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Date: 6/30/97

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Rev. 16 Effective Date 6-28-97

INFORMATION ONLY

ANNUNCIATOR RESPONSE

AR-701

FLORIDA POWER CORPORATION CRYSTAL RIVER UNIT 3

SSF P ANNUNCIATOR RESPONSE

APPROVED BY: Interpretation Contact uns hip for CWB a.W Mulai 06/28/95 DATE:

INTERPRETATION CONTACT: Manager, Nuclear Plant Operations Support

TABLE OF CONTENTS

SECTION	<u>P</u>	PAGE
1.0	PURPOSE	1
2.0	REFERENCES Implementing references 2.1 Implementing references 2.2 DEVELOPMENTAL REFERENCES	1 1 1
3.0	PEISONNEL INDOCTRIMATION	1
4.0	IMSTRUCTIONS	2
5.0	FOLLOW-UP ACTIONS	2
ENCLOSURE		
1	Annunciator Response	3



1.0 PURPOSE

- 1.1 Establish a reference document for each Annunciator Window on the SFF-Al Lampbox.
- 1.2 Establish operator actions for valid Annunciator alarms on the SSF-Al Lampbox.
- 1.3 Establish a reference to other procedures which address operator actions for valid Annunciator alarms on the SSF-Al Lampbox.

2.0 REFERENCES

2.1 IMPLEMENTING REFERENCES

- 2.1.1 EOP, Emergency Operating Procedure
- 2.1.2 OP-305, Operation of Pressurizer
- 2.1.3 AP-770, Emergency Diesel Generator Actuation
- 2.1.4 AP-545, Plant Runback
- 2.1.5 OP-700B, 480 Volt AC Motor Control Centers
- 2.1.6 OP-700D, 120 Volt AC Vital Busses
- 2.1.7 OP-703, Plant Distribution
- 2.1.8 OP-705, Emergency Power DC System

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-224-049

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 SSF-Al Lampbox as indicated on Enclosure 1, Annunciator Response.

5.0 FOLLOW-UP ACTIONS

None

ENCLOSURE 1 (Page 1 of 129)

	SSF ANNUNCIATOR RESPONSE	SSF-A1-01-01	P-01-01
		STARTUP	
		EVENT POIN	NT 0694
0	TED CONDITION: STARTUP TRANSFORMER GROUND FAULT LOCK- ACTUATED, DUE TO CURRENT ON THE NEUTRA 51TN/STU.	OUT RELAY 86TNSTU-1 H. L/GROUND SENSED BY RE	AS LAY
	ANT INDICATION WHICH WILL VERIFY ALARM		
	THE FOLLOWING BREAKERS WILL AUTOMATICABREAKER 3103BREAKER 3104BREAKER 3205BREAKER 3206BREAKER 3206BR	FAKER 3203 BREAK	ER 3204 ER 1692
OPERAT	OR ACTIONS FOR A VALID ALARM:		
0	VERIFY OPERATION OF THE LOCK OUT RELAY ENSURE THAT ALL FEEDER BREAKERS FROM TH OPEN.	S 86TNSTU-1, AND 86TN HE STARTUP TRANSFORMEN	STU-2. R ARE
DISCUS	SION:		
1	THIS IS INDICATION OF AN INTERNAL GROUD THE LOCK-OUT RELAY ACTUATES TO STRIP TH OF THE TRANSFORMER, AND TO PREVENT CLOS TRANSFORMER.	HE POWER FEED AND THE	LOADS OFF
EFERE	NCES: DRAWING 208-040 SHEET MT-84, EC-	-206-013	
		The second s	

ENCLOSURE 1 (Page 2 of 129)

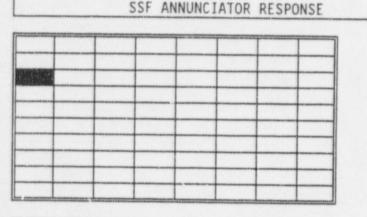
	SSF	ANNUNCIATOR	RESPONSE	SSF-A1-01-01	P-01-01
				STARTUP	
				EVENT POIN	NT 0695
O STAR ACTU	TUP TR	ANSFORMER SUD	DDEN PRESSURE LO DEN RISE IN PRES	DCK-OUT RELAY 86SPSTU- SSURE AS SENSED BY DEV	1 HAS ICE 63FPX.
O <u>THE</u>	EOLLOW	ING BREAKERS	ER 3104 BR	1: ALLY TRIP AND LOCK-OUT REAKER 3203 BREAK REAKER 1691 BREAK	ER 3204 ER 1692
• VERIF	Y OPER	FOR A VALID RATION OF THE ALL FEEDER	LOCK OUT RELAY	S 86SPSTU-1, 86SPSTU-2 HE STARTUP TRANSFORME	2. R ARE
DISCUSSION: THIS THF I	INDICA OCK-OU	IT RELAY ACTU	ATES TO STRIP T	ED INTERNAL TO THE TRA HE POWER FEED AND THE SING IN A BREAKER ON A	LOADS OFF
OF TH	E TRAN	ISFORMER, AND	TO PREVENT CLO	SING IN A DREAKER ON A	FAULTED

ENCLOSURE 1 (Page 3 of 129)

	SSF ANNUNCIATOR RESPONSE	SSF-A1-01-01	P-01-01
		STARTUP	XEMR
		FAUL	
		EVENT POI	NT 0696
INDIC	CATED CONDITION:		
0	STARTUP TRANSFORMER PHASE DIFFERENTIAL ACTUATED, DUE TO A DIFFERENCE IN CURRE SENSED BY RELAYS 87TSTU-ØA, 87TSTU-ØB,	NT ON THE INDIVIDUAL	U-1 HAS PHASES AS
REDUN	DANT INDICATION WHICH WILL VERIFY ALARM	:	
0	THE FOLLOWING BREAKERS WILL AUTOMATICA	LLY TRIP AND LOCK-OUT	
	BREAKER 3103 BREAKER 3104 BR BREAKER 3205 BREAKER 3206 BR	EAKER 3203 BREAK	ER 3204 ER 1692
OPERA	TOR ACTIONS FOR A VALID ALARM:		
0 0	TERMINE OF ERATION OF THE LOCK OUT RELAT		R ARE
DISCU	SSION:		
	THIS IS INDICATION OF A PHASE IMBALANCE THE LOCK-OUT RELAY ACTUATES TO STRIP TH OF THE TRANSFORMER, AND TO PREVENT CLOSE TRANSFORMER.	HE POWER FEED AND THE	LOADS OFF
REFER	ENCES: DRAWING 208-040 SHEET MT-86, EC	-206-013,	
SENSI	NG ELEMENT: RELAYS 86TSTU-1, 87TSTU-ØA	, 87TSTU-ØB, AND 87TST	-ψC

ENCLOSURE 1 (Page 4 of 129)

P-01-03



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	and a country which do not	CONTRACTOR AND ADDRESS	 NAME OF TAXABLE	Can provide set between

SSF-A1-01-03

STARTUP XFMR MAJOR ALARM

EVENT POINT 0756

INDICATED CONDITION:

 STARTUP TRANSFORMER PRESS RELIEF DEVICE HAS ACTUATED DUE TO PRESS >10 PSIG AS SENSED BY 63PRX.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

RED LIGHT IS ON, LOCATED ON THE START-UP TRANSFORMER ALARM PANEL.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

IF XFMR FANS HAVE BEEN OFF FOR AN EXTENDED PERIOD OF TIME AND HIGH OIL TEMPS EXIST, RESTART OF FANS MAY ACTUATE FIRE DELUGE SYSTEM DUE TO HIGH FAN EXHAUST AIR TEMPS. THIS WILL TRIP THE FANS AND OIL PUMPS OFF AGAIN. IF THIS OCCURS THE DELUGE VALVES MUST BE RESET BEFORE XFMR FANS AND PUMPS WILL RESTART.

REFERENCES: DRAWING 208-040 SHEET MT-090

SENSING ELEMENT: 63PRX

ENCLOSURE 1 (Page 5 of 129)

P-01-03

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SSF ANNUNCIATOR RESPONSE

STARTUP XFMR MAJOR ALARM

SSF-A1-01-03

EVENT POINT 0757

INDICATED CONDITION:

 STARTUP TRANSFORMER TOP OIL TEMPERATURE >90°C AS SENSED BY DEVICE 26QX.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

RED LIGHT IS ON, LOCATED ON THE STARTUP TRANSFORMER ALARM PANEL.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

IF XFMR FANS HAVE BEEN OFF FOR AN EXTENDED PERIOD OF TIME AND HIGH OIL TEMPS EXIST, RESTART OF FANS MAY ACTUATE FIRE DELUGE SYSTEM DUE TO HIGH FAN EXHAUST AIR TEMPS. THIS WILL TRIP THE FANS AND OIL PUMPS OFF AGAIN. IF THIS OCCURS THE DELUGE VALVES MUST BE RESET BEFORE XFMR FANS AND PUMPS WILL RESTART.

REFERENCES: DRAWING 208-040 SHEET MT-090

SENSING ELEMENT: 26QX

ENCLOSURE 1 (Page 6 of 129)

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SSF ANNUNCIATOR RESPONSE SSF-A1-01-

STARTUP XFMR MAJOR ALARM

EVENT POINT 0758

INDICATED CONDITION:

○ STARTUP TRANSFORMER WINDING TEMF >120°C AS SENSED BY DEVICE 49X.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

RED LIGHT IS ON, LOCATED ON THE STARTUP TRANSFORMER ALARM PANEL.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

IF XFMR FANS HAVE BEEN OFF FOR AN EXTENDED PERIOD OF TIME AND HIGH OIL TEMPS EXIST, RESTART OF FANS MAY ACTUATE FIRE DELUGE SYSTEM DUE TO HIGH FAN EXHAUST AIR TEMPS. THIS WILL TRIP THE FANS AND OIL PUMPS OFF AGAIN. IF THIS OCCURS THE DELUGE VALVES MUST BE RESET BEFORE XFMR FANS AND PUMPS WILL RESTART.

REFERENCES: DRAWING 208-040 SHEET MT-090

SENSING ELEMENT: 49X

ENCLOSURE 1 (Page 7 of 129)

P-01-03

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SSF ANNUNCIATOR RESPONSE

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MAJU	n ALAN	M

SSF-A1-01-03

EVENT POINT 0760

INDICATED CONDITION:

 STARTUP TRANSFORMER HAS EVOLVED >200 cc OF COMBUSTIBLE GAS AS SENSED BY DEVICE 63GDRX.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

RED LIGHT IS ON, LOCATED ON THE STARTUP TRANSFORMER ALARM PANEL.
 INDICATION OF COMBUSTIBLE GAS ON THE METER.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

THIS CONDITION IS INDICATIVE OF INSULATION BREAKDOWN INTERNAL TO THE TRANSFORMER. AS THE INSULATION DEGRADES COMBUSTIBLE GAS EVOLVES. THE GAS COLLECTS IN A CHAMBER ON THE TOP OF THE TRANSFORMER. THE AMOUNT OF THIS GAS IS READ ON A GAUGE ON THE TRANSFORMER.

REFERENCES: DRAWING 208-040 SHEET MT-090

SENSING ELEMENT: 63GDRX

ENCLOSURE 1 (Page 8 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-01-04	P-01-04	
	STARTUP XFM MINOR ALARM		
	EVENT POI	NT 0751	
INDICATED CONDITION:			
 NO INDICATION WHICH WILL VERIFY ALARM NO INDICATING LIGHTS ARE ON, LOCATED C 		EL.	
○ NO INDICATING LIGHTS ARE ON, LOCATED O		IEL.	
PERATOR ACTIONS FOR A VALID ALARM:		IEL .	
 NO INDICATING LIGHTS ARE ON, LOCATED O OPERATOR ACTIONS FOR A VALID ALARM: NOTIFY SYSTEM DISPATCHER. 	ON THE LOCAL ALARM PAN	WER RELAY	
 NO INDICATING LIGHTS ARE ON, LOCATED OF PERATOR ACTIONS FOR A VALID ALARM: NOTIFY SYSTEM DISPATCHER. 	ON THE LOCAL ALARM PAN	WER RELAY OMATIC TIONS.	

ENCLOSURE 1 (Page 9 of 129)

P-01-04

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SSF-A1-01-04

EVENT POINT 0752

INDICATED CONDITION:

 TRANSFORMER TEMPERATURE >85°C AND ONE OR MORE OF THE PUMPS DID NOT START AS SENSED BY FLOW SWITCH 63QF-1, OR 63QF-2.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

 RED PUMP NO FLOW INDICATING LIGHT IS ON, LOCATED ON THE LOCAL ALARM PANEL.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

THIS IS AN INDICATION THAT THE PUMPS DID NOT START AS REQUIRED. AND THAT THE TRANSFORMER MAY BE OVERHEATING. CONSIDERATION SHOULD BE GIVEN TO REDUCING LOAD.

REFERENCES: DRAWING 208-040 SHEET MT-090, VENDOR DRAWING 3906D662AC

SENSING ELEMENT: RELAYS 74X, 63QF-1, 63QF-2

ENCLOSURE 1 (Page 10 of 129)

P-01-04

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SSF ANNUNCIATOR RESPONSE

STARTUP XFMR
MINOR ALARM

SSF-A1-01-04

EVENT POINT 0753

INDICATED CONDITION:

 STARTUP TRANSFORMER NORMAL POWER SUPPLY TO AUXILIARY POWER RELAYS IS DEENERGIZED AS SENSED BY RELAY 83, AND 83X.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

 RED AUXILIARY POWER FAILURE (NORMAL) INDICATING LIGHT IS ON, LOCATED ON THE LOCAL ALARM PANEL.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

THIS INDICATES THAT THE NORMAL SOURCE OF POWER FOR THE AUXILIARY EQUIPMENT IS DEENERGIZED. THE TRANSFORMER SHOULD OPERATE ON THE BACK-UP POWER SOURCE UNTIL THE PROBLEM CAN BE CGRRECTED.

REFERENCES: DRAWING 208-040 SHEET MT-090, VENDOR DRAWING 3906D662AC

SENSING ELEMENT: RELAYS 83 83X.

ENCLOSURE 1 (Page 11 of 129)

P-01-04

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SIL BOOM	 		 	
		CONTRACTOR OF THE OWNER	 	

SSF ANNUNCIATOR RESPONSE

START	UP XFMR
MINOR	ALARM

SSF-A1-01-04

EVENT POINT 0754

INDICATED CONDITION:

 STARTUP TRANSFORMER AUXILIARY POWER EMERGENCY POWER SUPPLY IS DEENERGIZED AS SENSED BY RELAY 27E.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

 RED AUXILIARY POWER FAILURE (EMERGENCY) INDICATING LIGHT IS ON, LOCATED ON THE LOCAL ALARM PANEL.

OPERATOR ACTIONS FOR A VALID ALARM:

NOTIFY SYSTEM DISPATCHER.

DISCUSSION:

THIS INDICATES THAT THE EMERGENCY SOURCE OF POWER FOR THE AUXILIARY EQUIPMENT IS DEENERGIZED.

REFERENCES: DRAWING 208-040 SHEET MT-090, VENDOR DRAWING 3906D662AC

SENSING ELEMENT: RELAY 27E

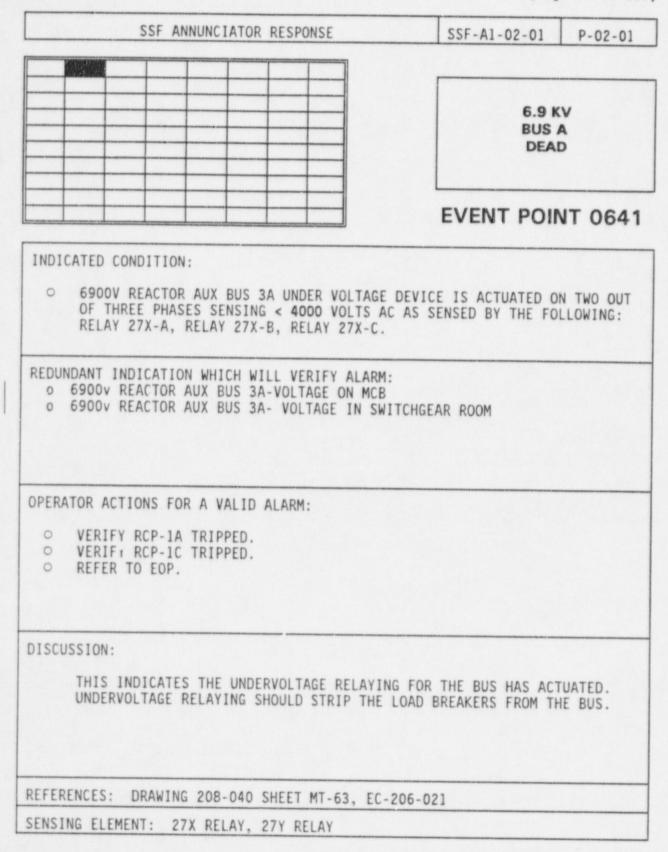
ENCLOSURE 1 (Page 12 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-01-04	P-01-04
	STARTUP MINOR AN	
	EVENT POINT 07	
INDICATED CONDITION: O STARTUP TRANSFORMER AUXILIARY POWER IS EMERGENCY POWER SUPPLY.	5 BEING SUPPLIED FROM	THE
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	٨.	
 RED AUTO TRANSFER ALARM INDICATING LIG ALARM PANEL. 		THE LOCAL
 RED AUTO TRANSFER ALARM INDICATING LIG ALARM PANEL. OPERATOR ACTIONS FOR A VALID ALARM: NOTIFY SYSTEM DISPATCHER. 		THE LOCAL
OPERATOR ACTIONS FOR A VALID ALARM:	CE OF POWER FOR THE AL	

ENCLOSURE 1 (Page 13 of 129)

	SSF-A1-01-04	P-01-04
	STARTUP MINOR AL	
	EVENT POIN	NT 0759
INDICATED CONDITION: O STARTUP TRANSFORMER LIQUID LEVEL LOW	AS SENSED BY 63QLX LEV	EL SWITCH.
 REDUNDANT INDICATION WHICH WILL VERIFY ALA LIQUID LEVEL INDICATOR LOCATED ON TH RED LIQUID LEVEL LOW ALARM LIGHT IS PANEL. 	E STARTUP TRANSFORMER	LALARM
OPERATOR ACTIONS FOR A VALID ALARM: O NOTIFY SYSTEM DISPATCHER. WHEN CONDITION IS CLEARED THE ALARM LOCAL ALARM PANEL.	WILL NEED TO BE RESET AT	
 NOTIFY SYSTEM DISPATCHER. WHEN CONDITION IS CLEARED THE ALARM LOCAL ALARM PANEL. 		
• WHEN CONDITION IS CLEARED THE ALARM LOCAL ALARM PANEL.		

ENCLOSURE 1 (Page 14 of 129)



ENCLOSURE 1 (Page 15 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-02 P-02-	02
	4 KV UNIT BUS A DEAD	
	EVENT POINT 06	45
INDICATED CONDITION:		
 4160V UNIT BUS 3A UNDER VOLTAGE DEVICE THREE PHASES SENSING < 3750 VOLTS AC A RELAY 27-A, RELAY 27-B, RELAY 27-C. REDUNDANT INDICATION WHICH WILL VERIFY ALARM VOLTAGE INDICATORS ON UNIT BUS 3A. COMPUTER POINT E-002. GREEN INDICATING LIGHT IS ON, LOCATED BREAKER 3201. GREEN INDICATING LIGHT IS ON, LOCATED BREAKER 3203. 	AS SENSED BY THE FOLLOWING: M: ON THE CONTROL STATION FOR	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO AP-545 PLANT RUNBACK PROCEDUR	RE.	
DISCUSSION:		
THIS INDICATES THE UNDERVOLTAGE RELAYI THE LOSS OF UNIT BUS 3A WILL RESULT IN AHF-14A AHF-14C MTSW-3E RW CWP-1A CWP-1C CDP-1A MT	THE LOSS OF THE FOLLOWING:	
REFERENCES: DRAWING 208-040 SHEET MT-64, EC	-206-011	

ENCLOSURE 1 (Page 16 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-03	P-02-03
	4 KV RX AUX DEA	BUS
	EVENT POI	NT 1990
 NDICATED CONDITION: 4160V REACTOR AUX BUS UNDER VOLTAGE DE THREE PHASES SENSING < 3750 VOLTS AC A RELAY 27X-A, RELAY 27X-B, RELAY 27X-C. REDUNDANT INDICATION WHICH WILL VERIFY ALARM VOLTAGE INDICATORS ON 4160V REACTOR AU 	AS SENSED BY THE FOLLO	WO OUT OF WING:
 COMPUTER POINT E-016. GREEN INDICATING LIGHT IS ON, LOCATED BREAKER 3105. 		N FOR
 GREEN INDICATING LIGHT IS ON, LOCATED BREAKER 3105. 	ON THE CONTROL STATIO	N FOR
 GREEN INDICATING LIGHT IS ON, LOCATED BREAKER 3105. OPERATOR ACTIONS FOR A VALID ALARM: INVESTIGATE CAUSE OF BUS UNDERVOLTAGE. 	ON THE CONTROL STATIO	TUATED
 GREEN INDICATING LIGHT IS ON, LOCATED BREAKER 3105. OPERATOR ACTIONS FOR A VALID ALARM: INVESTIGATE CAUSE OF BUS UNDERVOLTAGE. DISCUSSION: THIS INDICATES THE UNDERVOLTAGE RELAYI 	ON THE CONTROL STATIO	TUATED

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ENCLOSURE 1 (Page 17 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-02-04	P-02-04
	r	
	480 TURB AUX DEA	BUS A
	EVENT POI	NT 0661
INDICATED CONDITION: O 480V TURBINE AUX BUS 3A UNDERVOLTAGE F BUS UNDERVOLTAGE AS SENSED BY RELAY 27	RELAYING HAS ACTUATED YY-3/33TA.	DUE TO A
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM BUS VOLTAGE METER INDICATION. COMPUTER POINT E-007. GREEN LIGHT ON BREAKER 3303 CONTROL ST 		
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O INVESTIGATE THE CAUSE OF BUS UNDERVOLT	AGE.	
DISCUSSION:		
THIS INDICATES THE UNDERVOLTAGE RELAYI ALL OF THE LOAD BREAKERS SHOULD OPEN O NEED TO BE RECLOSED LOCALLY AFTER THE	N UNDERVOLTAGE AND THE	Y WILL
REFERENCES: DRAWING 208-040, MT-68		
SENSING ELEMENT: 27Y-33TA		

ENCLOSURE 1 (Page 18 of 129)

	480 RX AUX E DEAL	BUS A
	EVENT POIN	NT 0657
INDICATED CONDITION: O 480V REACTOR AUX BUS 3A UNDERVOLTAGE REL BUS UNDERVOLTAGE AS SENSED BY RELAY 27Y-	AYING HAS ACTUATED I 1/33RA.	DUE TO A
REDUNDANT INDICATION WHICH WILL VERIFY ALARM: O BUS VOLTAGE METER INDICATION. O COMPUTER POINT E-009. O GREEN LIGHT IS ON, LOCATED ON THE BREAKE OPERATOR ACTIONS FOR A VALID ALARM:	R 3305 CONTROL STAT	ION.
 STABILIZE PLANT. INVESTIGATE THE CAUSE OF BUS UNDERVOLTAG 	E.	
DISCUSSION: THIS INDICATES THE UNDERVOLTAGE RELAYING ALL OF THE LOAD BREAKERS SHOULD OPEN ON I NEED TO BE RECLOSED LOCALLY AFTER THE CAN	UNDERVOLTAGE AND THE	V WILL
REFERENCES: DRAWING 208-040 SHEET MT-067 SENSING ELEMENT: 27Y-1/33RA		

ENCLOSURE 1 (Page 19 of 129)

	SSF-A1-02-06	P-02-06
	480 INTAKE E DEAI	BUS A
	EVENT POI	NT 0665
INDICATED CONDITION: O 480V INTAKE BUS 3A UNDERVOLTAGE RELAY UNDERVOLTAGE AS SENSED BY RELAY 27Y-1/	ING HAS ACTUATED DUE T /33IA.	O A BUS
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM BUS VOLTAGE METER INDICATION. COMPUTER POINT E-011. GREEN LIGHT IS ON, LOCATED ON THE BREA 		ION.
OPERATOR ACTIONS FOR A VALID ALARM: → STABILIZE PLANT.		
 STABILIZE PLANT. INVESTIGATE THE CAUSE OF BUS UNDERVOLT 	AGE.	
INVESTIGATE THE CAUSE OF BUS UNDERVOLT DISCUSSION: THIS INDICATES THE UNDERVOLTAGE RELAYI	NG FOR THE BUS HAS ACT	TUATED,
> INVESTIGATE THE CAUSE OF BUS UNDERVOLT	NG FOR THE BUS HAS ACT	EY WILL

ENCLOSURE 1 (Page 20 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-02-07 P-02-07
	480 V PLANT AUX BUS DEAD
	EVENT POINT 066
INDICATED CONDITION: • 480V PLANT AUX BUS 3 UNDERVOLTAGE RELA UNDERVOL AGE AS SENSED BY RELAY 27Y-2/	/33P.
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM BUS VOLTAGE METER INDICATION. COMPUTER POINT E-006. GREEN LIGHT IS ON, LOCATED ON THE BREA 	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O INVESTIGATE THE CAUSE OF BUS UNDERVOLT	AGE.
DISCUSSION:	
THIS INDICATES THE UNDERVOLTAGE RELAYI THIS CAUSES THE "B" CONTROL ROD DRIVE OF THE LOAD BREAKERS SHOULD OPEN ON UN TO BE RECLOSED LOCALLY AFTER THE CAUSE	SYSTEM TO BE DEENERGIZED. ALL DERVOLTAGE AND THEY WILL NEED
THIS INDICATES THE UNDERVOLTAGE RELAYI THIS CAUSES THE "B" CONTROL ROD DRIVE OF THE LOAD BREAKERS SHOULD OPEN ON UN	SYSTEM TO BE DEENERGIZED. ALL DERVOLTAGE AND THEY WILL NEED

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ENCLOSURE 1 (Page 21 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-08	P-02-08
		and the second se
	6.9 KV R XFMR T HIGI	EMP
	EVENT POI	NT 2002
 TRANSFORMER ELECTRONIC TEMPERATURE MONI TO EITHER THE TRANSFORMER TEMPERATURE > POWER. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: 	200°C, OR A LOSS OF	OSED DUE CONTROL
 HIGH TEMPERATURE ON TRANSFORMER TEMPERA 		
○ HIGH TEMPERATURE ON TRANSFORMER TEMPERA	TURE MONITOR.	
 HIGH TEMPERATURE ON TRANSFORMER TEMPERA OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TURE MONITOR.	JATE SIBLE.
 HIGH TEMPERATURE ON TRANSFORMER TEMPERA OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORMER 	TURE MONITOR.	JATE SIBLE.

ENCLOSURE 1 (Page 22 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POIN	NT 0626
 INDICATED CONDITION: BREAKER 3340 IS OPEN AND RACKED IN. 		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
 COMPUTER POINT E-028. GREEN LIGHT IS ON, LOCATED ON THE BREAK 	ER AT "B" 480 V ES UI	NIT 2B.
○ GREEN LIGHT IS ON, LOCATED ON THE BREAK		NIT 2B.
 GREEN LIGHT IS ON, LOCATED ON THE BREAK OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 	3B1. ON THE MOTOR CONTROL	
 GREEN LIGHT IS ON, LOCATED ON THE BREAK OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT 	3B1. ON THE MOTOR CONTROL	

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ENCLOSURE 1 (Page 23 of 129)

SF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	48n MCC 7 12	R
	EVENT POI	NT 0627
INDICATED CONDITION:		
• BREAKER 3343 IS OPEN AND RACKED IN.		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
REDORDART INDICATION WITCH WILL VERIFT ALARM:		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. 	INDICATION AT "B" 4	80V TURB
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. 	INDICATION AT "B" 4	80V TURB
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: 	INDICATION AT "B" 4	80V TURB
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL 		80V TURB
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V TURB
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON TURB MCC 3 		80V TURB
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 	BA.	
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON TURB MCC 3 DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT C 	BA.	
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON TURB MCC 3 DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT C 	BA.	

ENCLOSURE 1 (Page 24 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
		an ann an tar ann an ann an ann an an ann an an an an
	480 MCC BRE OPE	AKER
	EVENT POI	NT 0628
• BREAKER 3344 IS OPEN AND RACKED IN.		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS, UNIT 3C. 		80V TURB
AUX BUS, UNIT 3C.	INDICATION AT "B" 4	80V TURB
OPERATOR ACTIONS FOR A SALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON TURB MCC	ON THE MOTOR CONTROL	
DPERATOR ACTIONS FOR A SALID ALARM: O STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON TURB MCC DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT	ON THE MOTOR CONTROL	

ENCLOSURE 1 (Page 25 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPEI	AKER
	EVENT POI	NT 0629
O BREAKER 3345 IS OPEN AND RACKED IN.		
The second		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL REACTOR AUX BUS, UNIT 3B. 	INDICATION AT "A" 4	80V
REACTOR AUX BUS, UNIT 3B.		80V
PERATOR ACTIONS FOR A VALID ALARM: OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON REACTOR M	ON THE MOTOR CONTROL	
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON REACTOR M DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT	ON THE MOTOR CONTROL	

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ENCLOSURE 1 (Page 26 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	[
	480 MCC BRE OPEI	AKER
	EVENT POI	NT 0630
• BREAKER 3346 IS OPEN AND RACKED IN. REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL REACTOR AUX BUS, UNIT 3A. 	INDICATION AT "B" 4	80V
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL REACTOR AUX BUS, UNIT 3A. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON REACTOR MO 		80V
OPERATOR ACTIONS FOR A VALID ALARM:		" 4
REACTOR AUX BUS, UNIT 3A. RATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON REACTOR MO	CC 3B1.	
DPERATOR ACTIONS FOR A VALID ALARM: OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON REACTOR MO DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT O	CC 3B1.	

ENCLOSURE 1 (Page 27 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPEI	AKER
	EVENT POI	NT 0633
 INDICATED CONDITION: BREAKER 3341 IS OPEN AND RACKED IN. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: COMPUTER POINT E-026. GREEN LIGHT IS ON, LOCATED ON THE LOCAL UNIT 3D. OPERATOR ACTIONS FOR A VALID ALARM: 		80V ES BUS
 STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 	3A1.	
	ON THE MOTOR CONTROL	CENTER,
 REFER TO OP-700B FOR LOADS ON E.S. MCC DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT 	ON THE MOTOR CONTROL	CENTER,

ENCLOSURE 1 (Page 28 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POI	VT 063
 BREAKER 3353 IS OPEN AND RACKED IN. EDUNDANT INDICATION WHICH WILL VERIFY ALARM: 		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL TURBINE AUX BUS, UNIT 3A. 		80 V
TURBINE AUX BUS, UNIT 3A.	INDICATION AT "A" 4	80 V
OPERATOR ACTIONS FOR A VALID ALARM: OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON WATER TRE	ATMENT MCC 3A.	
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON WATER TRE DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT	ATMENT MCC 3A.	

ENCLOSURE 1 (Page 29 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-01
	480 MCC BRE OPE	AKER
	EVENT POI	NT 0635
• BREAKER 3354 IS OPEN AND RACKED IN.		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL TURBINE AUX BUS, UNIT 3B. 		80V
TURBINE AUX BUS, UNIT 3B.	INDICATION AT "B" 4	80V
DPERATOR ACTIONS FOR A VALID ALARM: OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER 10 OP-700B FOR LOADS ON WATER TREA	INDICATION AT "B" 4	
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER 10 OP-700B FOR LOADS ON WATER TREAD DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT O	INDICATION AT "B" 4	

ENCLOSURE 1 (Page 30 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 V MCC BREAKER OPEN EVENT POINT 0638	
 BREAKER 3357 IS OPEN AND RACKED IN. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: 		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL 3 UNIT 4C. 		INTAKE BUS
3 UNIT 4C.	INDICATION AT 480V	INTAKE BUS
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON INTAKE MC	INDICATION AT 480V	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON INTAKE MC DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT O	INDICATION AT 480V	

ENCLOSURE 1 (Page 31 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 V MCC BREAKER OPEN EVENT POINT 0635	
• BREAKER 3363 IS OPEN AND RACKED IN. REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL AUX BUS 3A UNIT 3D. 		TURBINE
AUX BUS 3A UNIT 3D.	INDICATION AT 480V	TURBINE
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON VENTILATION DISCUSSION:	INDICATION AT 480V	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON VENTILATION	INDICATION AT 480V	
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON VENTILATION DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT (INDICATION AT 480V	

ENCLOSURE 1 (Page 32 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POI	NT 0640
• BREAKER 3364 IS OPEN AND RACKED IN.		
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL TURBINE AUX BUS, UNIT 3D. 	INDICATION AT "B" 4	80V
TURBINE AUX BUS, UNIT 3D.		80V
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON VENTILATION	ON MCC 3B.	
DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON VENTILATION DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT (ON MCC 3B.	

ENCLOSURE 1 (Page 33 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POIN	NT 067
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	:	
 STABILIZE PLANT. 		80V
REACTOR AUX BUS, UNIT 3C. DPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON REACTOR M		80V
DPERATOR ACTIONS FOR A VALID ALARM:	MCC 3A2.	
REACTOR AUX BUS, UNIT 3C. OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON REACTOR M DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT	MCC 3A2.	

ENCLOSURE 1 (Page 34 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POIN	NT 067
 BREAKER 3366 IS OPEN AND RACKED IN. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: GREEN LIGHT IS ON, LOCATED ON THE LOCAL 	INDICATION AT "A" AS	
REACTOR BUS, UNIT 3C.		807
		80V
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TU OP-700B FOR LOADS ON REACTOR MO		BOV
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TU OP-700B FOR LOADS ON REACTOR MO	CC 3B2.	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TU OP-700B FOR LOADS ON REACTOR MO DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT O	CC 3B2.	

ENCLOSURE 1 (Page 35 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
		
	480 MCC BRE OPEN	AKER
	EVENT POIN	NT 0682
 O BREAKER 3351 IS OPEN AND RACKED IN. 		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
 COMPUTER POINT E-027. GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2B. 	INDICATION AT "A" 48	BOV ES
OPERATOR ACTIONS FOR A VALID ALARM:		
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON E.S. MCC :	3A2.	
 STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC : 	3A2.	
	ON THE MOTOR CONTROL	CENTER,
 STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC : DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT A POSSIBLE POSSIBLE FAULT A POSSIBLE FAULT A POSSIBLE FAULT A POSSIBLE POSSIB	ON THE MOTOR CONTROL	CENTER,

ENCLOSURE 1 (Page 36 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	EAKER
	EVENT POI	NT 0763
INDICATED CONDITION:		
• BREAKER 3331 IS OPEN AND RACKED IN.		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
 COMPUTER POINT E-023. GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. 	INDICATION AT "A" 4	80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. 	INDICATION AT "A" 4	80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 3 	BA3.	
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 3 DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT C 	BA3.	

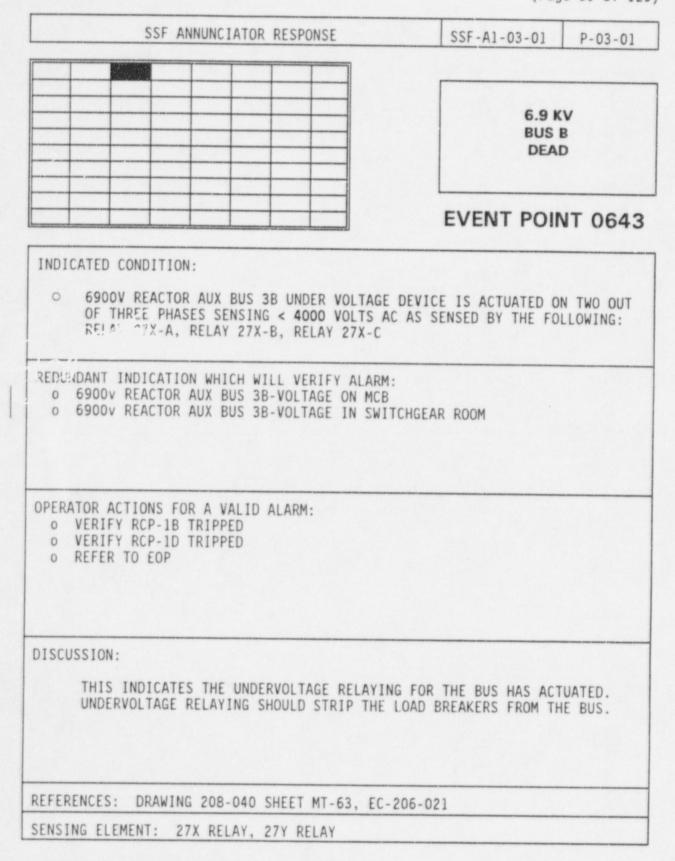
ENCLOSURE 1 (Page 37 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POI	NT 0764
INDICATED CONDITION:		
 BREAKER 3330 IS OPEN AND RACKED IN. 		
Didinicia oboo io of ch and knoked in.		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM:		
O COMPUTER POINT F-024		
 COMPUTER POINT E-024. GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. 	INDICATION AT "B" 4	80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. 	INDICATION AT "B" 4	80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: 	INDICATION AT "B" 4	80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 3 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. 		80V ES
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 3 	BB3.	
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 3 DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT OR RESTORATION OF POWER SHOULD BE IN ACCORD 	BB3.	
 GREEN LIGHT IS ON, LOCATED ON THE LOCAL BUS, UNIT 2C. OPERATOR ACTIONS FOR A VALID ALARM: STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC 3 DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT OF 	BB3.	

ENCLOSURE 1 (Page 38 of 129)

	SSF-A1-02-09	P-02-09
	480 MCC BRE OPE	AKER
	EVENT POI	VT 1119
 DICATED CONDITION: BREAKER 3350 IS OPEN AND RACKED IN. 		
 COMPUTER POINT E-021. GREEN LIGHT IS ON, LOCATED ON THE LOCAL 	INDICATION AT "B" 4	80V FS
BUS, UNIT 3D.		
	3B2.	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO OP-700B FOR LOADS ON E.S. MCC :	ON THE MOTOR CONTROL	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. REFER TO OP-700B FOR LOADS ON E.S. MCC : DISCUSSION: THIS IS INDICATIVE OF A POSSIBLE FAULT O	ON THE MOTOR CONTROL	

ENCLOSURE 1 (Page 39 of 129)



ENCLOSURE 1 (Page 40 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-02 P	-03-02
	4 KV UNIT BUS E DEAD	3
	EVENT POINT	0647
 A160V UNIT BUS 35 UNDER VOLTAGE DEVICE THREE PHASES SENSING < 3750 VOLTS AC A RELAY 27-A, RELAY 27-B, RELAY 27-C 	E IS ACTUATED ON TWO OUT AS SENSED BY THE FOLLOWIN	OF G:
 VOLTAGE INDICATION WHICH WILL VERIFY ALARM VOLTAGE INDICATORS ON UNIT BUS 3B. COMPUTER POINT E-003. GREEN INDICATING LIGHT ON CONTROL STAT GREEN INDICATING LIGHT ON CONTROL STAT 	TION FOR BREAKER 3202	
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O REFER TO AP-545 PLANT RUNBACK PROCEDUR	₹Ē.	
ISCUSSION:		
THIS INDICATES THE UNDERVOLTAGE RELAYI THE LOSS OF UNIT BUS 3B WILL RESULT IN MTSW-3B MTSW-3D MTSW-3H CD FWP-1B SCP-1B SWP-1C AH	THE LOSS OF THE FOLLOWIN	NG:
REFERENCES: DRAWING 208-040 SHEET MT-64, EC	-206-021	

ENCLOSURE 1 (Page 41 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-03-04	P-03-04
	480 TURB AUX DEAL	BUS B
	EVENT POIN	NT 0663
INDICATED CONDITION: O 480V TURBINE AUX BUS 3B UNDERVOLTAGE R BUS UNDERVOLTAGE AS SENSED BY RELAY 27	ELAYING HAS ACTUATED I Y-3/33TB.	DUE TO A
REDUNDANT INDICATION WHICH WILL VERIFY ALARM O BUS VOLTAGE METER INDICATION. O COMPUTER POINT E-008. O GREEN LIGHT IS ON, LOCATED ON THE BREA		ION.
OPERATOR ACTIONS FOR A VALID ALARM:		
 STABILIZE PLANT. INVESTIGATE THE CAUSE OF BUS UNDERVOLT. 	AGE.	
DISCUSSION:		
THIS INDICATES THE UNDERVOLTAGE RELAYI ALL OF THE LOAD BREAKERS SHOULD OPEN O NEED TO BE RECLOSED LOCALLY AFTER THE	N UNDERVOLTAGE AND THE	Y WILL
REFERENCES: DRAWING 208-040 SHEET MT-068		
SENSING ELEMENT: 27Y-33TB	n a debater einen verder ber staater set. Gryge straterij werder einen verder de besterne en de besterne de se	a na ann an ann an tha chuirt a sha ann a

ENCLOSURE 1 (Page 42 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-03-05	P-03-05
	480	
	RX AUX DEA	BUS B
	EVENT POI	NT 0659
INDICATED CONDITION: O 480V REACTOR AUX BUS 3B UNDERVOLTAGE F BUS UNDERVOLTAGE AS SENSED BY RELAY 27	RELAYING HAS ACTUATED	DUE TO A
○ BUS VOLTAGE METER INDICATION.	1:	
 COMPUTER POINT E-010. GREEN LIGHT IS ON, LOCATED ON THE BREA 	KER 3306 CONTROL STAT	ION.
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O INVESTIGATE THE CAUSE OF BUS UNDERVOLT	AGE.	
DISCUSSION:		
THIS INDICATES THE UNDERVOLTAGE RELAYI ALL OF THE LOAD BREAKERS SHOULD OPEN O NEED TO BE RECLOSED LOCALLY AFTER THE	N UNDERVOLTAGE AND THI	EY WILL
REFERENCES: DRAWING 208-040 SHEET MT-067		
SENSING ELEMENT: 27Y-33RB		

ENCLOSURE 1 (Page 43 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-03-06	P-03-06
	480 INTAKE E DEAL	BUS B
	EVENT POIN	NT 0667
INDICATED CONDITION: O 480V INTAKE BUS 3B UNDERVOLTAGE RELAYI UNDERVOLTAGE AS SENSED BY RELAY 27Y-1/	ING HAS ACTUATED DUE TO 33IB.	O A BUS
REDUNDANT INDICATION WHICH WILL VERIFY ALARM BUS VOLTAGE METER INDICATION. COMPUTER POINT E-012. GREEN LIGHT IS ON, LOCATED ON THE BREA OPERATOR ACTIONS FOR A VALID ALARM:		ION.
 STABILIZE PLANT. INVESTIGATE THE CAUSE OF BUS UNDERVOLT 	AGE.	
DISCUSSION: THIS INDICATES THE UNDERVOLTAGE RELAYI ALL OF THE LOAD BREAKERS SHOULD OPEN O NEED TO BE RECLOSED LOCALLY AFTER THE	N UNDERVOLTAGE AND THE	Y WILL
REFERENCES: DRAWING 208-040 SHEET MT-069		
SENSING ELEMENT: 27Y-1/33IB	A REAL PROPERTY AND A REAL	

ENCLOSURE 1 (Page 44 of 129)

SSF ANNUNCIATOR RESPONSE	SSF-A1-03-07	P-03-07
	480 HTG AUX DEAT	BUS
	EVENT POIN	NT 0671
INDICATED CONDITION: O 480V HEATING AUX BUS 3 UNDERVOLTAGE RE BUS UNDERVOLTAGE AS SENSED BY RELAY 27	ELAYING HAS ACTUATED DI YY-3/33H.	UE TO A
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM BUS VOLTAGE METER INDICATION. COMPUTER POINT E-025. GREEN LIGHT IS ON, LOCATED ON THE BREA 		ION.
OPERATOR ACTIONS FOR A VALID ALARM: O STABILIZE PLANT. O INVESTIGATE THE CAUSE OF BUS UNDERVOLT	AGE.	
DISCUSSION: THIS INDICATES THE UNDERVOLTAGE RELAYIN ALL OF THE LOAD BREAKERS SHOULD OPEN ON NEED TO BE RECLOSED LOCALLY AFTER THE	N UNDERVOLTAGE AND THE	Y WILL
REFERENCES: DRAWING 208-040 SHEET MT-070		
SENSING ELEMENT: 27Y-3/33H		

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ENCLOSURE 1 (Page 45 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGH	EMP
	EVENT POI	NT 0700
SPOT TEMP. SW.2.		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM: HIGH TEMPERATURE ON TRANSFORMER TEMPERA 		
○ HIGH TEMPERATURE ON TRANSFORMER TEMPERA	TURE MONITOR.	
 HIGH TEMPERATURE ON TRANSFORMER TEMPERA DPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TURE MONITOR.	JATE SIBLE.
OPERATOR ACTIONS FOR A VALID ALARM: • ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORME COOLING. TRANSFORMER LOAD SHOULD BE RE	TURE MONITOR.	JATE SIBLE.

ENCLOSURE 1 (Page 46 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGI	EMP
	EVENT POI	NT 0701
SPOT TEMP. SW.2. REDUNDANT INDICATION WHICH WILL VERIFY ALARM		
 HIGH TEMPERATURE ON MTSW-3B TRANSFORMED 		
○ HIGH TEMPERATURE ON MTSW-3B TRANSFORME	R TEMPERATURE MONITOR	
 HIGH TEMPERATURE ON MTSW-3B TRANSFORMEN OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	R TEMPERATURE MONITOR	IATE
 HIGH TEMPERATURE ON MTSW-3B TRANSFORMENT OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORMER COOLING. TRANSFORMER LOAD SHOULD BE RE 	R TEMPERATURE MONITOR	IATE

ENCLOSURE 1 (Page 47 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGI	EMP
	EVENT POI	NT 0702
 REACTOR AUX BUS 3A TRANSFORMER TEMPERAT SPOT TEMP. SW.2. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: 		ISED BY HOT
 HIGH TEMPERATURE ON MTSW-3C TRANSFORMER 		•
○ HIGH TEMPERATURE ON MTSW-3C TRANSFORMER	TEMPERATURE MONITOR	•
 HIGH TEMPERATURE ON MTSW-3C TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TEMPERATURE MONITOR TARTED. R DOES NOT HAVE ADEQU	UATE
 HIGH TEMPERATURE ON MTSW-3C TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORME COOLING. TRANSFORMER LOAD SHOULD BE RE 	TEMPERATURE MONITOR TARTED. R DOES NOT HAVE ADEQU	UATE

ENCLOSURE 1 (Page 48 of 129)

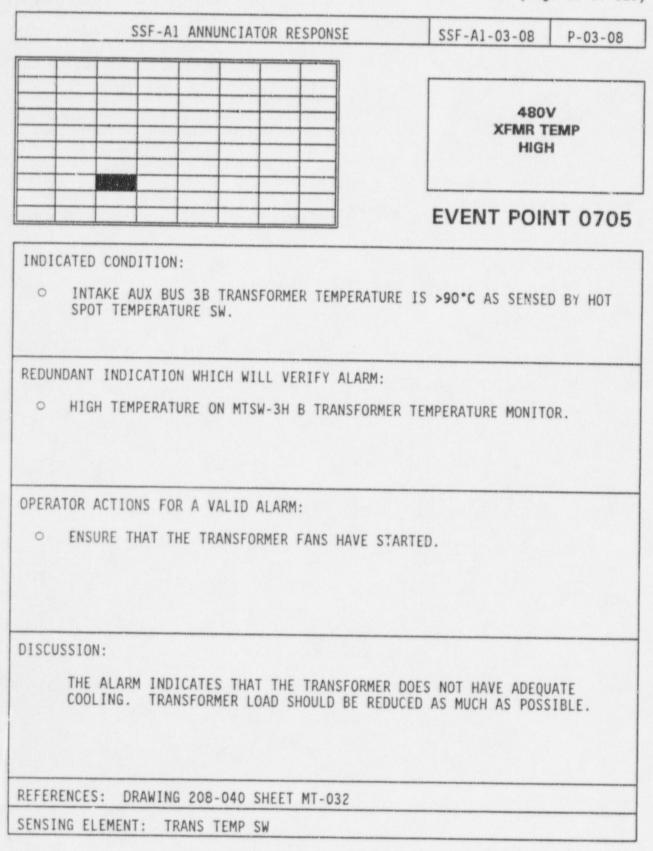
SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGI	EMP
	EVENT POI	NT 0703
 REACTOR AUX BUS 3B TRANSFORMER TEMPERAT SPOT TEMP. SW.2. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: 		ISED BY HOT
○ HIGH TEMPERATURE ON MTSW-3D TRANSFORMER		
○ HIGH TEMPERATURE ON MTSW-3D TRANSFORMER	TEMPERATURE MONITOR	
 HIGH TEMPERATURE ON MTSW-3D TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TEMPERATURE MONITOR TARTED.	UATE
 HIGH TEMPERATURE ON MTSW-3D TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORMER COOLING. TRANSFORMER LOAD SHOULD BE REL 	TEMPERATURE MONITOR TARTED.	UATE

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ENCLOSURE 1 (Page 49 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGH	EMP
	EVENT POI	NT 0704
 INTAKE AUX BUS 3A TRANSFORMER TEMPERATU SPOT TEMPERATURE SW. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: 		D BY HOT
○ HIGH TEMPERATURE ON MTSW-3H A TRANSFORM		OR.
○ HIGH TEMPERATURE ON MTSW-3H A TRANSFORM	ER TEMPERATURE MONIT	OR.
 HIGH TEMPERATURE ON MTSW-3H A TRANSFORM OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TARTED.	IATE
 HIGH TEMPERATURE ON MTSW-3H A TRANSFORM OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORMER 	TARTED.	IATE

ENCLOSURE 1 (Page 50 of 129)



ENCLOSURE 1 (Page 51 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGI	EMP
	EVENT POI	NT 0706
 HEATING AUX BUS 3 TRANSFORMER TEMPERATION SPOT TEMP. SW.2. REDUNDANT INDICATION WHICH NO VERIFY ALARM 		ED BY HOT
○ HIGH TEMPERATURE ON MTSW-3E TRANSFORME		
	R TEMPERATURE MONITOR	
OPERATOR ACTIONS FOR A VALID ALARM: • ENSURE THAT THE TRANSFORMER FANS HAVE S	R TEMPERATURE MONITOR	ΙΔΤΕ
OPERATOR ACTIONS FOR A VALID ALARM: • ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORME COOLING. TRANSFORMER LOAD SHOULD BE RE	R TEMPERATURE MONITOR	ΙΔΤΕ

ENCLOSURE 1 (Page 52 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGI	EMP
	EVENT POI	NT 0708
 ES 480V "B" TRANSFORMER TEMPERATURE IS TEMP. SW.2. REDUNDANT INDICATION WHICH WILL VERIFY ALARM: 		HOT SPOT
 HIGH TEMPERATURE ON MTSW-3G TRANSFORMER 		
○ HIGH TEMPERATURE ON MTSW-3G TRANSFORMER	TEMPERATURE MONITOR	
 HIGH TEMPERATURE ON MTSW-3G TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TEMPERATURE MONITOR	IATE
 HIGH TEMPERATURE ON MTSW-3G TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE STOL DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORMER 	TEMPERATURE MONITOR	IATE

ENCLOSURE 1 (Page 53 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	480 XFMR T HIGI	TEMP
	EVENT POI	NT 0710
 ES 480V "A" TRANSFORMER TEMPERATURE IS TEMP. SW.2. 	>200°C AS SENSED BY	HOT SPOT
© HIGH TEMPERATURE ON MTSW-3F TRANSFORMER		1.
○ HIGH TEMPERATURE ON MTSW-3F TRANSFORMER	TEMPERATURE MONITOR	
 HIGH TEMPERATURE ON MTSW-3F TRANSFORMER OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S 	TEMPERATURE MONITOR	UATE
OPERATOR ACTIONS FOR A VALID ALARM: • ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: THE ALARM INDICATES THAT THE TRANSFORME	TEMPERATURE MONITOR	UATE

ENCLOSURE 1 (Page 54 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-08	P-03-08
	·	anna anna anna anna a' Gord a ru anna
	480 XFMR T	
	HIGI	
	EVENT POI	NT 0711
INDICATED CONDITION:		
O PLANT AUX BUS 3 TRANSFORMER TEMPERATURE SPOT TEMP SH 2	IS >200°C AS SENSED	BY HOT
SPOT TEMP. SW.2.		
DEDINDANT INDICATION LUTPH LITH VEDTEV ALADM		
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM: HIGH TEMPERATURE ON MTSW-3J TRANSFORMER 	TEMPERATURE MONITOR	l.
	TEMPERATURE MONITOR	
○ HIGH TEMPERATURE ON MTSW-3J TRANSFORMER	TEMPERATURE MONITOR	
○ HIGH TEMPERATURE ON MTSW-3J TRANSFORMER	TEMPERATURE MONITOR	
○ HIGH TEMPERATURE ON MTSW-3J TRANSFORMER		
OPERATOR ACTIONS FOR A VALID ALARM:		
• HIGH TEMPERATURE ON MTSW-3J TRANSFORMER		
 HIGH TEMPERATURE ON MTSW-3J TRANSFORMER DPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE STATE 		
 HIGH TEMPERATURE ON MTSW-3J TRANSFORMER DPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE S DISCUSSION: 	TARTED.	
 HIGH TEMPERATURE ON MTSW-3J TRANSFORMER DPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE STATE 	TARTED. R DOES NOT HAVE ADEQU	
 HIGH TEMPERATURE ON MTSW-3J TRANSFORMER DPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT THE TRANSFORMER FANS HAVE STOLISCUSSION: THE ALARM INDICATES THAT THE TRANSFORMER COOLING. TRANSFORMER LOAD SHOULD BE RED 	TARTED. R DOES NOT HAVE ADEQU	

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ENCLOSURE 1 (Page 55 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-09 P-03-0	
	PZR MCC BREAKER OPEN	
	EVENT POINT 06	
 INDICATED CONDITION: BREAKER 3355 IS OPEN AND RACKED IN. 		
REDUNDANT INDICATION WHICH WILL VERIFY ALARM O GREEN LIGHT ON LOCAL INDICATION AT REAG O ZERO KW INDICATED ON RC-203-JI.		
OPERATOR ACTIONS FOR A VALID ALARM: ○ REFER TO OP-305.		
DISCUSSION:	SURIZER HEATER MCC 34 FEEDER	
THIS CONDITION INDICATES THAT THE PRESS BREAKER IS OPEN. SUFFICIENT HEATER CAP MEET STS REQUIREMENTS FROM PRESSURIZER	ACITY WILL REMAIN AVAILABLE	

ENCLOSURE 1 (Page 56 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-03-09	P-03-09
	PZF MCC BRE OPE	AKER
	EVENT POINT 06	
BREAKER 3356 IS OPEN AND RACKED IN.		
 GREEN LIGHT IS ON, LOCATED ON THE "B" R ZERO KW INDICATED ON RC-204-JI. 		1C
 GREEN LIGHT IS ON, LOCATED ON THE "B" R ZERO KW INDICATED ON RC-204-JI. 		1C
 GREEN LIGHT IS ON, LOCATED ON THE "B" R ZERO KW INDICATED ON RC-204-JI. OPERATOR ACTIONS FOR A VALID ALARM: REFER TO OP-305. 	EACTOR AUX BUS UNIT	EEEDED
 ZERO KW INDICATED ON RC-204-JI. OPERATOR ACTIONS FOR A VALID ALARM: REFER TO OP-305. DISCUSSION: THIS CONDITION INDICATES THAT THE PRESSIBREAKER IS OPEN. SUFFICIENT HEATER CAP. 	EACTOR AUX BUS UNIT	EEEDED

ENCLOSURE 1 (Page 57 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-04-01	P-04-01
	INVERTI	
	EVENT POINT 01	
INDICATED CONDITION: • LOSS OF INVERTER AC INPUT <365 VAC AND A LOSS OF DC INPUT < 105 VDC		
○ INVERTER POWER STATUS INDICATOR LIGHT	IS OUT, LOCATED ON TH	E MCB.
 OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT VBXS-1A HAS TRANSFERRED TO VBDP-3 IS ENERGIZED. ENSURE THAT VBXS-3A HAS TRANSFERRED TO VBDP-8 IS ENERGIZED. REFER TO OP-703. 		
DISCUSSION:		
THIS IS INDICATIVE OF A FAILURE OF THE REMAIN ENERGIZED VIA THE TRANSFORMERS.	•	BUS SHOULD
REFER TO STS FOR THE PROPER ADMINISTRA	ATIVE REQUIREMENTS.	

ENCLOSURE 1 (Page 58 of 129)

	SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-04-02	P-04-02
		INVERTI	
		EVENT POIN	
and the second		LVENTION	
INDI	CATED CONDITION:		ANY TRANSFORMED AND AND ADDRESS AND ADDRESS ADDR
0	INVERTED DO INDUT VOLTAGE IS - 125 VDC	AC CENCED DV VT	
0	INVERTER DC INPUT VOLTAGE IS < 135 VDC	AS SENSED BY X7.	
REDUI	NDANT INDICATION WHICH WILL VERIFY ALARM	:	
0	CALLER SOLLETING LOAD RED INDICATING	LIGHT IS ON, LOCATED	ON THE
0	INVERTER. BATTERY SOURCE INPUT METER INDICATING		
		> 50 AMPS ON THE INVE	KIEK.
OPER/	ATOR ACTIONS FOR A VALID ALARM:		
0	LITE LOSS OF AU THE TO THE	E INVERTER.	
0	REESTABLISH AC INPUT TO THE INVERTER.		
DISCU	USSION:		anna ainministe a' scanachtailtean 'd Canachtai
	THIS IS AN INDICATION OF THE DC INPUT	SUPPORTING THE INVERT	
	THE CAUSE COULD BE INTERNAL TO THE INVI AC INPUT TO INVERTER.	ERTER, OR POSSIBLY A L	OSS OFF
	REFER TO STS FOR ADMINISTRATIVE REQUIRE	EMENTS.	
EFER	ENCES: 209-058 VB-01 AND 20-102649		
ENSI	NG ELEMENT: X-7		and an which were the access of the
distant and state of the			

ENCLOSURE 1 (Page 59 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-04-02	P-04-02
	INVERTE	
	EVENT POIN	NT 0169
INDICATED CONDITION: O DC INPUT TO INVERTER IS > 200 AMPS DC	AS SENSED BY X48.	
CONTRACTION OF A CONTRACT OF A		ERTER.
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE THE CAUSE OF THE HIGH LOAD O REFER TO OP-700D.	ON THE INVERTER.	
DISCUSSION:		
 THIS IS INDICATIVE OF A PROBLEM WITH TH SHOULD BE GIVEN TO BYPASSING THE INVERT 	HE INVERTER, CONSIDERA TER. REFER TO OP-703.	TION
REFERENCES: 209-058 VB-01 AND 20-102649		
CITERENCES. 209-030 VD-01 AND 20-102649		

ENCLOSURE 1 (Page 60 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-04-02	P-04-02
	INVERT	
	EVENT POI	NT 0174
O DC INPUT VOLTAGE FROM BATTERY IS <105	VOC AS SENSED DV DEL	N NE
LA LINE TOLINGE THON DATTERT 13 KIUS	TOO AS SENSED DT KELA	NT X0.
 BATTERY INPUT BREAKER TRIPPED LOCALLY. 		
OPERATOR ACTIONS FOR A VALID ALARM:		
OPERATOR ACTIONS FOR A VALID ALARM: ○ INVESTIGATE CAUSE OF LOW INPUT VOLTAGE		
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE O RECLOSE DC INPUT BREAKER AFTER VOLTAGE	IS RECOVERED.	FUNCTION
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE RECLOSE DC INPUT BREAKER AFTER VOLTAGE DISCUSSION: WITH A LOSS OF DC INPUT VOLTAGE THE IN DURING A LOSS OF AC INPUT POWER.	IS RECOVERED.	FUNCTION

ENCLOSURE 1 (Page 61 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-04-02 P-04-0
	INVERTER A TROUBLE
	EVENT POINT 017
INDICATED CONDITION: O DC INPUT VOLTAGE TO INVERTER IS >140 W REDUNDANT INDICATION WHICH WILL VERIFY ALARM	
 HIGH OUTPUT VOLTAGE ON BATTERY CHARGER OPERATOR ACTIONS FOR A VALID ALARM: INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS 	
	•
DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH REFER TO STS FOR ADMINISTRATIVE REQUIR	
REFERENCES: 209-058 VB-01 AND 20-102649	

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ENCLOSURE 1 (Page 62 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-04-02	P-04-02
	INVERT	
	EVENT POI	NT 018
• INVERTER AC OUTPUT VOLTAGE IS < 114 V	AC AS SENSED BY RELAY	X26.
 VOLTAGE INDICATION WHICH WILL VERIFY ALAR VOLTAGE INDICATOR ON INVERTER FACE IN 		
○ VOLTAGE INDICATOR ON INVERTER FACE IN	IDICATING < 114 VAC.	
 VOLTAGE INDICATOR ON INVERTER FACE IN OPERATOR ACTIONS FOR A VALID ALARM: TRANSFER VITAL BUS TO ALTERNATE SOURC REFER TO OP-703. 	DICATING < 114 VAC. E IF AVAILABLE. R EXCESSIVE LOAD ON TH THE INVERTER SHOULD T	E RANSFER TO
OPERATOR ACTIONS FOR A VALID ALARM: O TRANSFER VITAL BUS TO ALTERNATE SOURC O REFER TO OP-703. DISCUSSION: LOW OUTPUT VOLTAGE RESULTS FROM EITHE INVERTER, OR FROM LOW INPUT VOLTAGE.	E IF AVAILABLE.	HT

ENCLOSURE 1 (Page 63 of 129)

	SSF-A1-04-02	P-04-02
	INVERT	
	EVENT POI	NT 1523
INDICATED CONDITION: • "A" INVERTER FAN FAILURE		
REDUNDANT INDICATION WHICH WILL VERIFY ALAR		
○ "A" INVERTER CABINET COOLING FAN(S) NO	OT RUNNING	
OPERATOR ACTIONS FOR A VALID ALARM: OPERATOR ACTIONS FOR A VALID ALARM: OCHECK TEMPERATURE OF "A" INVERTER NOTIFY ELECTRIC SHOP	OT RUNNING	
OPERATOR ACTIONS FOR A VALID ALARM: • CHECK TEMPERATURE OF "A" INVERTER		SHOULD BE

ENCLOSURE 1 (Page 64 of 129)

	SSF-A1-05-01	P-05-01
	INVERT FAILU	
	EVENT POI	NT 0160
 LOSS OF INVERTER AC INPUT < 365 VAC AND A LOSS OF DC INPUT < 105 VDC REDUNDANT INDICATION WHICH WILL VERIFY ALAR INVERTER POWER STATUS INDICATOR LIGHT 		E MCB.
 OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT VBXS-1B HAS TRANSFERRED T VBDP-4 IS ENERGIZED. ENSURE THAT VBXS-3B HAS TRANSFERRED T VBDP-10 IS ENERGIZED. REFER TO OP-703. 		
 ENSURE THAT VBXS-1B HAS TRANSFERRED T VBDF-4 IS ENERGIZED. ENSURE THAT VBXS-3B HAS TRANSFERRED T VBDP-10 IS ENERGIZED. 	O ALTERNATE SOURCE AND E INVERTER, THE VITAL E	THAT

ENCLOSURE 1 (Page 65 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-05-02	P-05-02
The second se		1 00 02
	INVERT	
	EVENT POIN	NT 0165
INDICATED CONDITION:		
 INVERTER DC INPUT AMPERAGE IS > 50 AMP 	S AS SENSED BY RL2.	
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	1:	
• BATTERY SOURCE INPUT RED INDICATING LI	GHT IS ON, LOCATED ON	THE
 INVERTER. BATTERY SOURCE INPUT METER VB-002-III INVERTER. 	INDICATING > 50 AMPS (ON THE
OPERATOR ACTIONS FOR A VALID ALARM:		
 INVESTIGATE THE LOSS OF AC INPUT TO TH REESTABLISH AC INPUT TO THE INVERTER. 	E INVERTER.	
DISCUSSION:		
THIS IS AN INDICATION OF THE DC INPUT THE CAUSE COULD BE INTERNAL TO THE INV AC INPUT TO INVERTER.	SUPPORTING THE INVERTE ERTER, OR POSSIBLY A L	R OUTPUT. OSS OFF
REFER TO STS FOR ADMINISTRATIVE REQUIR	EMENTS.	
REFERENCES: DRAWING 204-058 SHEET A, 2D6589	30 KVA, AND 2D6590 15	KVA
SENSING ELEMENT: RL2		

ENCLOSURE 1 (Page 66 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-05-02	P-05-02
	INVERT	
	EVENT POI	NT 0170
 O DC INPUT TO INVERTER IS > 168 AMPS DC 	AS SENSED BY RL3.	
• BATTERY SOURCE INPUT METER VB-002-II:	INDICATING >168 AMPS	LOCALLY.
OPERATOR ACTIONS FOR A VALID ALARM: • INVESTIGATE THE CAUSE OF THE HIGH LOAD		LOCALLY.
OPERATOR ACTIONS FOR A VALID ALARM:	HE INVERTER, CONSIDER	

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ENCLOSURE 1 (Page 67 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-05-02	P-05-02
	INVERT	
	EVENT POI	NT 0175
○ DC INPUT VOLTAGE FROM BATTERY IS <105	VDC AS SENSED BY RELA	Y RL6.
 BATTERY INPUT BREAKER TRIPPED LOCALLY 		
• BATTERY INPUT BREAKER TRIPPED LOCALLY		
 BATTERY INPUT BREAKER TRIPPED LOCALLY DPERATOR ACTIONS FOR A VALID ALARM: INVESTIGATE CAUSE OF LOW INPUT VOLTAG RECLOSE DC INPUT BREAKER AFTER VOLTAG 		
 BATTERY INPUT BREAKER TRIPPED LOCALLY DPERATOR ACTIONS FOR A VALID ALARM: INVESTIGATE CAUSE OF LOW INPUT VOLTAG 	E. E IS RECOVERED.	FUNCTION
 BATTERY INPUT BREAKER TRIPPED LOCALLY OPERATOR ACTIONS FOR A VALID ALARM: INVESTIGATE CAUSE OF LOW INPUT VOLTAG RECLOSE DC INPUT BREAKER AFTER VOLTAG OISCUSSION: WITH A LOSS OF DC INPUT VOLTAGE THE I 	E. E IS RECOVERED. NVERTER IS NOT ABLE TO	FUNCTION

ENCLOSURE 1 (Page 68 of 129)

	SSF-A1-05-02	P-05-02
	INVERT	
	EVENT POI	NT 0180
 DC INPUT VOLTAGE TO INVERTER IS >140 N DC INPUT VOLTAGE TO INVERTER IS >140 N REDUNDANT INDICATION WHICH WILL VERIFY ALARN HIGH OUTPUT VOLTAGE ON BATTERY CHARGES 	۹:	
O HIGH OUTFOIL VOLTAGE ON DATTERY CHARGEN	RS.	
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS		
OPERATOR ACTIONS FOR A VALID ALARM:	5. I INVERTER RELIABILITY.	

ENCLOSURE 1 (Page 69 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-05-02	P-05-02
	INVERT	
	EVENT POI	NT 0190
• INVISI AC OUTPUT VOLTAGE IS < 114 VAC	AS SENSED BY RELAY RL	1.
EDUNDANT INDICATION UNICH UTH VEDTER ALADY		and the second se
 VOLTAGE INDICATION WHICH WILL VERIFY ALARM VOLTAGE INDICATOR VB-006-II ON INVERTE 		14 VAC.
○ VOLTAGE INDICATION WHICH WILL VERIFY ALARM ○ VOLTAGE INDICATOR VB-006-II ON INVERTE ○ PERATOR ACTIONS FOR A VALID ALARM:		14 VAC.
○ VOLTAGE INDICATOR VB-006-II ON INVERTE	R FACE INDICATING < 1	14 VAC.
 VOLTAGE INDICATOR VB-006-II ON INVERTE DPERATOR ACTIONS FOR A VALID ALARM: TRANSFER VITAL BUS TO ALTERNATE SOURCE 	R FACE INDICATING < 1	14 VAC.
 VOLTAGE INDICATOR VB-006-II ON INVERTE OPERATOR ACTIONS FOR A VALID ALARM: TRANSFER VITAL BUS TO ALTERNATE SOURCE REFER TO OP-703. 	R FACE INDICATING < 1 IF AVAILABLE.	
 VOLTAGE INDICATOR VB-006-II ON INVERTE OPERATOR ACTIONS FOR A VALID ALARM: TRANSFER VITAL BUS TO ALTERNATE SOURCE REFER TO OP-703. DISCUSSION: LOW OUTPUT VOLTAGE RESULTS FROM EITHER INVERTER, OR FROM LOW INPUT VOLTAGE. 	R FACE INDICATING < 1 IF AVAILABLE. EXCESSIVE LOAD ON THE	E RANSFER TO

ENCLOSURE 1 (Page 70 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-01	P-06-01
	INVERT	
	EVENT POI	NT 0161
INDICATED CONDITION: • LOSS OF INVERTER AC INPUT <365 VAC A LOSS OF DC INPUT < 105 VDC		
 OPERATOR ACTIONS FOR A VALID ALARM: ENSURE THAT VBXS-1C HAS TRANSFERRED TO VBDP-5 IS ENERGIZED. ENSURE THAT VBXS-3C HAS TRANSFERRED TO VBDP-9 IS ENERGIZED. REFER TO OP-703. 		
DISCUSSION:		
THIS IS INDICATIVE OF A FAILURE OF THE REMAIN ENERGIZED VIA THE TRANSFORMERS.	INVERTER, THE VITAL H	BUS SHOULD
REFER TO STS FOR THE PROPER ADMINISTRA	TIVE REQUIREMENTS.	
REFERENCES: 209-058 VB-03 AND 20-102649		

ENCLOSURE 1 (Page 71 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-02	P-06-02
	INVERTI	
	EVENT POI	NT 0166
INDICATED CONDITION:		
○ INVERTER DC INPUT VOLTAGE IS < 135 VDC	AS SENSED BY X7.	
REDUNDANT INDICATION WHICH WILL VERIFY ALARM		
 BATTERY SUPPLYING LOAD RED INDICATING INVERTER. BATTERY SOURCE INPUT METER INDICATING : 		
- DATIENT SOURCE INFORMETER INDICATING	> 50 AMPS ON THE INVE	KIEK.
OPERATOR ACTIONS FOR A VALID ALARM:		
• INVESTIGATE THE LOSS OF AC INPUT TO THE	E INVERTER.	
 REESTABLISH AC INPUT TO THE INVERTER. 		
DISCUSSION:		
THIS IS AN INDICATION OF THE DC INPUT	SUPPORTING THE INVERTE	R OUTPUT.
THE CAUSE COULD BE INTERNAL TO THE INVE AC INPUT TO INVERTER. REFER TO STS FOR	ERTER. OR POSSIBLY A I	OSS OFF
REFERENCES: 209-058 VB-03 AND 20-102649		
ENSING ELEMENT: X7		

ENCLOSURE 1 (Page 72 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-02	P-06-02
	INVERTI	
	EVENT POIN	NT 0171
<pre>INDICATED CONDITION:</pre>		
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM BATTERY SOURCE INPUT METER INDICATING 		ERTER.
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE THE CAUSE OF THE HIGH LOAD O REFER TO OP-700D.	04 THE INVERTER.	
DISCUSSION:		
 THIS IS INDICATIVE OF A PROBLEM WITH TH SHOULD BE GIVEN TO BYPASSING THE INVERT 	HE INVERTER, CONSIDERA TER. REFER TO OP-703.	TION
REFERENCES: 209-058 VB-03 AND 20-102649		
SENSING ELEMENT: X48		

ENCLOSURE 1 (Page 73 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-02	P-06-02
	INVERT	
	EVENT POI	NT 0176
INDICATED CONDITION:		
○ DC INPUT VOLTAGE FROM BATTERY IS <105	VUC AS SENSED BY RELA	Y X6.
 BATTERY INPUT BREAKER TRIPPED LOCALLY. OPERATOR ACTIONS FOR A VALID ALARM: 		
 INVESTIGATE CAUSE OF LOW INPUT VOLTAGE 		
 RECLOSE DC INPUT BREAKER AFTER VOLTAGE 	IS RECOVERED.	
DISCUSSION:		
WITH A LOSS OF DC INPUT VOLTAGE THE IN DURING A LOSS OF AC INPUT POWER.	VERTER IS NOT ABLE TO	FUNCTION
REFER TO STS FOR ADMINISTRATIVE REQUIR	EMENTS.	
REFERENCES: 209-058 VB-03 AND 20-102649		

ENCLOSURE 1 (Page 74 of 129)

	SSF-A1-06-02	P-06-02
	INVERT	
	EVENT POI	NT 0181
INDICATED CONDITION: O DC INPUT VOLTAGE TO INVERTER IS >140 V REDUNDANT INDICATION WHICH WILL VERIFY ALARM	1:	
 HIGH OUTPUT VOLTAGE ON BATTERY CHARGER 	5.	
PERATOR ACTIONS FOR A VALID ALARM:		
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS		
○ INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS	INVERTER RELIABILITY.	
DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH	INVERTER RELIABILITY.	

ENCLOSURE 1 (Page 75 of 129)

INDICATED CONDITION: • INVERT AC OUTPUT VOLTAGE IS < 114 VAC AS SE REDUNDANT INDICATION WHICH WILL VERIFY ALARM: • VOLTAGE INDICATOR ON INVERTER FACE INDICATI	INVERTER C TROUBLE EVENT POINT 0191 ENSED BY RELAY X26.
• INVERT AC OUTPUT VOLTAGE IS < 114 VAC AS SE REDUNDANT INDICATION WHICH WILL VERIFY ALARM:	TROUBLE EVENT POINT 0191
• INVERT AC OUTPUT VOLTAGE IS < 114 VAC AS SE REDUNDANT INDICATION WHICH WILL VERIFY ALARM:	
• INVERT AC OUTPUT VOLTAGE IS < 114 VAC AS SE REDUNDANT INDICATION WHICH WILL VERIFY ALARM:	ENSED BY RELAY X26.
	ING < 114 VAC.
OPERATOR ACTIONS FOR A VALID ALARM: O TRANSFER VITAL BUS TO ALTERNATE SOURCE IF A O REFER TO OP-703.	AVAILABLE.

ENCLOSURE 1 (Page 76 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-02	P-06-02
	INVERT	
	EVENT POI	NT 1599
INDICATED CONDITION: • "C" INVERTER FAN FAILURE		
	1:	
○ "C" INVERTER CABINET COOLING FAN(S) NO		
○ "C" INVERTER CABINET COOLING FAN(S) NO		
 "C" INVERTER CABINET COOLING FAN(S) NO OPERATOR ACTIONS FOR A VALID ALARM: CHECK TEMPERATURE OF "C" INVERTER NOTIFY ELECTRIC SHOP DISCUSSION: EXCESSIVE TEMPERATURE COULD CAUSE LOSS OF IN 	VERTER. CONSIDERATION	SHOULD BE
OPERATOR ACTIONS FOR A VALID ALARM: • CHECK TEMPERATURE OF "C" INVERTER	VERTER. CONSIDERATION	SHOULD BE

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ENCLOSURE 1 (Page 77 of 129)

P-06-03

[SSF-A1	ANNUNC	IATOR I	RESPONSE	 J	SSF-A1-06-03
						INVER BYPAS
						EVENT POI
o V	ED CONDIT BXS-1A ANI DURCE.		(S-3A S	SUPPLYING	"A" VITAL	. BUS POWER FROM A

NT POINT 1594

INVERTER **BYPASSED**

ER FROM ALTERNATE

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

ON THE AFFECTED VBXS: EITHER THE ALTERNATE SOURCE SUPPLYING LOAD RED 0 INDICATING LIGHT IS ON, OR THE MANUAL TRANSFER SWITCH IS SELECTED TO ALTERNATE SOURCE.

OPERATOR ACTIONS FOR A VALID ALARM:

REFER TO OP-700D FOR AFFECTED LOADS.

DISCUSSION:

THIS INDICATES THAT VBDP-3 AND/OR VBDP-8 ARE BEING SUPPLIED FROM THE ALTERNATE SOURCE. THE STATUS OF THE TRANSFER SWITCH MAY NOT BE OBVIOUS AS THE ISOLATION REQUIRES THE ALTERNATE SOURCE INPUT BREAKER TO BE OPEN WHEN TRANSFER IS COMPLETE TO PREVENT BACKFEED TO THE INVERTER.

REFERENCES: DRAWING 209-058 SHEETS VB-06, AND VB-11, VEND DWG 015C18517,

SENSING ELEMENT: RELAY 1102 INTERNAL TO VBXS

ENCLOSURE 1 (Page 78 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-03	P-06-03
	INVE BYPA	
	EVENT PO	INT 1595
 VBXS-1B AND/OR VBXS-3B SUPPLYING "B" SOURCE. REDUNDANT INDICATION WHICH WILL VERIFY ALARM 		ALTERNATE
 ON THE AFFECTED VBXS: EITHER THE ALTH INDICATING LIGHT IS ON, OR THE MANUA TO ALTERNATE SOURCE. 	ERNATE SOURCE SUPPLYI AL TRANSFER SWITCH IS	NG LOAD RED SELECTED
INDICATING LIGHT IS ON, OR THE MANUA	ERNATE SOURCE SUPPLYI AL TRANSFER SWITCH IS	NG LOAD RED SELECTED
INDICATING LIGHT IS ON, OR THE MANUA TO ALTERNATE SOURCE.	2-10 ARE BEING SUPPLI RANSFER SWITCH MAY N ALTERNATE SOURCE INP	ED FROM THE OT BE

ENCLOSURE 1 (Page 79 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-03	P-06-03
	INVER	TER
	BYPAS	SED
	EVENT POI	NT 1596
 VBXS-1C AND/OR VBXS-3C SUPPLYING "C" SOURCE. REDUNDANT INDICATION WHICH WILL VERIFY ALARI 		ALTERNATE
ON THE AFFECTED VBXS: EITHER THE ALTER INDICATING LIGHT IS ON, OR THE MANUAL ALTERNATE SOURCE.	NATE SOURCE SUPPLYING	LOAD RED LECTED TO
ON THE AFFECTED VBXS: EITHER THE ALTERI INDICATING LIGHT IS ON, OR THE MANUAL ALTERNATE SOURCE.	NATE SOURCE SUPPLYING	LOAD RED LECTED TO
• ON THE AFFECTED VBXS: EITHER THE ALTER INDICATING LIGHT IS ON, OR THE MANUAL ALTERNATE SOURCE.	P-9 ARE BEING SUPPLIED	FROM THE

ENCLOSURE 1 (Page 80 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-03	P-06-03
	INVER BYPAS	
	EVENT POI	NT 1597
INDICATED CONDITION: • VBXS-1D AND/OR VBXS-3D SUPPLYING "D" SOURCE. REDUNDANT INDICATION WHICH WILL VERIFY ALAR		ALTERNATE
 ON THE AFFECTED VBXS: EITHER THE ALT INDICATING LIGHT IS ON, OR THE MANU 	ERNATE SOURCE SUPPLYT	NG LOAD RED SELECTED
 ON THE AFFECTED VBXS: EITHER THE ALT INDICATING LIGHT IS ON, OR THE MANU TO ALTERNATE SOURCE. 	ERNATE SOURCE SUPPLYT	NG LOAD RED SELECTED
 ON THE AFFECTED VBXS: EITHER THE ALT INDICATING LIGHT IS ON, OR THE MANU TO ALTERNATE SOURCE. OPERATOR ACTIONS FOR A VALID ALARM: REFER TO OP-700D FOR AFFECTED LOADS. 	ERNATE SOURCE SUPPLYIN AL TRANSFER SWITCH IS	SELECTED
 ON THE AFFECTED VBXS: EITHER THE ALT INDICATING LIGHT IS ON, OR THE MANU TO ALTERNATE SOURCE. OPERATOR ACTIONS FOR A VALID ALARM: REFER TO OP-700D FOR AFFECTED LOADS. 	P-11 ARE BEING SUPPLYIN AL TRANSFER SWITCH IS P-11 ARE BEING SUPPLIE TRANSFER SWITCH MAY NO ALTERNATE SOURCE INPU TO PREVENT BACKFEED TO	SELECTED ED FROM THE DT BE JT BREAKER D THE

ENCLOSURE 1 (Page 81 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-03	P-06-03
	r	No time of the Principal State of the State of the State
	INVER BYPAS	
	EVENT POI	NT 1598
○ VBXS-1E IS SUPPLYING LOADS WITH ALTER	NATE SOURCE.	
REDUNDANT INDICATION WHICH WILL VERIFY ALAR	M :	
 NORMAL POWER SOURCE BREAKER IS OFF AN IS ON, LOCATED ON THE MANUAL TRANSFER 	D ALTERNATE POWER SOUR	CE BREAKER
IS ON, LOCATED ON THE MANUAL TRANSFER	D ALTERNATE POWER SOUR	CE BREAKER
IS ON, LOCATED ON THE MANUAL TRANSFER	D ALTERNATE POWER SOUR	CE BREAKER
IS ON, LOCATED ON THE MANUAL TRANSFER	D ALTERNATE POWER SOUR	CE BREAKER
IS ON, LOCATED ON THE MANUAL TRANSFER	D ALTERNATE POWER SOUR	CE BREAKER
IS ON, LOCATED ON THE MANUAL TRANSFER OPERATOR ACTIONS FOR A VALID ALARM: • REFER TO OP-700D FOR AFFECTED LOADS.	D ALTERNATE POWER SOUR SWITCH.	
DPERATOR ACTIONS FOR A VALID ALARM: • REFER TO OP-700D FOR AFFECTED LOADS. • DISCUSSION: THIS INDICATES THAT VBDP-7 IS BEING SU	D ALTERNATE POWER SOUR SWITCH.	

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ENCLOSURE 1 (Page 82 of 129)

	SSF-A1-06-06	P-05-06
	BATTER	
	DISCHARGE	
	EVENT POI	NT 1944
INDICATED CONDITION:		
 DPBA-1A1 IS DISCHARGING CURRENT >50 A 	MPS AS SENSED BY AMMET	FR 1 RUS 1
ALARM RELAY.		LN 1 005 1
REDUNDANT INDICATION WHICH WILL VERIFY ALAR	М:	
O DPDP-1A LOCAL CURRENT METER		
 DPDP-1A LOCAL CURRENT METER. 		
 DPDP-1A LOCAL CURRENT METER. 		
• DPDP-1A LOCAL CURRENT METER.		
	THE BUS AND OPERATIONA	
OPERATOR ACTIONS FOR A VALID ALARM:	THE BUS AND OPERATIONA	L.
OPERATOR ACTIONS FOR A VALID ALARM:	THE BUS AND OPERATIONA	L.
OPERATOR ACTIONS FOR A VALID ALARM:	THE BUS AND OPERATIONA	L.
OPERATOR ACTIONS FOR A VALID ALARM:	THE BUS AND OPERATIONA	L.
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO TO DISCUSSION:		
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO T	ON BUS WITH >50 AMPS F	
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO TO DISCUSSION: LOSS OF A BATTERY CHARGER OR DC LOADS	ON BUS WITH >50 AMPS F HIS ALARM TO OPERATE.	
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO TO DISCUSSION: LOSS OF A BATTERY CHARGER OR DC LOADS SUPPLIED FORM THE BATTERY WILL CAUSE TO	ON BUS WITH >50 AMPS F HIS ALARM TO OPERATE.	
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO TO DISCUSSION: LOSS OF A BATTERY CHARGER OR DC LOADS SUPPLIED FORM THE BATTERY WILL CAUSE TO	ON BUS WITH >50 AMPS F HIS ALARM TO OPERATE.	

ENCLOSURE 1 (Page 83 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-06-06	P-06-06
	BATTE DISCH/ HIG	ARGE
	EVENT POI	NT 1945
 DPBA-1A2 IS DISCHARGING CURRENT >50 A ALARM RELAY. REDUNDANT INDICATION WHICH WILL VERIFY ALARM 		TER 2 BUS 1
• DPDP-1A LOCAL CURRENT METER.		
 DPDP-1A LOCAL CURRENT METER. DPERATOR ACTIONS FOR A VALID ALARM: VERIFY BATTERY CHARGER IS ALIGNED TO TO	THE BUS AND OPERATIONA	AL.
OPERATOR ACTIONS FOR A VALID ALARM:	ON BUS WITH >50 AMPS THIS ALARM TO OPERATE.	BEING

ENCLOSURE 1 (Page 84 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-01	P-07-01
	INVERTI FAILU	
	EVENT POI	NT 0162
INDICATED CONDITION: O INVERTER HAS SUFFERED A LOSS OF AC INF AND A LOSS OF DC INPUT < 105 VDC	PUT <365 VAC	
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM INVERTER POWER STATUS INDICATOR LIGHT 		E MCB.
 OPERATOR ACTIONS FOP A VALID ALARM: ENSURE THAT VBXS-1D HAS TRANSFERRED TO VBDP-6 IS ENELGIZED. ENSURE THAT VBXS-3D HAS TRANSFERRED TO VBDP-11 IS ENERGIZED. REFER TO OP-703. 		
DISCUSSION:		
THIS IS INDICATIVE OF A FAILURE OF THE REMAIN ENERGIZED VIA THE TRANSFORMERS.	INVERTER, THE VITAL E	BUS SHOULD
REFER TO STS FOR THE ADMINISTRATIVE RE	QUIREMENTS.	
REFERENCES: DRAWING 204-058 SHEET A, 2D6589	30 KVA, AND 2D6590 15	KVA
SENSING ELEMENT: RL11		

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ENCLOSURE 1 (Page 85 of 129)

	SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-02	P-07-02
		INVERTI	
		EVENT POIN	NT 0167
	CATED CONDITION: INVERTER DC INPUT AMPERAGE IS > 50 AMP	S AS SENSED BY RL2.	
REDUN O O	NDANT INDICATION WHICH WILL VERIFY ALARM BATTERY SOURCE INPUT RED INDICATING LI INVERTER. BATTERY SOURCE INPUT METER VB-003-III INVERTER.	GHT IS ON LOCATED ON T	
OPERA	TOR ACTIONS FOR A VALID ALARM:		
0 0	INVESTIGATE THE LOSS OF AC INPUT TO THE REESTABLISH AC INPUT TO THE INVERTER.	E INVERTER.	
DISCU	ISSION:		
	THIS IS AN INDICATION OF THE DC INPUT S THE CAUSE COULD BE INTERNAL TO THE INVE AC INPUT TO INVERTER.	SUPPORTING THE INVERTE ERTER, OR POSSIBLY A L	R OUTPUT. OSS OFF
	REFER TO STS FOR ADMINISTRATIVE REQUIRE	EMENTS.	
EFER	ENCES: DRAWING 204-058 SHEET A, 2D6589	30 KVA, AND 2D6590 15	KVA
ENSI	NG ELEMENT: RL2		

ENCLOSURE 1 (Page 86 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-02	P-07-02
	INVERTE	
	EVENT POIN	NT 0172
INDICATED CONDITION: • DC INPUT TO INVERTER IS > 168 AMPS DC	AS SENSED BY RL3.	
 REDUNDANT INDICATION WHICH WILL VERIFY ALARM BATTERY SOURCE INPUT METER VB-003-II1 THE INVERTER. 		LOCALLY ON
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE THE CAUSE OF THE HIGH LOAD O REFER TO OP-700D.	ON THE INVERTER.	
DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH T SHOULD BE GIVEN TO BYPASSING THE INVER	HE INVERTER, CONSIDERA TER. REFER TO OP-703.	TION
REFERENCES: DRAWING 204-058 SHEET A, 2D6589 SENSING ELEMENT: RL3	30 KVA, AND 2D6590 15	KVA

ENCLOSURE 1 (Page 87 of 129)

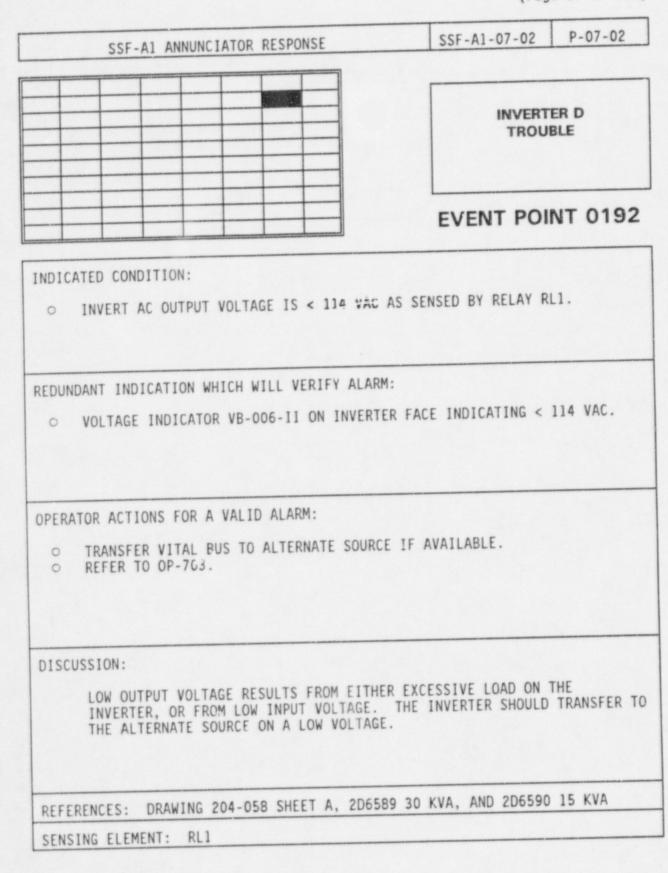
SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-02	P-07-02
	INVERT	
	TROU	BLE
	EVENT POI	NT 0177
O DC INPUT VOLTAGE FROM BATTERY IS <105		Y RL6.
O BATTERY INPUT RREAKER TRIPPED LOCALLY		
- DATTERT INTOT DREAKER TRIFFED LOCALLT.		
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE O RECLOSE DC INPUT BREAKER AFTER VOLTAGE		
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE	IS RECOVERED.	FUNCTION
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE O RECLOSE DC INPUT BREAKER AFTER VOLTAGE DISCUSSION: WITH A LOSS OF DC INPUT VOLTAGE THE IN	E IS RECOVERED.	FUNCTION
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE RECLOSE DC INPUT BREAKER AFTER VOLTAGE DISCUSSION: WITH A LOSS OF DC INPUT VOLTAGE THE IN DURING A LOSS OF AC INPUT POWER.	IS RECOVERED.	

ENCLOSURE 1 (Page 88 of 129)

	SSF-A1-07-02	P-07-02
	TROU	
	L	-
	EVENT POI	VT 0182
INDICATED CONDITION:		
 DC INPUT VOLTAGE TO INVERTER IS >140 ¥ 	DC AS SENSED BY DIT	
- DO INTOLINAL TO INVERTER IS PI40 4	DC AS SENSED BT RL7.	
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	1:	
 HIGH OUTPUT VOLTAGE ON BATTERY CHARGER 	S.	
OPERATOR ACTIONS FOR A VALID ALARM:		
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS		
	•	
• INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS		
 INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH 	INVERTER RELIABILITY.	
 INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS 	INVERTER RELIABILITY.	
 INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH 	INVERTER RELIABILITY.	
 INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH 	INVERTER RELIABILITY.	
• INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH REFER TO STS FOR ADMINISTRATIVE REQUIR	INVERTER RELIABILITY. EMENTS.	
 INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS DISCUSSION: THIS CONDITION MAY CAUSE PROBLEMS WITH 	INVERTER RELIABILITY. EMENTS.	

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ENCLOSURE 1 (Page 89 of 129)



Page 91

ENCLOSURE 1 (Page 90 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-06	P-07-06
	BATTE DISCHA HIGI	RGE
	EVENT POI	NT 1946
 DPBA-1B1 IS DISCHARGING CURRENT >50 AM ALARM RELAY. REDUNDANT INDICATION WHICH WILL VERIFY ALARM 		ER 1 BUS 2
O DPDP-1B LOCAL CURRENT METER.	1:	
○ DPDP-1B LOCAL CURRENT METER.		L.
 DPDP-1B LOCAL CURRENT METER. DPERATOR ACTIONS FOR A VALID ALARM: VERIFY BATTERY CHARGER IS ALIGNED TO T DISCUSSION: LOSS OF A BATTERY CHARGER OR DC LOACA 	HE BUS AND OPERATIONA	
 DPDP-1B LOCAL CURRENT METER. DPERATOR ACTIONS FOR A VALID ALARM: VERIFY BATTERY CHARGER IS ALIGNED TO T 	HE BUS AND OPERATIONA ON BUS WITH >50 AMPS E HIS ALARM TO OPERATE.	
 DPDP-1B LOCAL CURRENT METER. DPERATOR ACTIONS FOR A VALID ALARM: VERIFY BATTERY CHARGER IS ALIGNED TO T DISCUSSION: LOSS OF A BATTERY CHARGER OR DC LOACS SUPPLIED FORM THE BATTERY WILL CAUSE T 	HE BUS AND OPERATIONA ON BUS WITH >50 AMPS E HIS ALARM TO OPERATE.	

ENCLOSURE 1 (Page 91 of 129)

	SSF-A1-07-06	P-07-06
	BATTER DISCHA HIGI	RGE
INDICATED CONDITION:	EVENT POIN	NT 1947
 DPBA-1B2 IS DISCHARGING CURRENT >50 A ALARM RELAY. REDUNDANT INDICATION WHICH WILL VERIFY ALAR 		ER 2 BUS 2
• DPDP-1B LOCAL CURRENT METER.		
• VERIFY BATTERY CHARGER IS ALIGNED TO	THE BUS AND OPERATIONAL	
ISCUSSION:		
DISCUSSION: LOSS OF A BATTERY CHARGER OR DC LOADS SUPPLIED FORM THE BATTERY WILL CAUSE REFER TO STS FOR ADMINISTRATIVE REQUI	THIS ALARM TO OPERATE.	BEING

ENCLOSURE 1 (Page 92 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08 P	-07-08
	BATTERY	
	CHARGER	
	THOUBLE	
	EVENT POINT	0888
INDICATED CONDITION:		
O DPBC-11 AC VOLTAGE IS < 108 VAC AS SEM	NSED BY K1 RELAY ON ACPEAR	R CARD.
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	۹:	
• VOLTAGE INDICATED ON 480V REACTOR AUX	BUS 3A < 430 VAC.	
• VOLTAGE INDICATED ON 480V REACTOR AUX	BUS 3B < 430 VAC.	
PERATOR ACTIONS FOR A VALID ALARM:		
 RETURN NORMAL CHARGER TO SERVICE IF AV 		
• REFER TO OP-705.	AILADLE.	
ISCUSSION:		
THIS IS INDICATIVE OF A PROBLEM WITH T	WE DOVED FEED TO THE CHAD	000
A LOW BUS VOLTAGE ON THE AC POWER INPU	IT TO THE CHARGER MAY BE T	HF
PROBLEM. IF THIS IS NOT THE PROBLEM T BE RETURNED TO SERVICE UNTIL THE PROBL	EM CAN BE RESOLVED.	OULD
EFERENCES: DRAWING 209-023 SHEET DP-10, KB	C-2475-130, C&D MANUAL #3	3

ENCLOSURE 1 (Page 93 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08 P-07-0	80
	BATTERY CHARGER TROUBLE	
	EVENT POINT 157	70
INDICATED CONDITION:		
 REDUNDANT INDICATION WHICH WILL VERIFY ALAR COMPUTER POINT E-037. VOLTAGE INDICATED ON 480V ES BUS 3A 		
	430 140.	
OPERATOR ACTIONS FOR A VALID ALARM: O PLACE STANDBY CHARGER IN SERVICE IF A O REFER TO OP-705.		
 PLACE STANDBY CHARGER IN SERVICE IF A REFER TO OP-705. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH A LOW BUS VOLTAGE ON THE AC POWER INPI 	THE POWER FEED TO THE CHARGER.	
 REFER TO OP-705. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH A LOW BUS VOLTAGE ON THE AC POWER INPI 	VAILABLE. THE POWER FEED TO THE CHARGER. JT TO THE CHARGER MAY BE THE THEN THE SWING CHARGER SHOULD E AN BE RESOLVED.	BE

ENCLOSURE 1 (Page 94 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-m1-07-08	P-07-08
	BATTE CHARG TROUE	GER
	EVENT POIN	NT 1571
INDICATED CONDITION:		
O DPBC-18 AC VOLTAGE IS < 108 VAC AS SE	NSED BY KI RELAY ON ACT	PFAR CARD.
REDUNDANT INDICATION WHICH WILL VERIFY ALAR	M:	
 COMPUTER POINT E-038. VOLTAGE INDICATED ON ABOV ES PUS 20 - 		
 VOLTAGE INDICATED ON 480V ES BUS 3B < 	430 VAC.	
PERATOR ACTIONS FOR A VALID ALARM.		
O PLACE STANDBY CHARGER IN SERVICE IF AN	VAILABLE.	
PLACE STANDBY CHARGER IN SERVICE IF AN	VAILABLE.	
O PLACE STANDBY CHARGER IN SERVICE IF AN	VAILABLE.	
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. 	VAILABLE.	
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. 	VAILABLE.	
 REFER TO OP-705. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH T 	THE POWER FEED TO THE C	CHARGER .
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. 	THE POWER FEED TO THE C JT TO THE CHARGER MAY B THEN THE SWING CHARGER	RE THE
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. PISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH TA A LOW BUS VOLTAGE ON THE AC POWER INPU PROBLEM. IF THIS IS NOT THE PROBLEM TO 	THE POWER FEED TO THE C JT TO THE CHARGER MAY B THEN THE SWING CHARGER	RE THE
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. ISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH TA A LOW BUS VOLTAGE ON THE AC POWER INPU PROBLEM. IF THIS IS NOT THE PROBLEM TO 	THE POWER FEED TO THE C JT TO THE CHARGER MAY B THEN THE SWING CHARGER AN BE RESOLVED.	RE THE

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ENCLOSURE 1 (Page 95 of 129)

	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUG	GER
	EVENT POIL	NT 1572
INDICATED CONDITION: O DPBC-1C AC VOLTAGE IS < 108 VAC AS SEN REDUNDANT INDICATION WHICH WILL VERIFY ALARM O COMPUTER POINT E-039. O VOLTAGE INDICATED ON 480V ES BUS 3A <	1:	PFAR CARD.
OPERATOR ACTIONS FOR A VALID ALARM:		
 PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. 	/AILABLE.	
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. 	HE POWER FEED TO THE O TTO THE CHARGER MAY F HEN THE SWING CHARGER	BE THE
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH T A LOW BUS VOLTAGE ON THE AC POWER INPU PROBLEM. IF THIS IS NOT THE PROBLEM T 	THE POWER FEED TO THE O IT TO THE CHARGER MAY E THEN THE SWING CHARGER IN BE RESOLVED.	BE THE

ENCLOSURE 1 (Page 96 of 129)

	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUT	GER
	EVENT POI	NT 1573
INDICATED CONDITION:		
○ DPBC-1D AC VOLTAGE IS < 108 VAC AS SEE	NSED BY K1 RELAY ON AC	PFAR CARD.
REDUNDANT INDICATION WHICH WILL VERIFY ALAR	۹:	
• COMPUTER POINT E-040.		
O VOLTAGE INDICATED ON 480V ES BUS 3B <	430 VAC.	
OPERATOR ACTIONS FOR A VALID ALARM:		
O PLACE STANDBY CHARGER IN SERVICE IF AV	/AILABLE.	
	/AILABLE.	
O PLACE STANDBY CHARGER IN SERVICE IF AV	VAILABLE.	
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. 	VAILABLE.	
• REFER TO OP-705.		
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. 	THE POWER FEED TO THE OUT TO THE CHARGER MAY E	BE THE
 PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH T A LOW BUS VOLTAGE ON THE AC POWER INPU PROBLEM. IF THIS IS NOT THE PROBLEM T 	THE POWER FEED TO THE O IT TO THE CHARGER MAY E THEN THE SWING CHARGER IN BE RESOLVED.	BE THE

ENCLOSURE 1 (Page 97 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTERY CHARGER TROUBLE	1
	EVENT POINT	1574
 DPBC-1E AC VOLTAGE IS < 108 VAC AS SER REDUNDANT INDICATION WHICH WILL VERIFY ALARM COMPUTER POINT E-041. VOLTAGE INDICATED ON 480V ES BUS 3A 	1:	AR CARD.
OPERATOR ACTIONS FOR A VALID ALARM: O PLACE THE NORMAL DUTY CHARGER IN SERVI O REFER TO OP-705.	CE IF AVAILABLE.	
THIS IS INDICATIVE OF A PROBLEM WITH T A LOW BUS VOLTAGE ON THE AC POWER INPU PROBLEM. IF THIS IS NOT THE PROBLEM T SHOULD BE RESTORED TO SERVICE UNTIL TH	T TO THE CHARGER MAY BE HEN THE NORMAL DUTY CHAR	THE
REFERENCES: VENDOR DRAWING KBC-2475-130, PM	-141, C&D MANUAL #33	

ENCLOSURE 1 (Page 98 of 129)

	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUE	GER
	EVENT POI	NT 1575
 DPBC-1F AC VOLTAGE IS < 108 VAC AS SET 	NSED BY K1 RELAY ON AC	PFAR CARD.
 COMPUTER POINT E-042. VOLTAGE INDICATED ON 480V ES BUS 3B 	430 VAC.	
OPERATOR ACTIONS FOR A VALID ALARM:		
 PLACE THE NORMAL DUTY CHARGER IN SERVI REFER TO OP-705. 	ICE IF AVAILABLE.	
PLACE THE NORMAL DUTY CHARGER IN SERVI	THE POWER FEED TO THE O TT TO THE CHARGER MAY E THEN THE NORMAL DUTY CH	BE THE HARGER

ENCLOSURE 1 (Page 99 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTI CHAR TROU	GER
	EVENT POI	NT 1576
INDICATED CONDITION:		
 DPBC-1A DC VOLTAGE < 124.4 VDC AS SEN CONTROL BOARD REDUNDANT INDICATION WHICH WILL VERIFY ALARI 		HE LVA w/TD
○ VOLTAGE INDICATED ON DPBC-1A FACE < 13		
• VOLTAGE INDICATED ON DPBC-1A FACE < 1:		
 VOLTAGE INDICATED ON DPBC-1A FACE < 13 OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AN 	30 VDC.	
 VOLTAGE INDICATED ON DPBC-1A FACE < 1: OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. 	30 VDC.	
 VOLTAGE INDICATED ON DPBC-1A FACE < 13 OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. 	30 VDC.	
 VOLTAGE INDICATED ON DPBC-1A FACE < 13 OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR 	AILABLE.	GER. IF ROBLEM THE
 VOLTAGE INDICATED ON DPBC-1A FACE < 13 OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AN REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH TRAISING INPUT VOLTAGE TO THE CHARGER IN 	AILABLE.	GER. IF ROBLEM THE

ENCLOSURE 1 (Page 100 of 129)

	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUE	GER
	EVENT POI	NT 1577
<pre>INDICATED CONDITION: DPBC-1B DC VOLTAGE < 124.4 VDC AS SENS CONTROL BOARD</pre>	ED BY K5L RELAY ON TH	E HVA w/TD
REDUNDANT INDICATION WHICH WILL VERIFY ALARM O VOLTAGE INDICATED ON DPBC-1B FACE < 13		
OPERATOR ACTIONS FOR A VALID ALARM: O RAISE BUS VOLTAGE. O PLACE STANDBY CHARGER IN SERVICE IF AV. O REFER TO OP-705. O NOTIFY ELECTRICAL SHOP SUPERVISOR	AILABLE.	
 RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AV. REFER TO OP-705. 	HE OUTPUT OF THE CHARG	GER. IF ROBLEM THE

ENCLOSURE 1 (Page 101 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUE	GER
	EVENT POI	NT 1578
INDICATED CONDITION: O DPBC-1C DC VOLTAGE < 124.4 VDC AS SENSI- CONTROL BOARD	SED BY K5L RELAY ON TH	E LVA w/TD
REDUNDANT INDICATION WHICH WILL VERIFY ALAR		
○ VOLTAGE INDICATED ON DPBC-1C < 130 VDC	С.	
 VOLTAGE INDICATED ON DPBC-1C < 130 VD0 OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR 		
OPERATOR ACTIONS FOR A VALID ALARM: O RAISE BUS VOLTAGE. O PLACE STANDBY CHARGER IN SERVICE IF AV O REFER TO OP-705.	VAILABLE.	GER. IF ROBLEM THE

ENCLOSURE 1 (Page 102 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARO TROU	GER
	EVENT POI	NT 1579
 DPBC-1D DC VOLTAGE < 124.4 VDC AS SENS CONTROL BOARD REDUNDANT INDICATION WHICH WILL VERIFY ALARM 		IE LVA w/TD
 VOLTAGE INDICATED ON DPBC-1D < 130 VDC 		
○ VOLTAGE INDICATED ON DPBC-1D < 130 VDC	•	
 VOLTAGE INDICATED ON DPBC-1D < 130 VDC OPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR. DISCUSSION: 	AILABLE.	
 VOLTAGE INDICATED ON DPBC-1D < 130 VDC DPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR. 	AILABLE. HE OUTPUT OF THE CHARG	GER. IF ROBLEM THE
 VOLTAGE INDICATED ON DPBC-1D < 130 VDC DPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH T RAISING INPUT VOLTAGE TO THE CHARGER D	AILABLE. HE OUTPUT OF THE CHARG OES NOT CORRECT THE PI ICE.	GER. IF ROBLEM THE

ENCLOSURE 1 (Page 103 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTI CHAR TROU	GER
	EVENT POI	NT 1580
<pre>INDICATED CONDITION: DPBC-1E DC VOLTAGE < 124.4 VDC AS SENS CONTROL BOARD</pre>	SED BY K5L RELAY ON TH	IE LVA w/TD
REDUNDANT INDICATION WHICH WILL VERIFY ALARM		
○ VOLTAGE INDICATED ON DPBC-1E < 130 VDC		
 VOLTAGE INDICATED ON DPBC-1E < 130 VDC DPERATOR ACTIONS FOR A VALID ALARM: RAISE BUS VOLTAGE. RETURN NORMAL CHARGER TO SERVICE IF AV REFER TO OP-705. NOTIFY ELECTRICAL SUPERVISOR. 		
OPERATOR ACTIONS FOR A VALID ALARM: O RAISE BUS VOLTAGE. O RETURN NORMAL CHARGER TO SERVICE IF AV O REFER TO OP-705.	AILABLE.	GER.

ENCLOSURE 1 (Page 104 of 129)

	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUT	GER
	EVENT POI	NT 1581
 DPBC-1F DC VOLTAGE < 124.4 VDC AS SENS CONTROL BOARD 	SED BY K5L RELAY ON TH	IE LVA w/TD
○ VOLTAGE INDICATED ON DPBC-1F < 130 VDC		
OPERATOR ACTIONS FOR A VALID ALARM: O RAISE BUS VOLTAGE. O RETURN NORMAL LHARGER TO SERVICE IF AV O REFER TO OP-705. O NOTIFY ELECTRICAL SHOP SUPERVISOR.	AILABLE.	GER.
OPERATOR ACTIONS FOR A VALID ALARM: O RAISE BUS VOLTAGE. O RETURN NORMAL CHARGER TO SERVICE IF AV O REFER TO OP-705. O NOTIFY ELECTRICAL SHOP SUPERVISOR. DISCUSSION:	HE OUTPUT OF THE CHAR	GER.

ENCLOSURE 1 (Page 105 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARO TROU	GER
	EVENT POI	NT 1790
INDICATED CONDITION:		
○ DPBC-1G AC VOLTAGE IS < 108 VAC AS SET	NSED BY KI RELAY ON AC	PFAR CARD.
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	A.	
	1:	
• VOLTAGE INDICATED ON 480V REACTOR AUX		
○ VOLTAGE INDICATED ON 480V REACTOR AUX		
• VOLTAGE INDICATED ON 480V REACTOR AUX	BUS 3A < 430 VAC.	
○ VOLTAGE INDICATED ON 480V REACTOR AUX	BUS 3A < 430 VAC.	
 VOLTAGE INDICATED ON 480V REACTOR AUX OPERATOR ACTIONS FOR A VALID ALARM: PLACE STANDBY CHARGER IN SERVICE IF AV 	BUS 3A < 430 VAC.	
 VOLTAGE INDICATED ON 480V REACTOR AUX OPERATOR ACTIONS FOR A VALID ALARM: PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. 	BUS 3A < 430 VAC. AILABLE. HE POWER FEED TO THE O T TO THE CHARGER MAY E HEN THE SWING CHARGER	RF THF
 VOLTAGE INDICATED ON 480V REACTOR AUX OPERATOR ACTIONS FOR A VALID ALARM: PLACE STANDBY CHARGER IN SERVICE IF AV REFER TO OP-705. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH T A LOW BUS VOLTAGE ON THE AC POWER INPU PROBLEM. IF THIS IS NOT THE PROBLEM T 	BUS 3A < 430 VAC. WAILABLE. HE POWER FEED TO THE O T TO THE CHARGER MAY E HEN THE SWING CHARGER N BE RESOLVED.	BE THE SHOULD BE

ENCLOSURE 1 (Page 106 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08 P-07-08
	BATTERY CHARGER TROUBLE
	EVENT POINT 179
 DPBC-1H AC VOLTAGE IS <108 VAC AS SENS REDUNDANT INDICATION WHICH WILL VERIFY ALARM COMPUTER POINT E-043. 	
 VOLTAGE INDICATED ON 480V ES BUS 3B < 4 OPERATOR ACTIONS FOR A VALID ALARM: PLACE STANDBY CHARGER IN SERVICE IF AVA REFER TO OP-705. 	
DISCUSSION:	
THIS IS INDICATIVE OF A PROBLEM WITH TH	E POWER FEED TO THE CHARGER.
THIS IS INDICATIVE OF A PROBLEM WITH TH A LOW BUS VOLTAGE ON THE AC POWER INPUT PROBLEM. IF THIS IS NOT THE PROBLEM TH PLACED IN SERVICE UNTIL THE PROBLEM CAN	TO THE CHARGER MAY BE THE HEN THE SWING CHARGER SHOULD BE I BE RESOLVED.

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ENCLOSURE 1 (Page 107 of 129)

the a result designed where we approved that a result of the second second	551-AI	ANNUNCIATOR	RESPONSE	SSF-A1-07-08	P-07-08
				BATTE CHARO TROUT	GER
				EVENT POI	NT 1938
INDICATED (
 DPBC- CONTE 	-1A DC ROL BOA	RD.	9.6 VDC AS SENS	ED BY K5H RELAY ON TH	E HVA w/TE
FOUNDANT 1	NDICAT		LL VERIFY ALARM		
			IGE > 139 VDC.	:	
O DFBC-	IA DC	UUIPUI VULIA	GE > 139 VDC.		
			A 1 A 1914		Percenters Collected and a constraint start, a based many more
PERATOR AC	TIONS	FOR A VALID	ALARM:		Anna (an anna anna anna
 LOWER 	BUS V	DLTAGE.			
 LOWER PLACE REFER 	BUS VO	DLTAGE. VING CHARGER -705.	IN SERVICE IF	AVAILABLE.	
 LOWER PLACE REFER 	BUS VO	DLTAGE. √ING CHARGER	IN SERVICE IF	AVAILABLE.	
 LOWER PLACE REFER 	BUS VO THE SU TO OP Y ELECT	DLTAGE. VING CHARGER -705.	IN SERVICE IF	AVAILABLE.	
O LOWER O PLACE O REFER O NOTIF	E BUS VO THE SU TO OP- Y ELECT IS INDI ING INF WING CF	DLTAGE. WING CHARGER -705. TRICAL SHOP ICATIVE OF A PUT VOLTAGE HARGER SHOUL TINUES TO IN	IN SERVICE IF A SUPERVISOR PROBLEM WITH TH TO THE CHARGER I D BE PLACED IN S	HE OUTPUT OF THE CHAR	PROBLEM
O LOWER O PLACE O REFER O NOTIF	IS IND IS IND WING CH OR CONT	DLTAGE. WING CHARGER -705. TRICAL SHOP ICATIVE OF A PUT VOLTAGE HARGER SHOUL TINUES TO IN TDOWN.	IN SERVICE IF A SUPERVISOR PROBLEM WITH TH TO THE CHARGER E D BE PLACED IN S CREASE THE CHARG	HE OUTPUT OF THE CHARG	PROBLEM

ENCLOSURE 1 (Page 108 of 129)

	SSF-A1-07-08	P-07-08
	r	
	BATTE CHARO TROUE	GER
	EVENT POIN	NT 1939
INDICATED CONDITION:		
 DPBC-1B DC VOLTAGE > 139.6 VDC AS SENS CONTROL BOARD 	ED BY K5H RELAY ON TH	E HVA w/TD
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	:	
 DPBC-1B DC OUTPUT VOLTAGE > 139 VDC. 		
PERATOR ACTIONS FOR A VALID ALARM:		
 LOWER BUS VOLTAGE. 		
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A 	AVAILABLE.	
 LOWER BUS VOLTAGE. 	AVAILABLE.	
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. 	AVAILABLE.	
 PLACE THE SWING CHARGER IN SERVICE IF / REFER TO OP-705. 	AVAILABLE.	
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR 	HE OUTPUT OF THE CHARG DOES NOT CORRECT THE P SERVICE. IF VOLTAGE R	ROBLEM
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH THE LOWERING INPUT VOLTAGE TO THE CHARGER DE THE SWING CHARGER SHOULD BE PLACED IN SHIGH OR CONTINUES TO INCREASE THE CHARGER	HE OUTPUT OF THE CHARG DOES NOT CORRECT THE P SERVICE. IF VOLTAGE R GER MAY EXPERIENCE A H	ROBLEM

ENCLOSURE 1 (Page 109 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUE	GER
	EVENT POIN	NT 1940
INDICATED CONDITION: O DPBC-1C DC VOLTAGE > 139.6 VDC AS SENS CONTROL BOARD	ED BY K5H RELAY ON TH	E HVA w/TD
 DPBC-1C DC OUTPUT VOLTAGE > 139 VDC. 	:	
OPERATOR ACTIONS FOR A VALID ALARM: O LOWER BUS VOLTAGE. O PLACE THE SWING CHARGER IN SERVICE IF A O REFER TO OP-705. O NOTIFY THE ELECTRICAL SHOP SUPERVISOR.	AVAILABLE.	
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. 	HE OUTPUT OF THE CHARG	ROBLEM
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH TH LOWERING INPUT VOLTAGE TO THE CHARGER D THE SWING CHARGER SHOULD BE PLACED IN S HIGH OR CONTINUES TO INCREASE THE CHARGE	HE OUTPUT OF THE CHARG DOES NOT CORRECT THE P SERVICE. IF VOLTAGE R SER MAY EXPERIENCE A H	ROBLEM

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ENCLOSURE 1 (Page 110 of 129)

SSF-A1 ANNUNCIATOR RESPONSE		
	SSF-A1-07-08	P-07-08
	BATTE CHARG TROUE	BER
	EVENT POIN	NT 1941
<pre>INDICATED CONDITION:</pre>	ED BY K5H RELAY ON TH	E HVA w/TC
○ DPBC-1D DC OUTPUT VOLTAGE > 139 VDC.		
OPERATOR ACTIONS FOR A VALID ALARM:		
 LOWER BUS VOLTAGE. PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR. 	AVAILABLE.	
 PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR. 	E OUTPUT OF THE CHARG	ROBLEM
 PLACE THE SWING CHARGER IN SERVICE IF A REFER TO OP-705. NOTIFY ELECTRICAL SHOP SUPERVISOR. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH TH LOWERING INPUT VOLTAGE TO THE CHARGER D THE SWING CHARGER SHOULD BE PLACED IN S HIGH OR CONTINUES TO INCREASE THE CHARGE	E OUTPUT OF THE CHARG DOES NOT CORRECT THE P ERVICE. IF VOLTAGE R ER MAY EXPERIENCE A H	ROBLEM

ENCLOSURE 1 (Page 111 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	[
	BATTE CHARO TROU	GER
	EVENT POI	NT 1942
INDICATED CONDITION:		
 DPBC-1E DC VOLTAGE > 139.6 VDC AS SENS CONTROL BOARD 	ED BY K5H RELAY ON TH	IE HVA W/TD
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	and the second	
The second	1:	
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. 	1:	
	1:	
	1:	
	1:	
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. 		
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. 		
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I 		
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR 		
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR DISCUSSION: 	F AVAILABLE.	
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR 	F AVAILABLE. HE OUTPUT OF THE CHARG DOES NOT CORRECT THE I TO SERVICE. IF VOLTAG	PROBLEM GE REMAINS
 DPBC-1E DC OUTPUT VOLTAGE > 139 VDC. DPERATOR ACTIONS FOR A VALID ALARM: LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH THE LOWERING INPUT VOLTAGE TO THE CHARGER INTEL NORMAL CHARGER SHOULD BE RETURNED HIGH OR CONTINUES TO INCREASE THE CHARGER 	F AVAILABLE. HE OUTPUT OF THE CHARG DOES NOT CORRECT THE I TO SERVICE. IF VOLTAG GER MAY EXPERIENCE A H	PROBLEM GE REMAINS

ENCLOSURE 1 (Page 112 of 129)

	SSF-A1-07-08	P-07-08
	SATTE CHARO TROUT	GER
	EVENT POI	NT 1943
 DPBC-1F DC VOLTAGE > 139.6 VDC AS SENS CONTROL BOARD 	FD BY K5H RELAY ON TH	E HVA w/TD
○ DPBC-1F DC OUTPUT VOLTAGE > 139 VDC.		
DPERATOR ACTIONS FOR A VALID ALARM:		
OPERATOR ACTIONS FOR A VALID ALARM: O LOWER BUS VOLTAGE. O RETURN THE NORMAL CHARGER TO SERVICE I O REFER TO OP-705. O NOTIFY THE ELECTRICAL SHOP SUPERVISOR.	F AVAILABLE.	
 RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. 	F AVAILABLE.	
 LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR. 	HE OUTPUT OF THE CHARG DOES NOT CORRECT THE F TO SERVICE. IF VOLTAG	PROBLEM
 LOWER BUS VOLTAGE. RETURN THE NORMAL CHARGER TO SERVICE I REFER TO OP-705. NOTIFY THE ELECTRICAL SHOP SUPERVISOR. DISCUSSION: THIS IS INDICATIVE OF A PROBLEM WITH TH LOWERING INPUT VOLTAGE TO THE CHARGER I THE NORMAL CHARGER SHOULD BE RETURNED TH HIGH OR CONTINUES TO INCREASE THE CHARGE	HE OUTPUT OF THE CHARG DOES NOT CORRECT THE F TO SERVICE. IF VOLTAG GER MAY EXPERIENCE A H	PROBLEM

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ENCLOSURE 1 (Page 113 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE	GER
	EVENT POI	NT 1948
 DPBC-1A HIGH VOLTAGE SHUT DOWN RELAY I SENSED BY HVSDR. 		45 VDC AS
 NO VOLTAGE OR AMPERAGE INDICATIONS ON 		
 NO VOLTAGE OR AMPERAGE INDICATIONS ON 	DPBC-1A.	
 NO VOLTAGE OR AMPERAGE INDICATIONS ON DPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. 	DPBC-1A.	
 NO VOLTAGE OR AMPERAGE INDICATIONS ON DPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. 	DPBC-1A. BUS. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEL	SHUT DOWN
OPERATOR ACTIONS FOR A VALID ALARM: OMINIMIZE DC LOADS ON AFFECTED BATTERY C PLACE THE SWING CHARGER IN SERVICE. OREFER TO OP-705. DISCUSSION: THIS CONDITION CAN OCCUR WHEN THERE IS AND IT IS ABRUPTLY INTERRUPTED. RECOV TO THE BATTERY CHARGER REQUIRES THAT T	DPBC-1A. BUS. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEL E CHARGER CABINET.	SHUT DOWN

ENCLOSURE 1 (Page 114 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTI CHAR TROU	GER
	EVENT POI	NT 1949
 DPBC-1B HIGH VOLTAGE SHUT DOWN RELAY H SENSED BY HVSDR. 		45 VDC AS
C NO VOLTAGE OR AMPERAGE INDICATIONS ON		
C NO VOLTAGE OR AMPERAGE INDICATIONS ON	DPBC-18.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE.	DPBC-18.	
 NO VOLTAGE OR AMPERAGE INDICATIONS ON DPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. 	DPBC-1B. EUS. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEP	SHIT DOWN
 NO VOLTAGE OR AMPERAGE INDICATIONS ON DPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. DISCUSSION: THIS CONDITION CAN OCCUR WHEN THERE IS AND IT IS ABRUPTLY INTERRUPTED. RECOV TO THE BATTERY CHARGER REQUIRES THAT T	DPBC-18. EUS. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEN E CHARGER CABINET.	SHIIT DOWN

ENCLOSURE 1 (Page 115 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHAR TROU	GER
	EVENT POI	NT 1950
INDICATED CONDITION:		
 DPBC-1C HIGH VOLTAGE SHUT DOWN RELAY SENSED BY HVSDR. 	HAS ACTUATED DUE TO >1	45 VDC AS
REDUNDANT INDICATION WHICH WILL VERIFY ALAR	M ·	
• NO VOLTAGE OR AMPERAGE INDICATIONS ON		
 NO VOLTAGE OR AMPERAGE INDICATIONS ON 		
○ NO VOLTAGE OR AMPERAGE INDICATIONS ON		
• NO VOLTAGE OR AMPERAGE INDICATIONS ON		
PERATOR ACTIONS FOR A VALID ALARM:	DPBC-1C.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE.	DPBC-1C.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY	DPBC-1C.	
 PERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. 	DPBC-1C.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE. O REFER TO OP-705.	DPBC-1C.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE. O REFER TO OP-705. DISCUSSION:	DPBC-1C. BUS.	BATTEDY
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE. O REFER TO OP-705. DISCUSSION: THIS CONDITION CAN OCCUR WHEN THERE IS AND IT IS ABRUPTLY INTERRUPTED. RECOM	DPBC-1C. BUS. S A SEVERE LOAD ON THE VERY FROM HIGH VOLTAGE	SHUT DOWN
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE. O REFER TO OP-705. DISCUSSION: THIS CONDITION CAN OCCUR WHEN THERE IS	DPBC-1C. BUS. S A SEVERE LOAD ON THE VERY FROM HIGH VOLTAGE THE MANUAL RESET BE DED	SHUT DOWN
 PERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. ISCUSSION: THIS CONDITION CAN OCCUR WHEN THERE IS AND IT IS ABRUPTLY INTERRUPTED. RECONTO THE BATTERY CHARGER REQUIRES THAT 	DPBC-1C. BUS. S A SEVERE LOAD ON THE VERY FROM HIGH VOLTAGE THE MANUAL RESET BE DER HE CHARGER CABINET.	SHUT DOWN

ENCLOSURE 1 (Page 116 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUE	GER
	EVENT POIN	NT 1951
INDICATED CONDITION:		Mark Street Street, or, and Charles and an
SENSED BY HVSDR.		
 NO VOLTAGE OR AMPERAGE INDICATIONS ON 		
 NO VOLTAGE OR AMPERAGE INDICATIONS ON OPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY 	DPBC-1D.	
• NO VOLTAGE OR AMPERAGE INDICATIONS ON	DPBC-1D.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE SWING CHARGER IN SERVICE.	DPBC-1D.	
 NO VOLTAGE OR AMPERAGE INDICATIONS ON OPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. 	DPBC-1D. BUS. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEP	SHIIT DOUN
 NO VOLTAGE OR AMPERAGE INDICATIONS ON OPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE SWING CHARGER IN SERVICE. REFER TO OP-705. 	DPBC-1D. BUS. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEP E CHARGER CABINET.	SHIIT DOUN

ENCLOSURE 1 (Page 117 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARO TROUT	GER
	EVENT POI	NT 1952
INDICATED CONDITION:		
 DPBC-1E HIGH VOLTAGE SHUT DOWN RELAY H SENSED BY HVSDR. REDUNDANT INDICATION WHICH WILL VERIFY ALARM 		45 VDC AS
○ NO VOLTAGE OR AMPERAGE INDICATIONS ON		
OPERATOR ACTIONS FOR A VALID ALARM:	DPBC-1E.	
	DPBC-1E.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE NORMAL DUTY CHARGER IN SERVI	DPBC-1E.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE NORMAL DUTY CHARGER IN SERVI O REFER TO OP-705.	DPBC-1E. BUS. CE. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEP	CHIT DOWN
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE NORMAL DUTY CHARGER IN SERVI REFER TO OP-705. DISCUSSION: THIS CONDITION CAN OCCUR WHEN THERE IS AND IT IS ABRUPTLY INTERRUPTED. RECOV TO THE BATTERY CHARGER REQUIRES THAT T	DPBC-1E. BUS. CE. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEN E CHARGER CABINET.	CHIT DOWN

ENCLOSURE 1 (Page 118 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-08	P-07-08
	BATTE CHARC TROUE	GER
	EVENT POI	NT 1953
 DPBC-1F HIGH VOLTAGE SHUT DOWN RELAY H SENSED BY HVSDR. 		45 VDC AS
 NO VOLTAGE OR AMPERAGE INDICATIONS ON 		
○ NO VOLTAGE OR AMPERAGE INDICATIONS ON	DPBC-1F.	
OPERATOR ACTIONS FOR A VALID ALARM: O MINIMIZE DC LOADS ON AFFECTED BATTERY O PLACE THE NORMAL DUTY CHARGER IN SERVI	DPBC-1F.	
 NO VOLTAGE OR AMPERAGE INDICATIONS ON OPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE NORMAL DUTY CHARGER IN SERVI REFER TO OP-705. 	DPBC-1F. BUS. CE. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DED	CHIT DOUN
 NO VOLTAGE OR AMPERAGE INDICATIONS ON DPERATOR ACTIONS FOR A VALID ALARM: MINIMIZE DC LOADS ON AFFECTED BATTERY PLACE THE NORMAL DUTY CHARGER IN SERVI REFER TO OP-705. 	DPBC-1F. BUS. CE. A SEVERE LOAD ON THE ERY FROM HIGH VOLTAGE HE MANUAL RESET BE DEP E CHARGER CABINET.	CHIT DOUN

ENCLOSURE 1 (Page 119 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-07-09	P-07-09
	BATTE	
	EVENT POIN	NT 1190
INDICATED CONDITION:		
○ A GROUND <20 KOHMS AS SENSED BY DPGD-1	C HAS BEEN DETECTED OF	N DPBA-10
		orba-ic.
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	*	******
 COMPUTER POINT E-215. 		
 LOCAL READOUT ON DPGD-1C. 		
OPERATOR ACTIONS FOR A VALID ALARM:		
NOTE ANY EQUIPMENT RECENTLY STARTED OR	STOPPED.	
 NOTIFY ELECTRICIANS TO BEGIN TROUBLESH 	OOTING.	
DISCUSSION:		
A GROUND ON THE DC POWER SYSTEM IS AN U	INDESTRABLE CONDITION	NUTCH
COULD LEAD TO FURTHER DEGRADATION. EVE ISOLATE THE GROUND AND REPAIR IT AS SOC	ERY EFFORT SHOULD BF M	ADE TO
REFERENCES: DRAWING 209-023 SHEET DP-013		
SENSING ELEMENT: DPGD-1C		THE OWNER & COLOR OF COLOR OF COMPANY OF

ENCLOSURE 1 (Page 120 of 129)

	SSF-A1-07-09	P-07-09
	BATTE	
	EVENT POI	NT 1582
O A GROUND <20 KOHMS AS SENSED BY DPGD-	1A HAS BEEN DETECTED O	N DPBA-1A.
 COMPUTER POINT E-213. 		
 LOCAL READOUT ON DPGD-1A. 		
 LOCAL READOUT ON DPGD-1A. OPERATOR ACTIONS FOR A VALID ALARM: NOTE ANY EQUIPMENT RECENTLY STARTED OF NOTIFY ELECTRICIANS TO BEGIN TROUBLESH 	R STOPPED. HOOTING.	
OPERATOR ACTIONS FOR A VALID ALARM:	UNDESIRABLE CONDITION	WHICH MADE TO

ENCLOSURE 1 (Page 121 of 129)

	SSF-A1-07-09	P-07-09
	BATTE	
INDICATED CONDITION:	EVENT POI	NT 1583
 A GROUND <20 KOHMS AS SENSED BY DPGD-1 REDUNDANT INDICATION WHICH WILL VERIFY ALARM COMPUTER POINT E-214. LOCAL READOUT ON DPGD-1B. 		N DPBA-1B.
OPERATOR ACTIONS FOR A VALID ALARM: O NOTE ANY EQUIPMENT RECENTLY STARTED OR O NOTIFY ELECTRICIANS TO BEGIN TROUBLESH	STOPPED. OOTING.	
 NOTE ANY EQUIPMENT RECENTLY STARTED OR 	UNDESIRABLE CONDITION	WHICH MADE TO

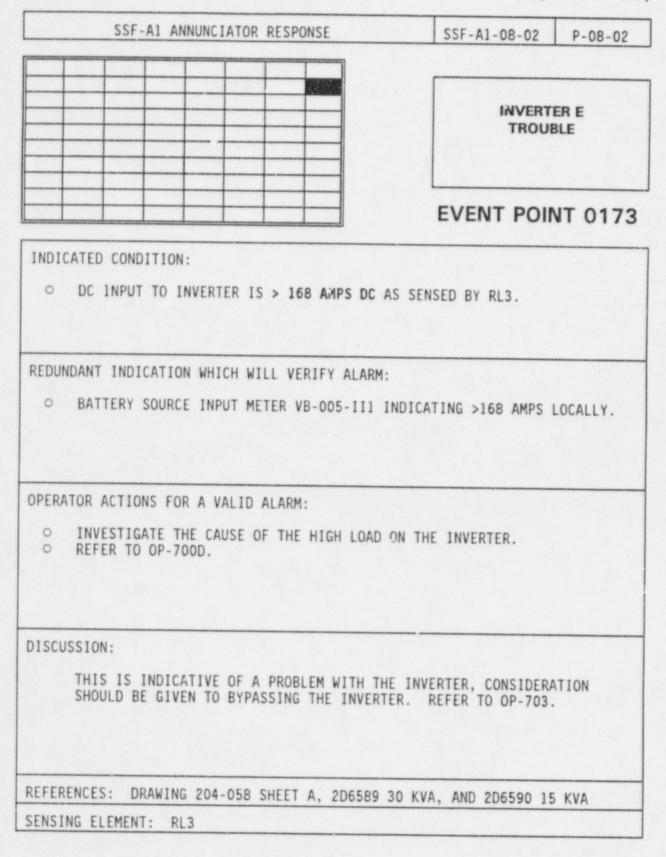
ENCLOSURE 1 (Page 122 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-08-01	P-08-01
	INVERT FAILU	
	EVENT POI	NT 0163
INDICATED CONDITION: C LOSS OF INVERTER AC INPUT < 365 VAC A LOSS OF DC INPUT < 105 VDC REDUNDANT INDICATION WHICH WILL VERIFY ALAF	RM :	
• PLANT COMPUTER DEENERGIZED.		
 PLANT COMPUTER DEENERGIZED. OPERATOR ACTIONS FOR A VALID ALARM: MANUALLY TRANSFER VBDP-7 TO ALTERNATE REFER TO OP-703. 	POWER SOURCE.	
OPERATOR ACTIONS FOR A VALID ALARM: • MANUALLY TRANSFER VBDP-7 TO ALTERNATE	S ON THE ICS PANEL DUE OM VBDP-7. AND THE TRAN	TO THE NSFER

ENCLOSURE 1 (Page 123 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-08-02	P-08-02
	INVERT	
	EVENT POIN	NT 0168
INDICATED CONDITION: O INVERTER DC INPUT AMPERAGE IS > 50 AMP	S AS SENSED BY RL2.	
REDUNDANT INDICATION WHICH WILL VERIFY ALARM O BATTERY SOURCE INPUT, RED INDICATING L O BATTERY SOURCE INPUT METER VB-005-III	IGHT ON LOCALLY	LOCALLY.
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE THE LOSS OF AC INPUT TO TH O REESTABLISH AC INPUT TO THE INVERTER.	E INVERTER.	
DISCUSSION: THIS IS AN INDICATION OF THE DC INPUT THE CAUSE COULD BE INTERNAL TO THE INV AC INPUT TO INVERTER. REFER TO STS FOR ADMINISTRATIVE REQUIR	ERTER, OR POSSIBLY A L	R OUTPUT. OSS OFF
REFERENCES: DRAWING 204-058 SHEET A, 2D6589 SENSING ELEMENT: RL2	30 KVA, AND 2D6590 15	KVA

ENCLOSURE 1 (Page 124 of 129)



ENCLOSURE 1 (Page 125 of 129)

	SSF-A1-08-02	F-08-02
	INVERT	
INDICATED CONDITION:	EVENT POI	NT 0178
 DC INPUT VOLTAGE FROM BATTERY IS <105 REDUNDANT INDICATION WHICH WILL VERIFY ALAR BATTERY INPUT BREAKER TRIPPED LOCALLY 	М:	Y RL6.
DITTER THEFT DREAKER TRIFFED EDUALET	•	
OPERATOR ACTIONS FOR A VALID ALARM: O INVESTIGATE CAUSE OF LOW INPUT VOLTAGE	IS RECOVERED.	FUNCTION

ENCLOSURE 1 (Page 126 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-08-02	P-08-02
	INVERT	
	EVENT POIN	NT 0183
INDICATED CONDITION: O DC INPUT VOLTAGE TO INVERTER IS >140 V	DC AS SENSED BY RUZ	
	LE HO SERVED DI NET.	
REDUNDANT INDICATION WHICH WILL VERIFY ALARM		
 HIGH OUTPUT VOLTAGE ON BATTERY CHARGER 	S.	
OPERATOR ACTIONS FOR A VALID ALARM:		
 INVESTIGATE CAUSE FOR VOLTAGE PROBLEMS 		
DISCUSSION:		
THIS CONDITION MAY CAUSE PROBLEMS WITH		
REFER TO STS FOR ADMINISTRATIVE REQUIR	EMENTS.	
REFERENCES: DRAWING 204-058 SHEET A, 2D6589	30 KVA, AND 2D6590 15	KVA
ENSING ELEMENT: RL7		

ENCLOSURE 1 (Page 127 of 129)

SSF-A1 ANNUNCIATOR RESPONSE	SSF-A1-08-02	P-08-02
	INVERT	
	EVENT POI	NT 0193
INDICATED CONDITION:		
O INVERT AC OUTPUT VOLTAGE IS < 114 VAC	AS SENSED BY RELAY RL	1.
REDUNDANT INDICATION WHICH WILL VERIFY ALARM	1:	
 VOLTAGE INDICATOR VB-006-II ON INVERTE 	R FACE INDICATING < 1	14 VAC.
	R FACE INDICATING < 1	14 VAC.
		14 VAC.
OPERATOR ACTIONS FOR A VALID ALARM: O TRANSFER VITAL BUS TO ALTERNATE SOURCE O REFER TO OP-703.		14 VAC.
OPERATOR ACTIONS FOR A VALID ALARM: O TRANSFER VITAL BUS TO ALTERNATE SOURCE O REFER TO OP-703.	IF AVAILABLE. EXCESSIVE LOAD ON THE	
OPERATOR ACTIONS FOR A VALID ALARM: O TRANSFER VITAL BUS TO ALTERNATE SOURCE O REFER TO OP-703. DISCUSSION: LOW OUTPUT VOLTAGE RESULTS FROM EITHER INVERTER, OR FROM LOW INPUT VOLTAGE.	IF AVAILABLE. EXCESSIVE LOAD ON THE THE INVERTER SHOULD TH	ANSFER TO

ENCLOSURE 1 (Page 128 of 129)

	SSF-A1-08-06 P	-08-06
	BATTERY C DISCHARGE HIGH	
	EVENT POINT	0920
 DPBA-1C IS DISCHARGING CURRENT >10 AM ALARM RELAY. REDUNDANT INDICATION WHICH WILL VERIFY ALARM OPDP-1C LOCAL CURRENT METER. 		BUS 3
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO T	THE BUS AND OPERATIONAL.	
OPERATOR ACTIONS FOR A VALID ALARM: • VERIFY BATTERY CHARGER IS ALIGNED TO TO DISCUSSION: LOSS OF A BATTERY CHARGER, OR DC LOADS SUPPLIED FROM THE BATTERY WILL CAUSE TO REFER TO STS FOR ADMINISTRATIVE REQUIR	ON BUS WITH >10 AMPS BEIM HIS ALARM TO OPERATE.	NG

ENCLOSURE 1 (Page 129 of 129)

P-08-07

EVENT POINT 1992

SSF-A1 ANNUNCIATOR RESPONSE					SSF-A1-08-07	P-08
					BATTER BREAM OPE	KER
					EVENT POI	NT 19
O DF	ED CONDIT: PDP-1C CUE DXILIARY S	BICLE 1 D	ISCONNECT THE CUBI	FOR DPBA-1 CLE.	C IS OPEN AS SENSED	BY AN
				RIFY ALARM: RIFICATION.		
OPERATOR	ACTIONS	FOR A VAL	ID ALARM	:		

ENSURE THAT BATTERY CHARGERS ARE IN SERVICE FOR BOTH BANKS OF DPBA-1C 0

- INVESTIGATE THE CAUSE FOR THE DISCONNECT BEING OPEN.
- RECLOSE DPBA-1C DISCONNECT AS SOON AS POSSIBLE.

DISCUSSION:

THE BATTERY DISCONNECT CAN BE OPENED WITH THE BATTERY CHARGERS IN SERVICE AND STILL MAINTAIN DC POWER TO ALL LOADS. THE LOSS OF AC POWER WITH THIS DISCONNECT OPEN WOULD CAUSE A COMPLETE LOSS OF ALL NON-1E DC LOADS.

REFERENCES: DRAWING 209-023 SHEET DP-013

SENSING ELEMENT: BREAKER AUXILIARY CONTACTS