURE > 135°F AS SENSED BY AH-219-TS EXISTS IN "A" BATTERY ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-9 AND FD-21

OPERATOR ACTIONS FOR A VALID ALARM:

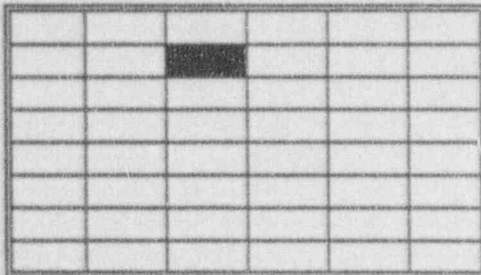
- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEETS AH-104, AH-108, DRAWING 308847

SENSING ELEMENT: AH-219-CE, AH-219-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0503

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-218-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-218-CE
- TEMPERATURE > 135°F AS SENSED BY AH-218-TS EXISTS IN THE "B" BATTERY ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-220 AND FD-222

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

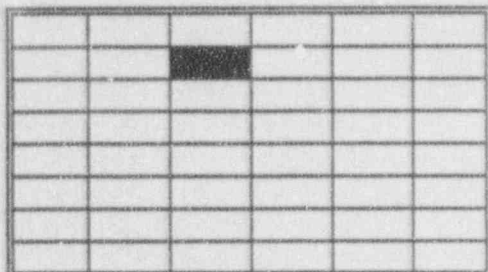
THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE OR A HIGH TEMPERATURE IN THE ROOM.

REFER TO THE CR3 FIRE PROTECTION PLAN FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEETS AH-103, AH-108 AND DRAWING 308847

SENSING ELEMENT: AH-218-CE, AH-218-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0504

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-222-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-222-CE
- TEMPERATURE > 135°F AS SENSED BY AH-222-TS EXISTS IN THE "A" INVERTER ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-12 AND FD-24

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE OR A HIGH TEMPERATURE IN THE ROOM.

REFER TO THE CR3 FIRE PROTECTION PLAN FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEETS AH-104, AH-109 AND DRAWING 308847

SENSING ELEMENT: AH-222-CE, AH-222-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0505

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-221-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-221-CE
- TEMPERATURE > 135°F AS SENSED BY AH-221-TS EXISTS IN THE "B" INVERTER ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-11 AND FD-23

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

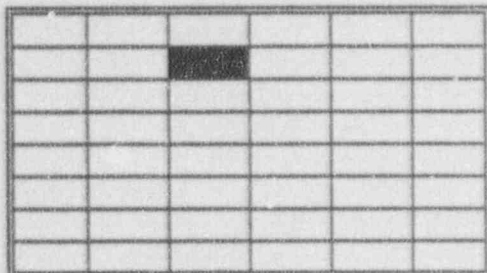
THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE OR A HIGH TEMPERATURE IN THE ROOM.

REFER TO THE CR3 FIRE PROTECTION PLAN FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEETS AH-104, AH-109 AND DRAWING 308847

SENSING ELEMENT: AH-221-CE, AH-221-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0506

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-235-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-235-CE
- TEMPERATURE > 135°F AS SENSED BY AH-235-TS EXISTS IN THE CONTROL COMPLEX STAIR WELL

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-25

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, A FIRE OR A HIGH TEMPERATURE IN THE ROOM.

REFER TO THE CR3 FIRE PROTECTION PLAN FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEETS AH-105, AH-109 AND DRAWING 308847

SENSING ELEMENT: AH-235-CE, AH-235-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0513

INDICATED CONDITION:

- TEMPERATURE > 135°F AS SENSED BY AH-132-TS EXISTS IN CLEAN MACHINE SHOP AIR HANDLING UNIT AHU-2 DISCHARGE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT TRIP OF AHU-2

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE OR A HIGH TEMPERATURE IN THE DISCHARGE DUCT OF AHU-2.

REFERENCES: DRAWING 208-005 SHEETS AH-094, DRAWING 308846

SENSING ELEMENT: AH-132-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-02	F-03-02
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AUX BLDG
FIRE ALERT

EVENT POINT 0514

INDICATED CONDITION:

- TEMPERATURE > 135°F AS SENSED BY AH-165-TS EXISTS IN HOT MACHINE SHOP AIR HANDLING UNIT AHU-3 DISCHARGE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT TRIP OF AHU-3

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE OR A HIGH TEMPERATURE IN THE DISCHARGE DUCT OF AHU-3.

REFERENCES: DRAWING 208-005 SHEETS AH-095, DRAWING 308846

SENSING ELEMENT: AH-165-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0443

INDICATED CONDITION:

- o TEMPERATURE > 135°F AS SENSED BY AH-125-TS EXISTS IN THE INTAKE PLENUM FOR AHF-16A/16B

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-16A TRIPS
- o AHF-16B TRIPS

OPERATOR ACTIONS FOR A VALID ALARM:

- o ENSURE AHF-16A/AHF-16B ARE SHUT DOWN
- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE OR A HIGH TEMPERATURE IN THE INTAKE DUCT OF AHF-16A/AHF-16B.

REFERENCES: DRAWING 208-005 SHEETS AH-058, DRAWING 308846

SENSING ELEMENT: AH-125-TS

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0444

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-126-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-126-CE
- TEMPERATURE > 135°F AS SENSED BY AH-126-TS EXISTS IN THE RETURN AIR DUCT FROM 119' SWITCH GEAR ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- THIS ALARM WILL RESULT IN THE ACTUATION OF THE FOLLOWING FIRE DAMPERS FD-38, FD-40, FD-48, FD-49, AND FD-50

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE AHF-16A/AHF-16B ARE SHUT DOWN
- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

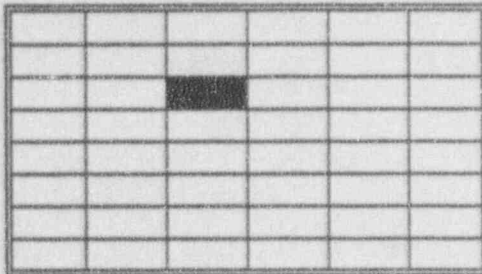
DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE OR A HIGH TEMPERATURE IN THE RETURN AIR DUCT FROM 119' SWITCH GEAR ROOM TO AHF-16A/AHF-16B.

REFERENCES: DRAWING 208-005 SHEETS AH-058, AH-060, AND DRAWING 308846

SENSING ELEMENT: AH-126-TS, AH-126-CE, 3AH-126-TS/RR-HV-V

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0448

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-127-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-127-CE
- TEMPERATURE > 135°F AS SENSED BY AH-127-TS EXISTS IN THE RETURN AIR DUCT FROM 95' SWITCH GEAR ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- THIS ALARM WILL RESULT IN THE ACTUATION OF THE FOLLOWING FIRE DAMPERS FD-39 AND FD-41

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE AHF-16A/AHF-16B ARE SHUT DOWN
- REFER TO THE PRE FIRE PLAN
- REFER TO AP-880

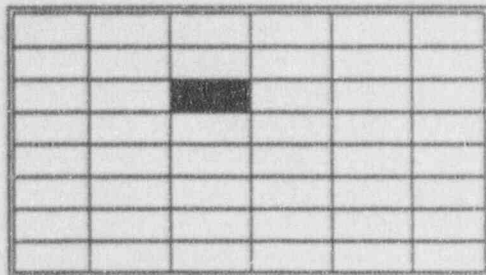
DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE OR A HIGH TEMPERATURE IN THE RETURN AIR DUCT FROM 95' SWITCH GEAR ROOM TO AHF-16A/AHF-16B.

REFERENCES: DRAWING 208-005 SHEETS AH-059, AH-060, AND DRAWING 308846

SENSING ELEMENT: AH-127-TS, AH-127-CE, 3AH-127-TS/RR-HV-V

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0460

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-364-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-364-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AN ALARM ON AH-364-CE WILL ACTUATE FD-36 AND FD-37

OPERATOR ACTIONS FOR A VALID ALARM:

- DEENERGIZE AHF-28A LOCALLY OR VIA ACDP-50 BREAKER 13
- REFER TO THE PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER A TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE EGDG-1A ROOM.

REFERENCES: DRAWING 208-005 AH-073, AH-076, AND DRAWING 308849

SENSING ELEMENT: AH-364-CE, 3AH-364-CE/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0465

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-374-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-374-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AN ALARM ON AH-374-CE WILL ACTUATE FD-34 AND FD-35

OPERATOR ACTIONS FOR A VALID ALARM:

- o DEENERGIZE AHF-28B LOCALLY OR VIA ACDP-50 BREAKER 14
- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

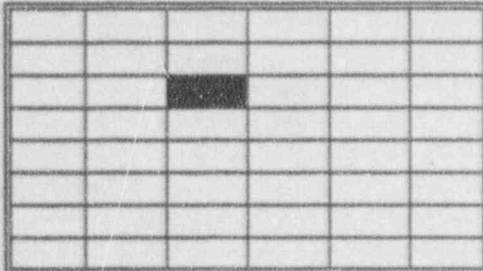
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE EGDG-1B ROOM.

REFERENCES: DRAWING 208-005 SHEETS AH-073, AH-079, AND DRAWING 308849

SENSING ELEMENT: AH-374-CE, 3AH-374-CE/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0481

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-33-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-33-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- AN ALARM ON AH-33-CE WILL ALLOW THE CONTROL COMPLEX VENTILATION SYSTEM TO BE PLACED IN A SMOKE REMOVAL MODE OF OPERATION

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 FIRE PLAN
- REFER TO AP-880

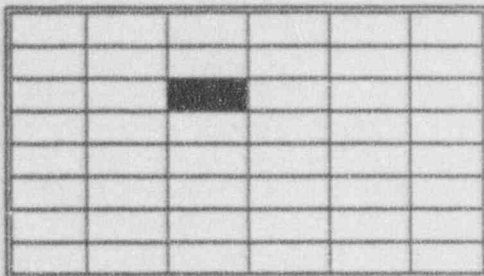
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE COMMON RETURN DUCT DOWNSTREAM OF AHF-19A/B

REFERENCES: DRAWING 208-005 SHEETS AH-090, AH-079, AND DRAWING 308847

SENSING ELEMENT: AH-33-CE, 3AH-33-CE/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0492

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-529-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-529-CE
- TEMPERATURE > 135°F AS SENSED BY AH-529-TS EXISTS AT THE 124' LEVEL OF THE CONTROL COMPLEX

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-13 AND FD-84

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 FIRE PLAN
- REFER TO AP-880

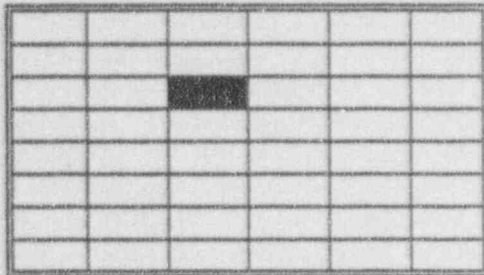
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 124' ELEVATION OF THE CONTRCL COMPLEX

REFERENCES: DRAWING 208-005 SHEETS AH-101, AH-106, AND DRAWING 308847

SENSING ELEMENT: AH-529-TS AH-529-CE, 3AH-529-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0494

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-214-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-214-CE
- o TEMPERATURE > 135°F AS SENSED BY AH-214-TS EXISTS AT THE 124' LEVEL OF THE CONTROL COMPLEX. ES 480V "A" SWITCHGEAR ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-4 AND FD-16

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

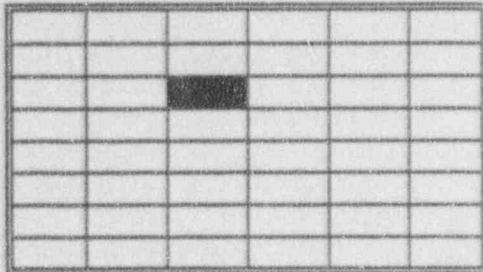
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 124' ELEVATION OF THE CONTROL COMPLEX

REFERENCES: DRAWING 208-005 SHEETS AH-102, AH-107, AND DRAWING 308847

SENSING ELEMENT: AH-214-TS AH-214-CE, 3AH-214-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0495

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-212-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-212-CE
- TEMPERATURE > 135°F AS SENSED BY AH-212-TS EXISTS AT THE 124' LEVEL OF THE CONTROL COMPLEX. ES 480V "B" SWITCHGEAR ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-2 AND FD-14

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

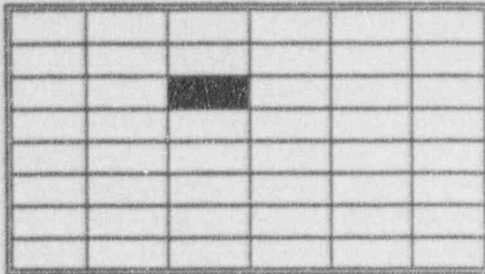
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 124' ELEVATION OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-102, AH-106, AND DRAWING 308847

SENSING ELEMENT: AH-212-TS AH-212-CE, 3AH-212-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0498

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-216-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-216-CE
- TEMPERATURE > 135°F AS SENSED BY AH-216-TS EXISTS AT THE 108' LEVEL OF THE CONTROL COMPLEX. ES 4160V "A" SWITCHGEAR ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-6 AND FD-18

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-380

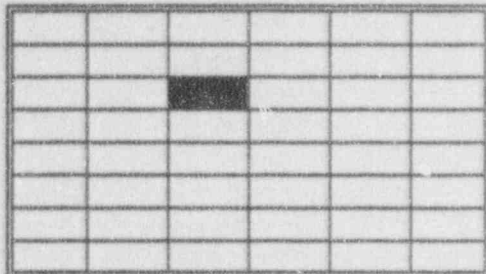
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 108' ELEVATION OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-103, AH-107, AND DRAWING 308847

SENSING ELEMENT: AH-216-TS AH-216-CE, 3AH-216-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0499

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-215-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-215-CE
- TEMPERATURE > 135°F AS SENSED BY AH-215-TS EXISTS AT THE 108' LEVEL OF THE CONTROL COMPLEX. ES 4160V "B" SWITCHGEAR ROOM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-5 AND FD-17

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

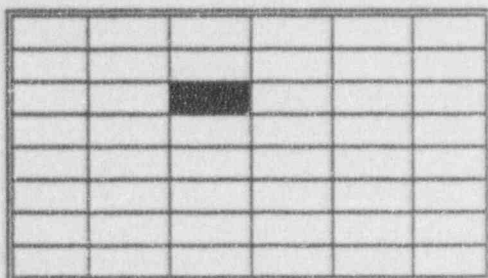
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 108' ELEVATION OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-103, AH-107, AND DRAWING 308847

SENSING ELEMENT: AH-215-TS AH-215-CE, 3AH-215-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 0507

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-236-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-236-CE
- o TEMPERATURE > 135°F AS SENSED BY AH-236-TS EXISTS AT THE 108' LEVEL OF THE CONTROL COMPLEX

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-26 AND FD-27

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 108' ELEVATION OF THE CONTROL COMPLEX

REFERENCES: DRAWING 208-005 SHEETS AH-105, AH-109, AND DRAWING 308847

SENSING ELEMENT: AH-236-TS AH-236-CE, 3AH-236-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 1118

INDICATED CONDITION:

- PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-723-CE
- TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-723-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- DETECTION OF PRODUCTS OF COMBUSTION WILL TRIP AHF-49 IF RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE INSTRUMENT CAL LAB 145' TURBINE DECK.

REFERENCES: DRAWING 208-005 SHEETS AH-151 AND AH-152

SENSING ELEMENT: AH-723-CE

PSA ANNUNCIATOR RESPONSE	PSA-X-03-05	F-03-03
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CNTRL COMPLEX
SWGR/DG FM
FIRE ALERT

EVENT POINT 1532

INDICATED CONDITION:

- TEMPERATURE > 135°F AS SENSED BY AH-534-TS EXISTS IN THE CONTROL COMPLEX MAIN AIR HANDLING SUPPLY DUCT AT 145' ELEVATION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-56

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE IN THE MAIN SUPPLY DUCT OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-101, AH-106, AND DRAWING 308847

SENSING ELEMENT: AH-534-TS, 3AH-534-TS/RR-HV-AU

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 1533

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-531-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-531-CE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o PRODUCTS OF COMBUSTION DETECTION WILL RESULT IN THE ACTUATION OF FD-51

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

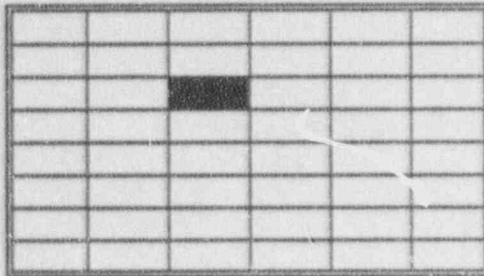
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE OUTSIDE AIR INTAKE OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-101, AH-106, AND DRAWING 308847

SENSING ELEMENT: AH-531-CE

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 1534

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-535-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-535-CE
- o TEMPERATURE > 135°F AS SENSED BY AH-535-TS EXISTS IN THE CONTROL COMPLEX MAIN SUPPLY DUCT 95' ELEVATION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-55

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE MAIN SUPPLY DUCT OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-101, AH-106, AND DRAWING 308847

SENSING ELEMENT: AH-535-TS AH-535-CE, 3AH-535-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 1535

INDICATED CONDITION:

- TEMPERATURE > 135°F AS SENSED BY AH-533-TS EXISTS IN THE CONTROL COMPLEX MAIN RETURN AIR DUCT AT 145' ELEVATION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF FD-57

OPERATOR ACTIONS FOR A VALID ALARM:

- REFER TO THE CR3 PRE FIRE PLAN
- REFER TO AP-880

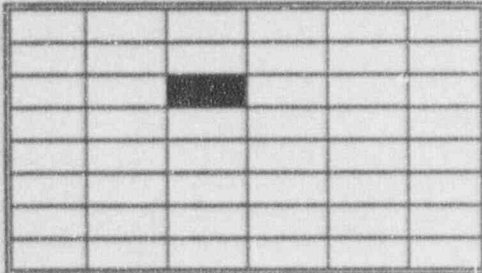
DISCUSSION:

THIS CONDITION IS INDICATIVE OF A FIRE IN THE RETURN AIR DUCT OF THE CONTROL COMPLEX.

REFERENCES: DRAWING 208-005 SHEETS AH-101, AH-106, AND DRAWING 308847

SENSING ELEMENT: AH-533-TS, 3AH-533-TS/RR-HV-AT

PSA ANNUNCIATOR RESPONSE	PSA-X-03-03	F-03-03
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CNTRL COMPLEX
SWGR/DG RM
FIRE ALERT

EVENT POINT 1536

INDICATED CONDITION:

- o PRODUCTS OF COMBUSTION HAVE BEEN DETECTED BY AH-211-CE
- o TROUBLE HAS BEEN DETECTED IN THE CIRCUITS FOR AH-211-CE
- o TEMPERATURE > 135°F AS SENSED BY AH-211-TS EXISTS AT THE 134' LEVEL OF THE CONTROL COMPLEX

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH TEMPERATURE WILL RESULT IN THE ACTUATION OF THE FOLLOWING:
FD-45, FD-46, FD-47, FD-81, FD-82, AND FD-83

OPERATOR ACTIONS FOR A VALID ALARM:

- o REFER TO THE CR3 PRE FIRE PLAN
- o REFER TO AP-880

DISCUSSION:

THIS CONDITION IS INDICATIVE OF EITHER TROUBLE IN THE FIRE DETECTION CIRCUITS, OR A FIRE IN THE 134' ELEVATION OF THE CONTROL COMPLEX IN THE CABLE SPREADING ROOM.

REFERENCES: DRAWING 208-005 SHEETS AH-105, AH-107, AND DRAWING 308847

SENSING ELEMENT: AH-211-TS AH-211-CE, 3AH-211-TS/RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-03-04	F-03-04
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FIRE SYSTEM TROUBLE

EVENT POINT 0197

INDICATED CONDITION:

- 0 FIRE SERVICE PANEL IN THE CONTROL ROOM HAS AN UNACKNOWLEDGED OR UNRESET ALARM

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o ALARM ON THE FIRE SERVICE PANEL OR ONE OF THE PYROTRONICS PANELS

OPERATOR ACTIONS FOR A VALID ALARM:

- IMMEDIATE INVESTIGATION OF ALARM CAUSE SHOULD BE INITIATED

DISCUSSION:

REFER TO THE CR3 FIRE PROTECTION PLAN FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-031 SHEET FS-21

SENSING ELEMENT:

PSA ANNUNCIATOR RESPONSE	PSA-X-04-01	F-04-01
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REACTOR BLDG
PURGE FAN
TRIP

EVENT POINT 0384

INDICATED CONDITION:

- o AHF-7A MOTOR NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-7A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE RB PURGE
- o REFER TO OP-417

DISCUSSION:

THIS CONDITION MAY BE CAUSED BY ACTUATION OF A FIRE ALERT IN THE DUCT INDICATED BY EVENT POINT 0387, OR AN FSV-114 DELUGE VALVE ACTUATION

REFERENCES: DRAWING 208-005 SHEETS AH-022, AH-015

SENSING ELEMENT: CS/SC, CS/O, 42/49B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-01	F-04-01
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REACTOR BLDG
PURGE FAN
TRIP

EVENT POINT 0385

INDICATED CONDITION:

- 0 AHF-7B MOTOR NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- Q GREEN LIGHT ON WITH A RED FLAG ON AHF-7B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE RB PURGE
- o REFER TO OP-417

DISCUSSION:

THIS CONDITION MAY BE CAUSED BY ACTUATION OF A FIRE ALERT IN THE DUCT INDICATED BY EVENT POINT 0387, OR AN FSV-114 DELUGE VALVE ACTUATION

REFERENCES: DRAWING 208-005 SHEETS AH-023, AH-015

SENSING ELEMENT: CS/SC, CS/O, 42/49B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-02	F-04-02
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AH FLTR 1
DIFF PRESS
HIGH

EVENT POINT 0497

INDICATED CONDITION:

- o DIFFERENTIAL PRESS ACROSS AHFL-1 IS > 5.2 "H₂O AS SENSED BY AH-586A-PS, OR AH-586B-PS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH FLOW INDICATED ON AH-32-FIR
- o LOCAL DIFFERENTIAL PRESSURE INDICATIONS ON AH-586-DPI

OPERATOR ACTIONS FOR A VALID ALARM:

- o REDUCE RB PURGE FLOW RATE
- o REFER TO OP-417

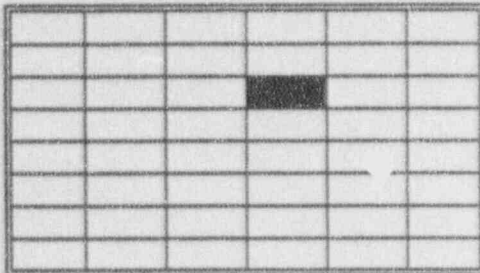
DISCUSSION:

THIS CONDITION IS INDICATIVE OF EXCESSIVE FLOW THROUGH THE PURGE EXHAUST FILTERS.

REFERENCES: DRAWING 308848

SENSING ELEMENT: AH-586A-DPS, AH-586B-PS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0360

INDICATED CONDITION:

- o AHF-2A MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-2A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP REACTOR CAVITY COOLING TO "B" SIDE PER OP-409
- o MONITOR REACTOR CAVITY TEMPS ON AH-1003-TIR PER OP-409

DISCUSSION:

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWINGS 208-005-AH-031, 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0362

INDICATED CONDITION:

- o AHF-2B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-2B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP REACTOR CAVITY COOLING TO "A" SIDE PER OP-409
- o MONITOR REACTOR CAVITY TEMPS ON AH-1003-TIR PER OP-409

DISCUSSION:

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWINGS 208-005-AH-033, 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0365

INDICATED CONDITION:

- AHF-3A MOTOR NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-3A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

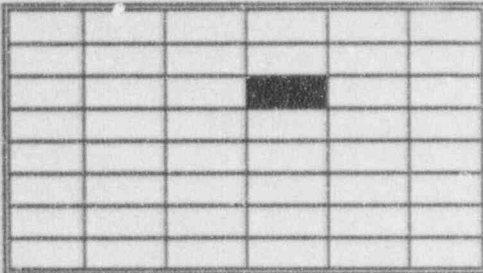
- ENSURE AHF-3B IS OPERATING
- REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWINGS 208-005-AH-036, 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0368

INDICATED CONDITION:

- AHF-3B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-3B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- START AHF-3A
- TRANSFER RMA-6 SUCTION TO AHF-3A REFER TO OP-417

DISCUSSION:

RM-A6 MONITORS THE REACTOR BUILDING ATMOSPHERE VIA EITHER THE DUCT OF AHF-3B OR THE DUCT OF AHF-3A DEPENDING ON WHICH IS IN OPERATION THE TRANSFER OF THE SAMPLE POINT PER OP-417 IS A MANUAL OPERATION. REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWINGS 208-005-AH-036, 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0371

INDICATED CONDITION:

- AHF-4A MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-4A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

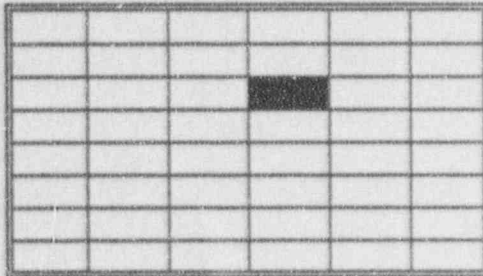
- START AHF-4B
- REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWINGS 208-005-AH-038, 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0373

INDICATED CONDITION:

- AHF-4B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-4B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

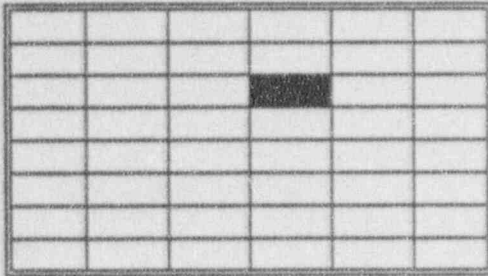
- START AHF-4A
- REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWINGS 208-005-AH-040, 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0378

INDICATED CONDITION:

- AHF-6A MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- GREEN LIGHT ON WITH A RED FLAG ON AHF-6A CONTROL STATION
- LOSS OF RB PURGE FLOW AS READ ON AH-32-FIR

OPERATOR ACTIONS FOR A VALID ALARM:

- START AHF-6B
- REESTABLISH RB PURGE IF REQUIRED
- REFER TO OP-409

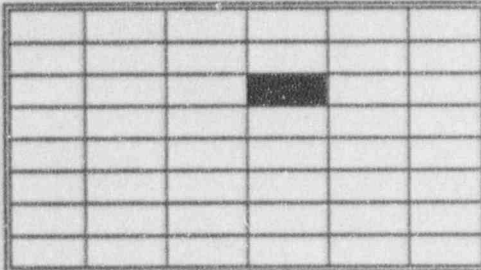
DISCUSSION:

ONLY ONE PURGE SUPPLY FAN IS REQUIRED FOR ESTABLISHING AN RB PURGE, SOME OF THE THINGS THAT WILL CAUSE THE PURGE SUPPLY FAN TO TRIP ARE A LOSS OF EITHER OF THE PURGE EXHAUST FANS AHF-7A/AHF-7B, ACTUATION OF FIRE ALERT EVENT POINT 0380

REFERENCES: DRAWINGS 208-005 SHEETS AH-015, AH-20, DRAWING 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-03	F-04-03
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REACTOR BLDG
MISC CLG FANS
TRIP

EVENT POINT 0379

INDICATED CONDITION:

- o AHF-6B MOTOR IS NOT ENERGIZED WITH THE CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-6B CONTROL STATION
- o LOSS OF RB PURGE FLOW AS READ ON AH-32-FIR

OPERATOR ACTIONS FOR A VALID ALARM:

- o START AHF-6A
- o REESTABLISH RB PURGE IF REQUIRED
- o REFER TO OP-409

DISCUSSION:

ONLY ONE PURGE SUPPLY FAN IS REQUIRED FOR ESTABLISHING AN RB PURGE, SOME OF THE THINGS THAT WILL CAUSE THE PURGE SUPPLY FAN TO TRIP ARE A LOSS OF EITHER OF THE PURGE EXHAUST FANS AHF-7A/AHF-7B, ACTUATION OF FIRE ALERT EVENT POINT 0380

REFERENCES: DRAWINGS 208-005 SHEETS AH-015, AH-21, DRAWING 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-04	F-04-04
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REACTOR BLDG
MISC AIR FLOW
LOW

EVENT POINT 0364

INDICATED CONDITION:

- AHF-2A AND/OR AHF-2B CONTROL HANDLE IN NORMAL AFTER START AND A LOW DIFF. PRESS. $<0.25'' \text{ H}_2\text{O}$ EXISTS AS SENSED BY AH-10-DPS AND/OR AH-532-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- CLOSED INDICATION OF AHD-1A
- CLOSED INDICATION ON AHD-1B

OPERATOR ACTIONS FOR A VALID ALARM:

- SWAP REACTOR CAVITY COOLING PER OP-409
- MONITOR REACTOR CAVITY TEMPERATURES ON AH-1003-TIR PER OP-409

DISCUSSION:

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY COULD HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

IF FLOW CANNOT BE RESTORED THEN CONSIDERATION SHOULD BE GIVEN TO SHUTTING DOWN THE PLANT.

REFERENCES: DRAWINGS 208-005 SHEET AH-032, DRAWING 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY, AH-10-DPS, AH-532-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-04	F-04-04
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A 10x10 grid with a black square at row 5, column 5 and a diagonal line from the bottom-left to the top-right.

REACTOR BLDG
MISC AIR FLOW
LOW

EVENT POINT 0366

INDICATED CONDITION:

- 0 AHF-3A CONTROL HANDLE IN NORMAL AFTER START AND A LOW DIFFERENTIAL PRESSURE $<0.25''$ H₂O EXISTS AS SENSED BY AH-13-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o INCREASING RB TEMPERATURES

OPERATOR ACTIONS FOR A VALID ALARM:

- o START AHF-3B
- o REFER TO OP-409
- o MONITOR RB TEMPS

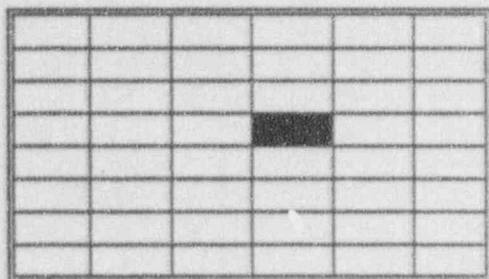
DISCUSSION:

LOSS OF THIS AIR SUPPLY FAN WILL CAUSE RB TEMPERATURES TO INCREASE IN PLACES DUE TO A LACK OF MIXING FLOW.

REFERENCES: DRAWINGS 208-005 SHEET AH-037, DRAWING 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY, AH-13-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-04	F-04-04
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REACTOR BLDG
MISC AIR FLOW
LOW

EVENT POINT 0369

INDICATED CONDITION:

- AHF-3B CONTROL HANDLE IN NORMAL AFTER START AND A LOW DIFFERENTIAL PRESSURE $<0.25'' \text{ H}_2\text{O}_2$ EXISTS AS SENSED BY AH-15-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- INCREASING RB TEMPERATURES

OPERATOR ACTIONS FOR A VALID ALARM:

- START AHF-3A
- TRANSFER RMA-6 SUCTION TO AHF-3A REFER TO OP-417

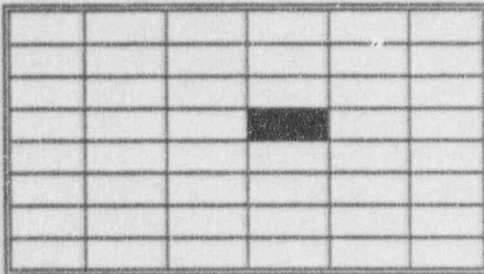
DISCUSSION:

RM-A6 MONITORS THE REACTOR BUILDING ATMOSPHERE VIA EITHER THE DUCT OF AHF-3B OR THE DUCT OF AHF-3A DEPENDING ON WHICH IS IN OPERATION THE TRANSFER OF THE SAMPLE POINT PER OP-417 IS A MANUAL OPERATION. REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWINGS 208-005 SHEET AH-037, DRAWING 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY, AH-13-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-04	F-04-04
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REACTOR BLDG
MISC AIR FLOW
LOW

EVENT POINT 0375

INDICATED CONDITION:

- AHF-4A OR AHF-4B CONTROL HANDLE IN NORMAL AFTER START AND A LOW DIFFERENTIAL PRESSURE $<.234"$ H_2O EXISTS AS SENSED BY AH-7-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- INCREASING RB TEMPERATURES

OPERATOR ACTIONS FOR A VALID ALARM:

- START AHF-4A OR 4B AS REQUIRED
- REFER TO OP-409
- MONITOR RB TEMPS

DISCUSSION:

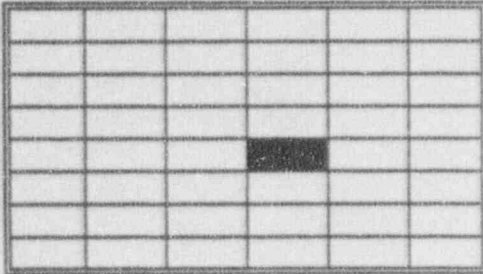
LOSS OF THE SG COOLING FANS WILL CAUSE SOME AREAS OF THE RB TO INCREASE DUE TO LACK OF MIXING FLOW.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWINGS 208-005 SHEET AH-038, DRAWING 308848

SENSING ELEMENT: CS/SC, CS/O, 42B RELAY, AH-7-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-05	F-04-05
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REACTOR BLDG
FAN VIBRATION
HIGH

EVENT POINT 0361

INDICATED CONDITION:

- AH-11-ME HAS ACTUATED DUE TO AHF-2A VIBRATION IN EXCESS OF SETPOINT AS DETERMINED BY PM-294

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- SECURE AHF-2A
- SWAP REACTOR CAVITY COOLING TO "B" SIDE PER OP-409
- MONITOR REACTOR CAVITY TEMPERATURES ON AH-1003-TIR PER OP-409

DISCUSSION:

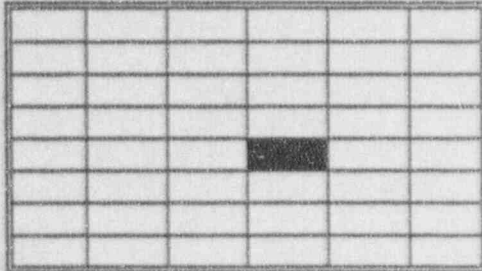
THIS CONDITION INDICATES THAT A VIBRATION IN EXCESS OF 1.0 G HAS BEEN DETECTED. THERE IS NO WAY TO MONITOR THE VIBRATION FROM OUTSIDE THE REACTOR BUILDING, THEREFORE IT WILL REQUIRE A REACTOR BUILDING ENTRY TO INVESTIGATE/REPAIR THE PROBLEM.

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWING 208-005 SHEET AH-133

SENSING ELEMENT: AH-11-ME

PSA ANNUNCIATOR RESPONSE	PSA-X-04-05	F-04-05
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REACTOR BLDG
FAN VIBRATION
HIGH

EVENT POINT 0363

INDICATED CONDITION:

- AH-12-ME HAS ACTUATED DUE TO AHF-2B VIBRATION IN EXCESS OF SETPOINT AS DETERMINED BY PM-294

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- NONE

OPERATOR ACTIONS FOR A VALID ALARM:

- SECURE AHF-2B
- SWAP REACTOR CAVITY COOLING TO "A" SIDE PER OP-409
- MONITOR REACTOR CAVITY TEMPERATURES ON AH-1003-TIR PER OP-409

DISCUSSION:

THIS CONDITION INDICATES THAT A VIBRATION IN EXCESS OF 1.0 G HAS BEEN DETECTED. THERE IS NO WAY TO MONITOR THE VIBRATION FROM OUTSIDE THE REACTOR BUILDING, THEREFORE IT WILL REQUIRE A REACTOR BUILDING ENTRY TO INVESTIGATE/REPAIR THE PROBLEM.

A SUSTAINED LOSS OF COOLING TO THE REACTOR CAVITY WILL HAVE ADVERSE EFFECTS ON THE RELIABILITY OF THE NUCLEAR INSTRUMENTATION.

REFERENCES: DRAWING 208-005 SHEET AH-133

SENSING ELEMENT: AH-12-ME

PSA ANNUNCIATOR RESPONSE	PSA-X-04-05	F-04-05
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REACTOR BLDG
FAN VIBRATION
HIGH

EVENT POINT 0367

INDICATED CONDITION:

- o AH-14-ME HAS ACTUATED DUE TO AHF-3A VIBRATION IN EXCESS OF SETPOINT AS DETERMINED BY PM-294

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-3A
- o ENSURE AHF-3B IS IN OPERATION

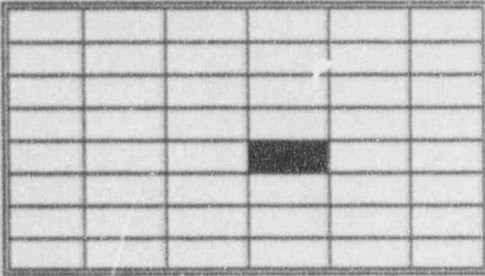
DISCUSSION:

THIS CONDITION INDICATES THAT A VIBRATION IN EXCESS OF 1.0 G HAS BEEN DETECTED. THERE IS NO WAY TO MONITOR THE VIBRATION FROM OUTSIDE THE REACTOR BUILDING, THEREFORE IT WILL REQUIRE A REACTOR BUILDING ENTRY TO INVESTIGATE/REPAIR THE PROBLEM.

REFERENCES: DRAWING 208-005 SHEET AH-133

SENSING ELEMENT: AH-14-ME

PSA ANNUNCIATOR RESPONSE	PSA-X-04-05	F-04-05
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REACTOR BLDG
FAN VIBRATION
HIGH

EVENT POINT 0370

INDICATED CONDITION:

- AH-16-ME HAS ACTUATED DUE TO AHF-3B VIBRATION IN EXCESS OF SETPOINT AS DETERMINED BY PM-294

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- SECURE AHF-3B
- START AHF-3A
- TRANSFER RMA-6 SUCTION TO AHF-3A REFER TO OP-417

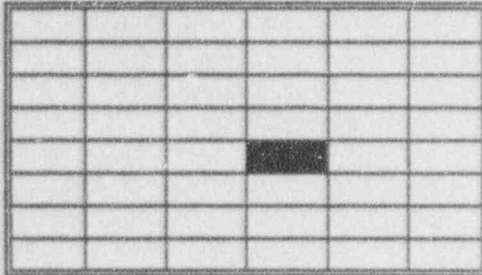
DISCUSSION:

THIS CONDITION INDICATES THAT A VIBRATION IN EXCESS OF 1.0 G HAS BEEN DETECTED. THERE IS NO WAY TO MONITOR THE VIBRATION FROM OUTSIDE THE REACTOR BUILDING, THEREFORE IT WILL REQUIRE A REACTOR BUILDING ENTRY TO INVESTIGATE/REPAIR THE PROBLEM.

REFERENCES: DRAWING 208-005 SHEET AH-134

SENSING ELEMENT: AH-16-ME

PSA ANNUNCIATOR RESPONSE	PSA-X 04-05	F-04-05
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REACTOR BLDG
FAN VIBRATION
HIGH

EVENT POINT 0372

INDICATED CONDITION:

- o AH-8-ME HAS ACTUATED DUE TO AHF-4A VIBRATION IN EXCESS OF SETPOINT AS DETERMINED BY PM-294

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-4A
- o START AHF-4B

DISCUSSION:

THIS CONDITION INDICATES THAT A VIBRATION IN EXCESS OF 1.0 G HAS BEEN DETECTED. THERE IS NO WAY TO MONITOR THE VIBRATION FROM OUTSIDE THE REACTOR BUILDING, THEREFORE IT WILL REQUIRE A REACTOR BUILDING ENTRY TO INVESTIGATE/REPAIR THE PROBLEM.

REFERENCES: DRAWING 208-005 SHEET AH-134

SENSING ELEMENT: AH-8-ME

PSA ANNUNCIATOR RESPONSE	PSA-X-04-05	F-04-05
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[illegible]

REACTOR BLDG
FAN VIBRATION
HIGH

EVENT POINT 0374

INDICATED CONDITION:

- 0 AH-9-ME HAS ACTUATED DUE TO AHF-4B VIBRATION IN EXCESS OF SETPOINT AS DETERMINED BY PM-294

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-4B
- o START AHF-4A

DISCUSSION:

THIS CONDITION INDICATES THAT A VIBRATION IN EXCESS OF 1.0 G HAS BEEN DETECTED. THERE IS NO WAY TO MONITOR THE VIBRATION FROM OUTSIDE THE REACTOR BUILDING, THEREFORE IT WILL REQUIRE A REACTOR BUILDING ENTRY TO INVESTIGATE/REPAIR THE PROBLEM.

REFERENCES: DRAWING 208-005 SHEET AH-134

SENSING ELEMENT: AH-9-ME

PSA ANNUNCIATOR RESPONSE	PSA-X-04-07	F-04-07
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[illegible]

REACTOR BLDG
PURGE AIR FLOW
LOW

EVENT POINT 0381

INDICATED CONDITION:

- 0 DIFFERENTIAL PRESSURE ACROSS AH-1-DPS IS < 0.048" H₂O WITH AHF-6A AND/OR AHF-6B CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHV-1D CLOSES

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 DETERMINE THE CAUSE FOR THE LOW PURGE SUPPLY FLOW, AND ADJUST THE RECIRC FLOW DAMPER CONTROL TO REESTABLISH FLOW THROUGH THE DUCT

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET 20, AND DRAWING 308848

SENSING ELEMENT: AHF-6A CS/SC, CS/O, AHF-6B CS/SC, CS/O, AH-1-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-07	F-04-07
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[illegible]

REACTOR BLDG
PURGE AIR FLOW
LOW

EVENT POINT 0386

INDICATED CONDITION:

- 0 DIFFERENTIAL PRESSURE ACROSS AH-296-DPS IS < 0.29" H₂O WITH AHF-7A AND/OR AHF-7B CONTROL HANDLE IN NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 LOW FLOW INDICATION ON AH-32-FIR POINT NUMBER 4

OPERATOR ACTIONS FOR A VALID ALARM:

- DETERMINE THE CAUSE FOR THE LOW PURGE EXHAUST FLOW, AND CORRECT IF POSSIBLE

DISCUSSION:

THIS CONDITION IS INDICATIVE OF A LOSS OF INTEGRITY IN THE DUCT WORK
AND SHOULD BE INVESTIGATED AS SOON AS POSSIBLE.

REFERENCES: DRAWING 208-005 SHEET 22, AND DRAWING 308848

SENSING ELEMENT: AHF-7A CS/SC, CS/O, AHF-7B CS/SC, CS/O, AH-296-DPS

PSA ANNUNCIATOR RESPONSE	PSA-X-04-08	F-04-08
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[illegible]

CRDM SHROUD
COOLING FANS
TRIP

EVENT POINT 1224

INDICATED CONDITION:

- o BREAKER IN UNIT 3D OF VENT MCC 3B IS OPEN
- o 42/12CR RELAY FOR THIS CIRCUIT IS DEENERGIZED
- o AHF-51B, AHF-51F, AND AHF-51J ARE NOT RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 GREEN INDICATOR LIGHT 0% VENT MCC 3B CUBICLE 3D
C LOCAL BREAKER POSITION

OPERATOR ACTIONS FOR A VALID ALARM:

- o MONITOR CRDM STATOR TEMPS
- o NOTIFY ELECTRIC L MAINTENANCE

DISCUSSION:

THIS ALARM IS INDICATIVE OF AN OVERLOAD CONDITION ON ONE OR MORE OF THE SHROUD FANS POWERED FROM THIS BREAKER. ELECTRICAL MAINTENANCE WILL DETERMINE THE FAN(S) THAT ARE SHORTED TO ENABLE THE REMAINING FANS TO BE RUN.

REFERENCES: DRAWING 208-005 SHEET AH-159

SENSING ELEMENT: 42/12CR RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-08	F-04-08
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A 10x10 grid with a single black square at the bottom center.

CRDM SHROUD
COOLING FANS
TRIP

EVENT POINT 1225

INDICATED CONDITION:

- o BREAKER IN UNIT 8A OF VENT MCC 3B IS OPEN
- o 42/34CR RELAY FOR THIS CIRCUIT IS DEENERGIZED
- o AHF-51C, AHF-51G, AND AHF-51K ARE NOT RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 GREEN INDICATOR LIGHT ON VENT MCC 3B CUBICLE 8A
0 LOCAL BREAKER POSITION

OPERATOR ACTIONS FOR A VALID ALARM:

- MONITOR CRDM STATOR TEMPS
- NOTIFY ELECTRICAL MAINTENANCE

DISCUSSION:

THIS ALARM IS INDICATIVE OF AN OVERLOAD CONDITION ON ONE OR MORE OF THE SHROUD FANS POWERED FROM THIS BREAKER. ELECTRICAL MAINTENANCE WILL DETERMINE THE FAN(S) THAT ARE SHORTED TO ENABLE THE REMAINING FANS TO BE RUN.

REFERENCES: DRAWING 208-005 SHEET AH-160

SENSING ELEMENT: 42/34CR RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-08	F-04-08
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A 10x10 grid with a black square at the bottom center.

CRDM SHROUD
COOLING FANS
TRIP

EVENT POINT 1226

INDICATED CONDITION:

- o BREAKER IN UNIT 10D OF VENT MCC 3B IS OPEN
- o 42/42CR RELAY FOR THIS CIRCUIT IS DEENERGIZED
- o AHF-51D, AHF-51H, AND AHF-51L ARE NOT RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 GREEN INDICATOR LIGHT ON VENT MCC 3B CUBICLE 10D
0 LOCAL BREAKER POSITION

OPERATOR ACTIONS FOR A VALID ALARM:

- o MONITOR CRDM STATOR TEMPS
- o NOTIFY ELECTRICAL MAINTENANCE

DISCUSSION:

THIS ALARM IS INDICATIVE OF AN OVERLOAD CONDITION ON ONE OR MORE OF THE SHROUD FANS POWERED FROM THIS BREAKER. ELECTRICAL MAINTENANCE WILL DETERMINE THE FAN(S) THAT ARE SHORTED TO ENABLE THE REMAINDER TO BE RUN.

REFERENCES: DRAWING 208-005 SHEET AH-161

SENSING ELEMENT: 42/42CR RELAY

PSA ANNUNCIATOR RESPONSE	PSA-X-04-08	F-04-08
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A 10x10 grid with a single black square at the bottom center.

CRDM SHROUD
COOLING FANS
TRIP

EVENT POINT 1229

INDICATED CONDITION:

- o BREAKER IN UNIT 8A OF VENT MCC 3A IS OPEN
- o 42/32CR RELAY FOR THIS CIRCUIT IS DEENERGIZED
- o AHF-51A, AHF-51E, AND AHF-51I ARE NOT RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN INDICATOR LIGHT ON VENT MCC 3A CUBICLE 8A
- o LOCAL BREAKER POSITION

OPERATOR ACTIONS FOR A VALID ALARM:

- MONITOR CRDM STATOR TEMPS
- NOTIFY ELECTRICAL MAINTENANCE

DISCUSSION:

THIS ALARM IS INDICATIVE OF AN OVERLOAD CONDITION ON ONE OR MORE OF THE SHROUD FANS POWERED FROM THIS BREAKER. ELECTRICAL MAINTENANCE WILL DETERMINE THE FAN(S) THAT ARE SHORTED TO ENABLE THE REMAINDER TO BE RUN.

REFERENCES: DRAWING 208-005 SHEET AH-158

SENSING ELEMENT: 42/32 CR RELAY

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-01	F-05-01
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AUX BLDG
EXHAUST FAN
TRIP

EVENT POINT 0417

INDICATED CONDITION:

- o AHF-14A BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-14A CONTROL STATION
- o AHF-10, AHF-11A, AHF-11B TRIP, IF RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14C, START AHF-14B AND AHF-14D PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

AUX BLDG EXHAUST FILTER DELUGE VALVE ACTUATION, FSV-112 WILL TRIP THIS FAN. THE SUCTION AND DISCHARGE DAMPER POSITION CONTACTS THAT FEED THE FAN RUN INTERLOCK STRING ARE DIFFERENT FROM THE CONTACTS THAT SUPPLY INDICATION ON THE HVAC PANEL.

WASTE GAS DECAY TANK OUTLET VALVES, WDV-436, 437, 438 WILL CLOSE WHEN THIS FAN TRIPS.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-01

SENSING ELEMENT: CONTROL STATION AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-01	F-05-01
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AUX BLDG
EXHAUST FAN
TRIP

EVENT POINT 0419

INDICATED CONDITION:

- o AHF-14B BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-14B CONTROL STATION
- o AHF-10, AHF-11A, AHF-11B TRIP, IF RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14D, START AHF-14A AND AHF-14C PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

AUX BLDG EXHAUST FILTER DELUGE VALVE ACTUATION, FSV-110 WILL TRIP THIS FAN. WASTE GAS DECAY TANK OUTLET VALVES, WDV-436, 437, 438 WILL CLOSE WHEN THIS FAN TRIPS.

THE SUCTION AND DISCHARGE DAMPER POSITION CONTACTS THAT FEED THE RUN INTERLOCK STRING ARE DIFFERENT FROM THE CONTACTS THAT SUPPLY INDICATION ON THE HVAC PANEL.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-02

SENSING ELEMENT: CONTROL STATION AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-01	F-05-01
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AUX BLDG
EXHAUST FAN
TRIP

EVENT POINT 0421

INDICATED CONDITION:

- o AHF-14C BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT WITH A RED FLAG ON AHF-14C CONTROL STATION
- o AHF-11A, AHF-11B, AHF-10 TRIP, IF RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14A, START AHF-14B AND AHF-14D
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

AUX BLDG EXHAUST FILTER DELUGE VALVE ACTUATION, FSV-116 WILL TRIP THIS FAN THE SUCTION AND DISCHARGE DAMPER POSITION CONTACTS THAT FEED THE FAN RUN INTERLOCK STRING ARE DIFFERENT FROM THE CONTACTS THAT SUPPLY INDICATION ON THE HVAC PANEL.

WASTE GAS DECAY TANK OUTLET VALVES, WDV-436, 437, 438 WILL CLOSE WHEN THIS FAN TRIPS.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-03

SENSING ELEMENT: CONTROL STATION AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-01	F-05-01
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AUX BLDG
EXHAUST FAN
TRIP

EVENT POINT 0423

INDICATED CONDITION:

- o AHF-14D BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-14D CONTROL STATION
- o AHF-10, AHF-11A, AHF-11B TRIP, IF RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14B, START AHF-14A AND AHF-14C
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

AUX BLDG EXHAUST FILTER DELUGE VALVE ACTUATION, FSV-118 WILL TRIP THIS FAN THE SUCTION AND DISCHARGE DAMPER POSITION CONTACTS THAT FEED THE FAN RUN INTERLOCK STRING ARE DIFFERENT FROM THE CONTACTS THAT SUPPLY INDICATION ON THE HVAC PANEL.

WASTE GAS DECAY TANK OUTLET VALVES, WDV-436, 437, 438 WILL CLOSE WHEN THIS FAN TRIPS.

REFER TO SYS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-04

SENSING ELEMENT: CONTROL STATION AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-02	F-05-02
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AUX BLDG
EXHAUST FAN
OVERLOAD

EVENT POINT 0418

INDICATED CONDITION:

- o AHF-14A MOTOR AMPS >115% RATED LOAD

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-14A TRIPS
- o AHF-14A HIGH MOTOR AMPS INDICATED ON HVAC PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14A AND AHF-14C, START AHF-14B AND AHF-14D AND RESTORE AUX BUILDING VENTILATION AS REQUIRED PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

THIS ALARM INDICATES THAT EITHER THE TIMED OVERCURRENT OR INSTANTANEOUS OVERCURRENT PROTECTIVE DEVICES HAVE ACTUATED. INSTANTANEOUS OVERCURRENT PROTECTIVE RELAY ACTUATION WILL TRIP THE BREAKER.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-01

SENSING ELEMENT: 74-AHF-14A

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-02	F-05-02
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AUX BLDG
EXHAUST FAN
OVERLOAD

EVENT POINT 0420

INDICATED CONDITION:

- o AHF-14B MOTOR AMPS >115% RATED LOAD

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-14B TRIPS
- o AHF-14B HIGH MOTOR AMPS INDICATED ON HVAC PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14B AND AHF-14D, START AHF-14A AND AHF-14C AND RESTORE AUX BUILDING VENTILATION AS REQUIRED PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

THIS ALARM INDICATES THAT EITHER THE TIMED OVERCURRENT OR INSTANTANEOUS OVERCURRENT PROTECTIVE DEVICES HAVE ACTUATED. INSTANTANEOUS OVERCURRENT PROTECTIVE RELAY ACTUATION WILL TRIP THE BREAKER.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-02

SENSING ELEMENT: 74-AHF-14B

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-02	F-05-02
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AUX BLDG
EXHAUST FAN
OVERLOAD

EVENT POINT 0422

INDICATED CONDITION:

- o AHF-14C MOTOR AMPS >115% RATED LOAD

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-14C TRIPS
- o AHF-14C HIGH MOTOR AMPS INDICATED ON HVAC PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14A AND AHF-14C, START AHF-14B AND AHF-14D AND RESTORE AUX BUILDING VENTILATION AS REQUIRED PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

THIS ALARM INDICATES THAT EITHER THE TIMED OVERCURRENT OR INSTANTANEOUS OVERCURRENT PROTECTIVE DEVICES HAVE ACTUATED. INSTANTANEOUS OVERCURRENT PROTECTIVE RELAY ACTUATION WILL TRIP THE BREAKER.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-03

SENSING ELEMENT: 74-AHF-14C

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-02	F-05-02
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AUX BLDG
EXHAUST FAN
OVERLOAD

EVENT POINT 0424

INDICATED CONDITION:

- o AHF-14D MOTOR AMPS >115% RATED LOAD

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-14D TRIPS
- o AHF-14D HIGH MOTOR AMPS INDICATED ON HVAC PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- o SECURE AHF-14B AND AHF-14D, START AHF-14A AND AHF-14C AND RESTORE AUX BUILDING VENTILATION AS REQUIRED PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

THIS ALARM INDICATES THAT EITHER THE TIMED OVERCURRENT OR INSTANTANEOUS OVERCURRENT PROTECTIVE DEVICES HAVE ACTUATED. INSTANTANEOUS OVERCURRENT PROTECTIVE RELAY ACTUATION WILL TRIP THE BREAKER.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-04

SENSING ELEMENT: 74-AHF-14D

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-03	F-05-03
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AB FLTR 2A/B/C/D
ΔP
HIGH

EVENT POINT 1552

INDICATED CONDITION:

- o AUX BUILDING EXHAUST FILTER, AHFL-2A, FLOW IS >5.2" H₂O AS SENSED BY AH-601-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHFL-2A LOCAL DIFFERENTIAL PRESSURE INDICATOR

OPERATOR ACTIONS FOR A VALID ALARM:

- o NOTIFY HVAC TO INSPECT FILTER

DISCUSSION:

OPERATION OF AUXILIARY BUILDING EXHAUST FANS WITH ONLY THREE AUX BUILDING EXHAUST FILTERS IS PERMITTED.

REFERENCES: DRAWING 208-005 SHEET AH-131

SENSING ELEMENT: AH-601-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-03	F-05-03
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AB FLTR 2A/B/C/D
ΔP
HIGH

EVENT POINT 1553

INDICATED CONDITION:

- o AUX BUILDING EXHAUST FILTER, AHFL-2B, FLOW IS >5.2" H₂O AS SENSED BY AH-602-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHFL-2B LOCAL DIFFERENTIAL PRESSURE INDICATOR

OPERATOR ACTIONS FOR A VALID ALARM:

- o NOTIFY HVAC TO INSPECT FILTER

DISCUSSION:

OPERATION OF AUXILIARY BUILDING EXHAUST FANS WITH ONLY THREE AUX BUILDING EXHAUST FILTERS IS PERMITTED.

REFERENCES: DRAWING 208-005 SHEET AH-131

SENSING ELEMENT: AH-602-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-03	F-05-03
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AB FLTR 2A/B/C/D
ΔP
HIGH

EVENT POINT 1688

INDICATED CONDITION:

- 0 AUX BUILDING EXHAUST FILTER, AHFL-2C, FLOW IS >5.2" H₂O AS SENSED BY AH-603-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHFL-2C LOCAL DIFFERENTIAL PRESSURE INDICATOR

OPERATOR ACTIONS FOR A VALID ALARM:

- o NOTIFY HVAC TO INSPECT FILTER.

DISCUSSION:

OPERATION OF AUXILIARY BUILDING EXHAUST FANS WITH ONLY THREE AUX BUILDING EXHAUST FILTERS IS PERMITTED.

REFERENCES: DRAWING 208-005 SHEET AH-131

SENSING ELEMENT: AH-603-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-03	F-05-03
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[illegible]

AB FLTR 2A/B/C/D
ΔP
HIGH

EVENT POINT 1689

INDICATED CONDITION:

- 0 AUX BUILDING EXHAUST FILTER, AHFL-2D, FLOW IS >5.2" H₂O AS SENSED BY AH-604-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHFL-2D LOCAL DIFFERENTIAL PRESSURE INDICATOR

OPERATOR ACTIONS FOR A VALID ALARM:

- o NOTIFY HVAC TO INSPECT FILTER

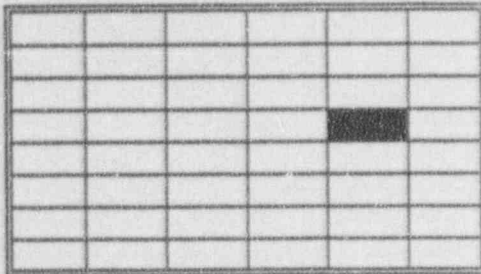
DISCUSSION:

OPERATION OF AUXILIARY BUILDING EXHAUST FANS WITH ONLY THREE AUX BUILDING EXHAUST FILTERS IS PERMITTED.

REFERENCES: DRAWING 208-005 SHEET AH-131

SENSING ELEMENT: AH-604-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-04	F-05-04
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PENETRATION
AIR FLOW
TROUBLE

EVENT POINT 0438

INDICATED CONDITION:

- o PENETRATION COOLING AIR FLOW IS $<0.018''$ H₂O AS SENSED BY AH-30-DPS WITH EITHER AHF-9A OR AHF-9B CONTROL STATION IN NORMAL AFTER START

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL DIFFERENTIAL FLOW INDICATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o START BACKUP PENETRATION COOLING FAN
- o REFER TO OP-409

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-56

SENSING ELEMENT: AH-30-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-05	F-05-05
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FIRE PP HOUSE
FAN
TROUBLE

EVENT POINT 0454

INDICATED CONDITION:

- 0 FIRE PUMP HOUSE VENTILATION AIR FLOW IS $<0.25"$ H₂O AS SENSED BY EITHER AH-168-DPS AND AHF-33A IS RUNNING OR BY AH-173-DPS AND AHF-33B RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL DIFFERENTIAL FLOW INDICATION

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 START BACKUP FIRE PUMP HOUSE FAN
- 0 CHECK FIRE PUMP HOUSE INLET FILTERS AND OUTLET REGISTERS FOR PROPER OPERATION

DISCUSSION:

FIRE PUMP HOUSE FANS ARE USED FOR FIRE PUMP COOLING AND COMBUSTION AIR FOR DIESEL FIRE PUMPS.

REFERENCES: DRAWING 208-005 SHEET AH-71

SENSING ELEMENT: AH-173-DPS, AH-168-DPS AND CONTROL STATION CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-05	F-05-05
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FIRE PP HOUSE
FAN
TROUBLE

EVENT POINT 1537

INDICATED CONDITION:

- 0 AHF-33A BREAKER CLOSED AND CONTROL HANDLE IN THE NORMAL AFTER STOP POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 RED LIGHT ON WITH A GREEN FLAG ON AHF-33A CONTROL STATION
0 TEMPERATURE IN FIRE PUMP HOUSE >85° F.
0 ANY FIRE PUMP RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF AUTO START

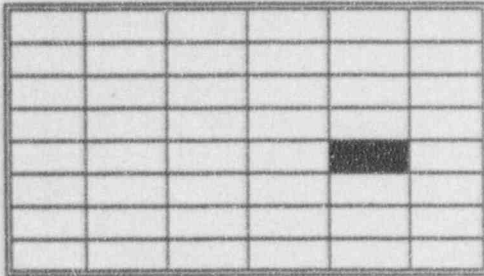
DISCUSSION:

FIRE PUMP HOUSE FANS ARE USED FOR FIRE PUMP COOLING AND COMBUSTION AIR FOR DIESEL FIRE PUMPS. AT LEAST ONE FAN MUST BE IN OPERATION ANY TIME A FIRE PUMP IS IN OPERATION.

REFERENCES: DRAWING 208-005 SHEET AH-71

SENSING ELEMENT: CONTROL STATION AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-05-05	F-05-05
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FIRE PP HOUSE
FAN
TROUBLE

EVENT POINT 1538

INDICATED CONDITION:

- o AHF-33B BREAKER CLOSED AND CONTROL HANDLE IN THE NORMAL AFTER STOP POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o RED LIGHT ON WITH A GREEN FLAG ON AHF-33B CONTROL STATION
- o TEMPERATURE IN FIRE PUMP HOUSE $>85^{\circ}$ F.
- o ANY FIRE PUMP RUNNING

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF AUTO START

DISCUSSION:

FIRE PUMP HOUSE FANS ARE USED FOR FIRE PUMP COOLING AND COMBUSTION AIR FOR DIESEL FIRE PUMPS. AT LEAST ONE FAN MUST BE IN OPERATION ANY TIME A FIRE PUMP IS IN OPERATION.

REFERENCES: DRAWING 208-005 SHEET AH-72

SENSING ELEMENT: CONTROL STATION AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0456

INDICATED CONDITION:

- o AHF-22A BREAKER OPEN WITH THE CONTROL HANDLE IN NORMAL AFTER START

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-22A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o IF EGDG-1A IS RUNNING ENSURE AHF-22B IS RUNNING
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

DIESEL GENERATOR FANS WILL TRIP IF DIESEL SPEED IS <600 RPM AS SENSED BY EG-19-SS.
SECURING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-75

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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[illegible]

DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0457

INDICATED CONDITION:

- o AHF-22B BREAKER OPEN WITH THE CONTROL HANDLE IN NORMAL AFTER START

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-22B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 IF EGDG-1A IS RUNNING ENSURE AHF-22A IS RUNNING
0 INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

DIESEL GENERATOR FANS WILL TRIP IF DIESEL SPEED IS <600 RPM AS SENSED BY EG-19-SS.
SECURING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-74

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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[illegible]

DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0458

INDICATED CONDITION:

- 0 DIESEL GENERATOR "A" ROOM DUCT AIR FLOW $<0.25''$ H₂O AS SENSED BY AH-359B-DPS WITH AHF-22B OR AH-359A-DPS WITH AHF-22A ON

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL FLOW INDICATION ON JOHNSON CONTROL PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- o IF EGDG-1A IS RUNNING SWAP OPERATING AHF-22 FANS
- o NOTIFY AUX BLDG OPERATOR TO ENSURE INLET FILTERS ARE CLEAR OF DEBRIS AND OBSTRUCTIONS TO AIR FLOW

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-74

SENSING ELEMENT: AH-359B-DPS, AH-359A-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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[illegible]

DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0459

INDICATED CONDITION:

- 0 DIESEL GENERATOR "A" CONTROL ROOM TEMPERATURE IS >118° F AS SENSED BY AH-540-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH AMBIENT TEMPERATURE CONDITIONS IN THE "A" DIESEL GENERATOR CONTROL ROOM

OPERATOR ACTIONS FOR A VALID ALARM:

- o INSPECT "A" DIESEL GENERATOR CONTROL ROOM FOR ANY SIGNS OF A FIRE
- o LOWER TEMPERATURE BY STARTING AHF-22A OR 22B
- o ENSURE AHF-28A IS RUNNING

DISCUSSION:

- o HIGH AMBIENT TEMPERATURES IN THE CONTROL ROOM CAN ADVERSELY IMPACT THE OPERABILITY OF THE EMERGENCY DIESEL GENERATORS

REFERENCES: DRAWING 208-005 SHEET AH-76

SENSING ELEMENT: AH-540-TS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0461

INDICATED CONDITION:

- o AHF-22C BREAKER OPEN WITH THE CONTROL HANDLE IN NORMAL AFTER START

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-22C CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o IF EGDG-1B IS RUNNING ENSURE AHF-22D IS RUNNING
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

DIESEL GENERATOR FANS WILL TRIP IF DIESEL SPEED IS <600 RPM AS SENSED BY EG-20-SS.
SECURING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-77

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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[illegible]

DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0462

INDICATED CONDITION:

- o AHF-22D BREAKER OPEN WITH THE CONTROL HANDLE IN NORMAL AFTER START

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- 0 GREEN LIGHT ON WITH A RED FLAG ON AHF-22D CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 IF EGDG-1B IS RUNNING ENSURE AHF-22C IS RUNNING
0 INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

DIESEL GENERATOR FANS WILL TRIP IF DIESEL SPEED IS <600 RPM AS SENSED BY EG-20-SS.
SECURING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-78

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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[illegible]

DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0463

INDICATED CONDITION:

- 0 DIESEL GENERATOR "B" ROOM DUCT AIR FLOW <0.25 " H₂O AS SENSED BY
AH-369B-DPS WITH AHF-22D OR AH-369A-DPS WITH AHF-22C ON

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL FLOW INDICATION ON JOHNSON CONTROL PANEL

OPERATOR ACTIONS FOR A VALID ALARM:

- 0 IF EGDG-1B IS RUNNING SWAP OPERATING AHF-22 FANS
- 0 NOTIFY AUX BLDG OPERATOR TO ENSURE INLET FILTERS ARE CLEAR OF DEBRIS AND OBSTRUCTIONS TO AIR FLOW

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-77

SENSING ELEMENT: AH-369B-DPS, AH-369A-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 0464

INDICATED CONDITION:

- o DIESEL GENERATOR "B" CONTROL ROOM TEMPERATURE IS >118° F AS SENSED BY AH-541-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o HIGH AMBIENT TEMPERATURE CONDITIONS IN THE DIESEL GENERATOR CONTROL ROOM

OPERATOR ACTIONS FOR A VALID ALARM:

- o INSPECT "B" DIESEL GENERATOR CONTROL ROOM FOR ANY SIGNS OF A FIRE
- o LOWER TEMPERATURE BY STARTING AHF-22C OR 22D
- o ENSURE AHF-28B IS RUNNING

DISCUSSION:

- o HIGH AMBIENT TEMPERATURES IN THE CONTROL ROOM CAN ADVERSELY IMPACT THE OPERABILITY OF THE EMERGENCY DIESEL GENERATORS

REFERENCES: DRAWING 208-005 SHEET AH-79

SENSING ELEMENT: AH-541-TS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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[illegible]

DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 1539

INDICATED CONDITION:

- o AHF-22A BREAKER CLOSED WITH THE CONTROL HANDLE IN NORMAL AFTER STOP

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o RED LIGHT ON WITH A GREEN FLAG ON AHF-22A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF FAN AUTO START

DISCUSSION:

DIESEL GENERATOR FANS WILL AUTO START IF DIESEL SPEED IS >600 RPM AS
SENSED BY EG-19-SS.
STARTING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-74

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 1540

INDICATED CONDITION:

- 0 EGDG-1A SPEED IS >600 RPM AS SENSED BY EG-19-SS AND AHF-22A AND AHF-22B
ARE NOT RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o EGDG-1A READY OR RUN LIGHT ON AND AHF-22A AND AHF-22B GREEN INDICATORS ON

OPERATOR ACTIONS FOR A VALID ALARM:

- o START AHF-22A AND/OR AHF-22B

DISCUSSION:

DIESEL GENERATOR FANS PROVIDE COOLING FOR THE DIESEL GENERATOR ROOM.
OPERATION OF THE EMERGENCY DIESEL GENERATOR WITH NO COOLING FANS RUNNING
MUST BE CLOSELY MONITORED SO AS TO NOT EXCEED 105° ROOM TEMPERATURE.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS

REFERENCES: DRAWING 208-005 SHEET AH-74

SENSING ELEMENT: 3ERA AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 1541

INDICATED CONDITION:

- o AHF-22B BREAKER CLOSED WITH THE CONTROL HANDLE IN NORMAL AFTER STOP

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o RED LIGHT ON WITH A GREEN FLAG ON AHF-22B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF FAN AUTO START

DISCUSSION:

DIESEL GENERATOR FANS WILL AUTO START IF DIESEL SPEED IS >600 RPM AS
SENSED BY EG-19-SS.
STARTING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-75

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 1542

INDICATED CONDITION:

- o AHF-22C BREAKER CLOSED WITH THE CONTROL HANDLE IN NORMAL AFTER STOP

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o RED LIGHT ON WITH A GREEN FLAG ON AHF-22C CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF FAN AUTO START

DISCUSSION:

DIESEL GENERATOR FANS WILL AUTO START IF DIESEL SPEED IS >600 RPM AS SENSED BY EG-20-SS.
STARTING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-77

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 1543

INDICATED CONDITION:

- o EGDG-1B SPEED IS >600 RPM AS SENSED BY EG-20-SS AND AHF-22C AND AHF-22D ARE NOT RUNNING

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o EGDG-1B READY OR RUN LIGHT ON AND AHF-22C AND AHF-22D GREEN INDICATORS ON

OPERATOR ACTIONS FOR A VALID ALARM:

- o START AHF-22C AND/OR AHF-22D

DISCUSSION:

DIESEL GENERATOR FANS PROVIDE COOLING FOR THE DIESEL GENERATOR ROOM. OPERATION OF THE EMERGENCY DIESEL GENERATOR WITH NO COOLING FANS RUNNING MUST BE CLOSELY MONITORED SO AS NOT TO EXCEED 105° ROOM TEMPERATURE.

REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.

REFERENCES: DRAWING 208-005 SHEET AH-77

SENSING ELEMENT: 3ERB AND BREAKER CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-03	F-06-03
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DIESEL GEN RM
FAN
TROUBLE

EVENT POINT 1544

INDICATED CONDITION:

- o AHF-22D BREAKER CLOSED WITH THE CONTROL HANDLE IN NORMAL AFTER STOP

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o RED LIGHT ON WITH A GREEN FLAG ON AHF-22D CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF FAN AUTO START

DISCUSSION:

DIESEL GENERATOR FANS WILL AUTO START IF DIESEL SPEED IS >600 RPM AS SENSED BY EG-20-SS.

STARTING THE FAN LOCALLY WILL ACTUATE THIS ALARM.

REFERENCES: DRAWING 208-005 SHEET AH-78

SENSING ELEMENT: CONTROL SWITCH CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-04	F-06-04
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SAMPLING ROOM
FAN
TROUBLE

EVENT POINT 0508

INDICATED CONDITION:

- o AHF-44A BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-44A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF FAN TRIP
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

DISCUSSION:

DUCTWORK TEMPERATURE >135° AS SENSED BY AH-402-TS WILL TRIP THIS FAN.
AHF-20A MUST BE RUNNING IN EITHER FAST OR SLOW FOR THIS FAN TO RUN.

REFERENCES: DRAWING 208-005 SHEET AH-98

SENSING ELEMENT: CONTROL STATION CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-04	F-06-04
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SAMPLING ROOM
FAN
TROUBLE

EVENT POINT 0509

INDICATED CONDITION:

- 0 AHF-44B BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-44B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF FAN TRIP
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

DISCUSSION:

DUCTWORK TEMPERATURE $>135^{\circ}$ AS SENSED BY AH-545-TS WILL TRIP THIS FAN.

AHF-20B MUST BE RUNNING IN EITHER FAST OR SLOW FOR THIS FAN TO RUN.

REFERENCES: DRAWING 208-005 SHEET AH-99

SENSING ELEMENT: CONTROL STATION CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-04	F-06-04
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SAMPLING ROOM
FAN
TROUBLE

EVENT POINT 0510

INDICATED CONDITION:

- o AHF-44A DUCTWORK TEMPERATURE >135°F AS SENSED BY AH-402-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-44A TRIPS
- o WHILE "TEMP NORM" LIGHT IS OUT FOR AHF-44A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF HIGH TEMP
- o IF FIRE CONDITIONS EXIST REFER TO AP-880
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-98

SENSING ELEMENT: AH-402-TS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-04	F-06-04
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SAMPLING ROOM
FAN
TROUBLE

EVENT POINT 0511

INDICATED CONDITION:

- o AHF-44A EXHAUST FLOW <0.10" H₂O AS SENSED BY AH-403-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOW FLOW ON LOCAL INDICATION FOR AHF-44A

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF LOW FLOW
- o CONSIDERATION SHOULD BE GIVEN TO SWAPPING TO "B" SIDE CONTROL COMPLEX VENTILATION
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

DISCUSSION:

AHF-20A MUST BE RUNNING PRIOR TO STARTING AHF-44A

REFERENCES: DRAWING 208-005 SHEET AH-98

SENSING ELEMENT: AH-403-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-04	F-06-04
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[illegible]

SAMPLING ROOM
FAN
TROUBLE

EVENT POINT 1530

INDICATED CONDITION:

- o AHF-44B EXHAUST FLOW $<0.10'' \text{ H}_2\text{O}$ AS SENSED BY AH-544-DPS

- o AHF-44B EXHAUST FLOW <0.10" H₂O AS SENSED BY AH-544-DPS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOW FLOW ON LOCAL INDICATION FOR AHF-44B

- o LOW FLOW ON LOCAL INDICATION FOR AHF-44B

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF LOW FLOW
- o CONSIDERATION SHOULD BE GIVEN TO SWAPPING TO "A" SIDE CONTROL COMPLEX VENTILATION
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

- o INVESTIGATE CAUSE OF LOW FLOW
- o CONSIDERATION SHOULD BE GIVEN TO SWAPPING TO "A" SIDE CONTROL COMPLEX VENTILATION
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

DISCUSSION:

AHF-20B MUST BE RUNNING PRIOR TO STARTING AHF-44B

AHF-20B MUST BE RUNNING PRIOR TO STARTING AHF-44B

REFERENCES: DRAWING 208-005 SHEET AH-99

SENSING ELEMENT: AH-544-DPS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-04	F-06-04
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SAMPLING ROOM
FAN
TROUBLE

EVENT POINT 1531

INDICATED CONDITION:

- o AHF-44B DUCTWORK TEMPERATURE >135°F AS SENSED BY AH-545-TS

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o AHF-44B TRIPS
- o WHITE "TEMP NORM" LIGHT IS OUT FOR AHF-44B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o INVESTIGATE CAUSE OF HIGH TEMP
- o IF FIRE CONDITIONS EXIST REFER TO AP-880
- o NOTIFY CHEMISTRY OF LOSS OF SAMPLE HOOD VENTILATION

DISCUSSION.

REFERENCES: DRAWING 208-005 SHEET AH-99

SENSING ELEMENT: AH-545-TS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-05	F-06-05
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[illegible]

INTERMEDIATE
BLDG FAN
TROUBLE

EVENT POINT 0376

INDICATED CONDITION:

- o AHF-24A BREAKER CLOSED AND DISCHARGE DAMPER AHD-67, CLOSED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL DAMPER INDICATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SHUTDOWN AHF-24A
- o SWAP TO "B" SIDE INTERMEDIATE BUILDING FANS PER OP-409

DISCUSSION:

OPERATION OF AHF-24A WITH THE DISCHARGE DAMPER CLOSED MAY CAUSE FAN DAMAGE.

REFERENCES: DRAWING 208-005 SHEET AH-51

SENSING ELEMENT: 2-AHF-24A, AHF-24A-KS

PSA-F ANNUNCIATOR RESPONSE	PSA X-06-05	F-06-05
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[illegible]

INTERMEDIATE
BLDG FAN
TROUBLE

EVENT POINT 0377

INDICATED CONDITION:

- o AHF-24B BREAKER CLOSED AND ITS DISCHARGE DAMPER AHD-68, CLOSED

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o LOCAL DAMPER INDICATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SHUTDOWN AHF-24B
- o SWAP TO "A" SIDE INTERMEDIATE BUILDING FANS PER OP-409

DISCUSSION:

OPERATION OF AHF-24B WITH THE DISCHARGE DAMPER CLOSED MAY CAUSE FAN DAMAGE.

REFERENCES: DRAWING 208-005 SHEET AH-52

SENSING ELEMENT: 2-AHF-24B, AHF-24B-KS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-05	F-06-05
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INTERMEDIATE
BLDG FAN
TROUBLE

EVENT POINT 1548

INDICATED CONDITION:

- 0 AHF-29A BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-29A CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP TO "B" SIDE INTERMEDIATE BUILDING FANS PER OP-409
- o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-53

SENSING ELEMENT: CONTROL STATION CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-05	F-06-05
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[illegible]

INTERMEDIATE
BLDG FAN
TROUBLE

EVENT POINT 1549

INDICATED CONDITION:

- o AHF-29B BREAKER OPEN WITH CONTROL HANDLE IN THE NORMAL AFTER START POSITION

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- o GREEN LIGHT ON WITH A RED FLAG ON AHF-29B CONTROL STATION

OPERATOR ACTIONS FOR A VALID ALARM:

- o SWAP TO "A" SIDE INTERMEDIATE BUILDING FANS PER OP-409
o INVESTIGATE CAUSE OF FAN TRIP

DISCUSSION:

REFERENCES: DRAWING 208-005 SHEET AH-54

SENSING ELEMENT: CONTROL STATION CONTACTS

PSA-F ANNUNCIATOR RESPONSE	PSA-X-06-08	F-06-08
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[illegible]

REACTOR BLDG
PERSONNEL DOOR
OPEN

EVENT POINT 1212

INDICATED CONDITION:
o REACTOR BUILDING PERSONNEL OR EQUIPMENT HATCH INNER OR OUTER DOOR NOT CLOSED
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:
o RB DOOR INDICATION PANEL MCB PSA SECTION
OPERATOR ACTIONS FOR A VALID ALARM:
o INVESTIGATE OPEN HATCH o REFER TO OP-417
DISCUSSION:
REFER TO STS FOR ADMINISTRATIVE REQUIREMENTS.
REFERENCES: DRAWING 208-064 SHEET ME-04
SENSING ELEMENT: ME-1,3,5&7-KS