



- LEGEND**
- VALVE (NORMALLY OPEN)
 - VALVE (NORMALLY CLOSED)
 - VALVE (NORMALLY THROTTLED)
 - CHECK VALVE
 - RELIEF VALVE
 - ORIFICE
 - PRESSURE GAUGE
 - THERMOMETER
 - ELECTRICAL CONNECTION
 - PRESSURE SWITCH
 - SOLENOID VALVE

- OIL ALARMS**
- 10 DEFOAMING TANK LEVEL-HIGH
 - 11 AIR SIDE SEAL OIL PUMP-OFF
 - 12 SEAL OIL PRESSURE-LOW
 - 13 HYDROGEN SIDE LEVEL-LOW
 - 14 SEAL OIL TURBINE BACKUP PRESSURE-LOW
 - 15 HYDROGEN SIDE SEAL OIL PUMP-OFF
 - 16 AIR SIDE SEAL OIL BACKUP PUMP-RUNNING

CONDENSED OPERATING INSTRUCTIONS

SEE INSTRUCTION BOOK FOR COMPLETE OPERATING INSTRUCTIONS

GENERAL-SEAL OIL PRESSURE MUST BE MAINTAINED AT THE HYDROGEN SEALS WHEN HYDROGEN IS IN THE GENERATOR OR WHEN THE SHAFT IS TURNING.

THE HYDROGEN PRESSURE MAY BE VARIED UP TO 75 PSIG. SEAL OIL PRESSURE IS NORMALLY MAINTAINED AT 12 PSI ABOVE THE HYDROGEN PRESSURE. 3 PSI IS REQUIRED TO MAINTAIN A SEAL WHEN RUNNING.

THE VAPOR EXTRACTORS SHOULD BE OPERATED CONTINUOUSLY WHEN THE GENERATOR IS FILLED WITH HYDROGEN.

HYDROGEN SHOULD BE PURGED FROM THE GENERATOR BEFORE MAIN OIL RESERVOIR IS DRAINED.

DUPLEX FILTERS PROVIDE FOR ON-LINE FILTER ELEMENT REPLACEMENT. REFER TO INSTRUCTION MANUAL DC-663280-48

SEAL OIL SUPPLY-EMERGENCY SOURCES

- MAIN OIL PUMP ON TURBINE SHAFT
 - SEAL OIL BACKUP PUMP ON MAIN OIL RESERVOIR
 - AIR SIDE SEAL OIL BACKUP PUMP
 - TURNING GEAR BEARING OIL PUMPS-WILL MAINTAIN 2 PSIG HYDROGEN PRESSURE
- WILL MAINTAIN 75 PSIG HYDROGEN PRESSURE

THE TURBINE BACKUP REGULATOR VALVE 264 OPENS WHEN THE DIFFERENTIAL PRESSURE AT THE SEALS DECREASES TO 8 PSI. THEN IF THE SEAL DIFFERENTIAL PRESSURE DECREASES TO 5 PSI, PRESSURE SWITCH 12 ACTIVATES THE AIR SIDE SEAL OIL BACKUP PUMP ON THE SEAL OIL UNIT AND THE DIFFERENTIAL PRESSURE IS RESTORED TO 12 PSI.

THE NEXT AVAILABLE SOURCES OF EMERGENCY OIL AFTER THE AIR SIDE SEAL OIL BACKUP PUMP ARE THE TURNING GEAR BEARING OIL PUMPS ON THE MAIN OIL RESERVOIR. THESE CAN MAINTAIN A HYDROGEN PRESSURE OF 2 PSIG ONLY. WHEN THE AIR SIDE SEAL OIL BACKUP PUMP IS RUNNING, HYDROGEN PRESSURE SHOULD BE REDUCED TO 2 PSIG IF THE SEAL OIL BACKUP PUMP ON THE RESERVOIR IS NOT AVAILABLE.

TO PLACE EQUIPMENT IN OPERATION-SET VALVES AS INDICATED. START AIR SIDE SEAL OIL PUMP AND FILL DEFOAMING TANKS AND HYDROGEN SIDE DRAIN REGULATOR. START HYDROGEN SIDE SEAL OIL PUMP. EQUIPMENT IS THEN IN NORMAL OPERATION.

UNIT 2

DIABLO CANYON POWER PLANT - PG&E CO.
TURBINE AND GENERATOR ASSOCIATED SYSTEMS

DRAWING	SHEET	PAGE	REV
108022	4	0	40

SEAL OIL DIAGRAM

04-09-2008	ADM1	FXC2	ALAN GLEN BARTA	ELECTRICAL	E 9271	9/30/2009	REVISED PER DC2-SJ-50835-0
DATE	DWN	RE	IV	PE DISC.	PE*	PE EXP.	

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