



ANNUNCIATOR TABLE

ANNUNCIATOR	ANNUNCIATOR ENGRAVING
1-1-J	EDG 2 FAULT
1-1-K	EDG 2 TRBL
1-2-K	EDG 2 FREQUENCY
37-2-B	EDG 2 DC TURBO OIL PUMP ON (NOTE 14)
44-1-A	NOT READY FOR AUTO START/ABNORM SW POS (NOTE 18)
44-1-B	UNIT LOCKOUT (MCL-24)
44-1-C	FAIL TO START (NOTE 2)
44-1-D	FAIL TO REACH RATED SPEED & VOLTAGE (NOTE 3)
44-1-E	BLOWN FUSE LOSS OF POWER (NOTE 19)
44-2-A	OVERSPEED TRIP
44-2-B	LOW LUBE OIL PRESSURE
44-2-C	LOW LUBE OIL LEVEL
44-2-D	LOW JACKET WATER TEMPERATURE
44-2-E	HIGH JACKET WATER TEMPERATURE
44-2-F	HIGH CRANKCASE PRESSURE
44-3-A	P/T/FUSE FAILURE EXCITER
44-3-B	PROTECTIVE RELAYS

NOTES (CONT'D)

- FOR ADDITIONAL OPERATION OF HS6221 AND 26SD/001 (ZONES D-5 AND D-7) SEE 4.16 KV SYSTEM DWG 05-05B MCL-4 AND CL-7*.
- ALL VALVES ARE PREFIXED BY "LO" UNLESS OTHERWISE NOTED.
- WHERE NOTED THE TANK CAPACITY IS NOMINAL, WHERE APPLICABLE, SEE DD-PP-06709 (TANK LEVEL CALIBRATION CURVES) FOR INDICATED LEVEL VS. VOLUME RELATIONSHIP. (REF: PCA9 96-0976).
- THE FIELD FLASH SELECTOR SWITCH (FFSS) IS PLACED IN THE 800 RPM POSITION WHEN PERFORMING AN IDLE START OF EDG 1-1 AFTER COMPLETION OF RUN PLACE THE FFSS BACK IN 400 RPM POSITION.
- OPERATION OF FFSS FOR EDG 1-2 (ZONE C-25) IS SIMILAR.
- 200 RPM INDICATOR LAMP HAS BEEN ABANDONED IN PLACE PER ECP 02-0736.

NOTES

- WHEN THE IDLE START PUSHBUTTON (05-041B,B-8) AT THE IDLE START PANEL IS DEPRESSED THE ENGINE WILL START AND ACCELERATE TO IDLE SPEED. WHEN THE IDLE RELEASE PUSHBUTTON (NOT SHOWN) AT THE IDLE START PANEL IS DEPRESSED THE ENGINE WILL ACCELERATE FROM IDLE SPEED TO RATED SPEED.
- IF THE EMERGENCY DIESEL GENERATOR 1-1 (ZONE H-6) FAILS TO REACH 300 RPM WITHIN 7 SEC OF A START SIGNAL ANNUNCIATOR 43-1-C (ZONE J-8) "FAIL TO START" WILL ANNUNCIATE AND THE EMERGENCY DIESEL GENERATOR START CIRCUIT WILL BE LOCKED OUT. SEE MCL-2*.
- NOTE FOR EMERGENCY DIESEL GENERATOR 1-2 ANNUNCIATOR 44-1-C (ZONE J-23) IS SIMILAR.
- ANNUNCIATOR 43-1-D (ZONES C-3 AND J-7) "FAIL TO REACH RATED SPEED AND VOLTAGE" WILL ANNUNCIATE IF THE EMERGENCY DIESEL GENERATOR 1-1 (ZONE H-6) IS NOT UP TO 800RPM OR RATED VOLTAGE WITHIN 10 SEC OF RECEIVING A START SIGNAL.
- NOTE FOR EMERGENCY DIESEL GENERATOR 1-2 ANNUNCIATOR 44-1-D (ZONES C-23 AND J-24) IS SIMILAR.
- THERMOSTATIC CONTROL VALVES (ZONE H-2 AND H-19) START TO OPEN AT 185°F AND ARE FULL OPEN AT 187°F.
- A REVOLVING BLUE WARNING LIGHT LOCATED IN THE ASSOCIATED EMERGENCY DIESEL GENERATOR ROOM WILL LIGHT WHENEVER THE EMERGENCY DIESEL GENERATOR RECEIVES AN AUTOMATIC/EMERGENCY START SIGNAL. SEE MCL-2*.
- THE EDG 1-1 GOVERNOR MODE SELECTOR (GMS) SWITCH (ZONE A-3) WHEN IN "ELECTRIC" MODE ALLOWS THE GOVERNOR TO OPERATE AS AN ELECTRIC GOVERNOR. WHEN GMS SWITCH IS IN "HYD" POSITION ENGINE SPEED CAN BE MANUALLY RAISED OR LOWERED VIA THE HYDRAULIC GOVERNOR CONTROL SWITCH (GCS) (ZONE A-2). THE GCS SWITCH IS NOT NORMALLY USED. CONTROL OF EDG 1-2 SPEED VIA BACKUP HYDRAULIC GOVERNOR IS SIMILAR.
- FOR GENERAL NOTES, PIPING SYMBOLS, INSTRUMENTATION SYMBOLS AND OPERATIONAL SCHEMATIC INDEX, SEE INDEX SHEET DWG 05-000.
- 125 VDC CONTROL POWER FOR BREAKERS AC101 AND AD101 (ZONES E-4 AND E-23) IS SUPPLIED FROM THEIR RESPECTIVE SWITCHING 125VDC CONTROL BUS. SEE 05-05B, NOTE 6.
- UNLESS NEEDED BY AN ACTUAL EMERGENCY, DO NOT TRANSFER THE EDG 1-1 GOVERNOR MODE SELECTOR SWITCH GMS (ZONE A-3) FROM "ELECTRIC" TO "HYD" WHEN THE EMERGENCY DIESEL GENERATOR IS OPERATING ABOVE IDLE SPEED.
- NOTE FOR EDG 1-2 GMS SWITCH (ZONE A-24) IS SIMILAR.
- SYSTEM IS LINED UP FOR DIESEL GENERATOR STANDBY CONDITION (READY FOR AUTO OR MANUAL START) IN ACCORDANCE WITH WITH APPLICABLE PROCEDURES.
- LOW OIL LEVEL ALARM SETPOINT AS SENSED BY LSL20191 (ZONE G-12) AND LSL20182 (ZONE G-29) IS MEASURED FROM BOTTOM OF EMERGENCY DIESEL GENERATOR ENGINE OIL LEVEL DIPSTICK.
- FOR OPERATION OF PSH20143 (ZONE G-5) AND PSH20144 (ZONE G-22) SEE EMERGENCY DIESEL GENERATOR AIR START/ENGINE AIR SYSTEM DWG 05-041B, MCL-2*.
- DELETED.
- ALARM PANEL 37 FOR EMERGENCY DIESEL GENERATOR 1-1 IS LOCATED ON RACK R3601.
- ALARM PANEL 37 FOR EMERGENCY DIESEL GENERATOR 1-2 IS LOCATED ON RACK R3602.
- VALVES 352 AND 353 (ZONES G-12 AND F-13) ARE INTERNAL TO THE HEAD OF THE TURBO LUBE OIL FILTER ON EMERGENCY DIESEL GENERATOR 1-1 LUBE OIL SYSTEM.
- NOTE FOR VALVES 352 AND 353 (ZONES G-29 AND F-30) ON EDG 1-2 IS SIMILAR.
- WHENEVER THE EMERGENCY DIESEL GENERATOR SYSTEM IS IMPERABLE, THE OPERATOR IS TO PLACE THE HANDSWITCH HS4808 (ZONE F-31) IN "NOT OPER" AS INDICATED BY THE "BYPASS" LIGHT (ZONE F-31).
- THE EDG 1-1 "NOT READY FOR AUTO START/ABNORM SW POS" WINDOW 43-1-A (ZONE A-3) WILL ANNUNCIATE WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
 - EXCITER FIELD SHORTING RELAY FSS ENERGIZED IN PANEL C3617 (NOT SHOWN).
 - VOLTAGE REGULATOR CONTROL SWITCH IN OFF IN PANEL C3617 (NOT SHOWN).
 - SAFETY SHUTDOWN RELAY SDR ENERGIZED IN PANEL C3621 (NOT SHOWN).
 - LOSS OF DC POWER TO PANEL C3621 OR FUSE 2P OR 2N BLOWN IN PANEL C3621.
 - GOVERNOR MODE SELECTOR SWITCH IN "HYD" (ZONE A-3) -APPENDIX R LOCAL/NORMAL SWITCH IN LOCAL ON PANEL C3621 (NOT SHOWN).
- THE EDG 1-2 "NOT READY FOR AUTO START/ABNORM SW POS" WINDOW 44-1-A (ZONE A-24) WILL ANNUNCIATE WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
 - EXCITER FIELD SHORTING RELAY FSS ENERGIZED IN PANEL C3618 (NOT SHOWN).
 - VOLTAGE REGULATOR CONTROL SWITCH IN OFF IN PANEL C3618 (NOT SHOWN).
 - SAFETY SHUTDOWN RELAY SDR ENERGIZED IN PANEL C3622 (NOT SHOWN).
 - LOSS OF DC POWER TO PANEL C3622 OR FUSE 2P OR 2N BLOWN IN PANEL C3622.
 - GOVERNOR MODE SELECTOR SWITCH IN "HYD" (ZONE A-24)
- ANNUNCIATOR 1-1-A (ZONE K-8) ALARMS ON BLOWN FUSE OR DIESEL GENERATOR 1-1.
- ANNUNCIATOR 1-1-K (ZONE K-25) ALARMS ON BLOWN FUSE OR DIESEL GENERATOR 1-2.
- ALL COMPONENTS WITH CORRESPONDING VENDOR ID(S) ARE SHOWN THUS "I" WITH THE VENDOR ID SHOWN WITHIN THE BRACKET.
- FOR ADDITIONAL OPERATION OF EDG 1-1 S52 AND EDG 1-2 S52 (ZONES H-6 AND J-23) SEE EMERGENCY DIESEL GENERATOR AIR START/ENGINE AIR SYSTEM DWG 05-041B, MCL-2*.
- FOR ADDITIONAL OPERATION OF AC101 (ZONE E-4) SEE 4.16 KV SYSTEM DWG 05-05B, MCL-1*.

NOTES (CONT'D ABOVE LEFT, C-29)

LR NOTES:

A. FOR GENERAL LICENSE RENEWAL NOTES REFER TO LR-M001-01

LICENSE RENEWAL BOUNDARY DRAWING

LR-05041A2 REV. 0

SYSTEMS SHOWN ON THIS DRAWING:

17: DIESELS

DAVIS-BESSE NUCLEAR POWER STATION

UNIT NO 1

OPERATIONAL SCHEMATIC

EMERGENCY DIESEL GENERATOR SYSTEMS

REFERENCES

DRAWINGS	
M-0100	E-648 SH 2A
M-1800-13	E-648 SH 2B
M-1800-14	E-648 SH 2C
M-180-7	E-648 SH 2E
M-180-7	E-648 SH 2F
M-180-7	E-648 SH 3
M-180-7	E-648 SH 4
M-180-7	E-648 SH 5
M-180-31	E-648 SH 8
M-320-63	E-648 SH 9
E-2	E-648 SH 13
E-22 SH 2	E-648 SH 14
E-27	E-648 SH 15
E-348 SH 13	E-648 SH 16
E-348 SH 14	E-648 SH 17
E-348 SH 14	E-648 SH 18
E-348 SH 14	E-648 SH 19
E-348 SH 14	E-648 SH 20
E-348 SH 14	E-648 SH 21
E-348 SH 14	E-648 SH 22A
E-348 SH 14	E-648 SH 23B
E-348 SH 14	E-648 SH 24
E-348 SH 14	E-648 SH 25
E-348 SH 14	E-648 SH 26

DRAWING NO	REV
05-041A SH 2	26

285X