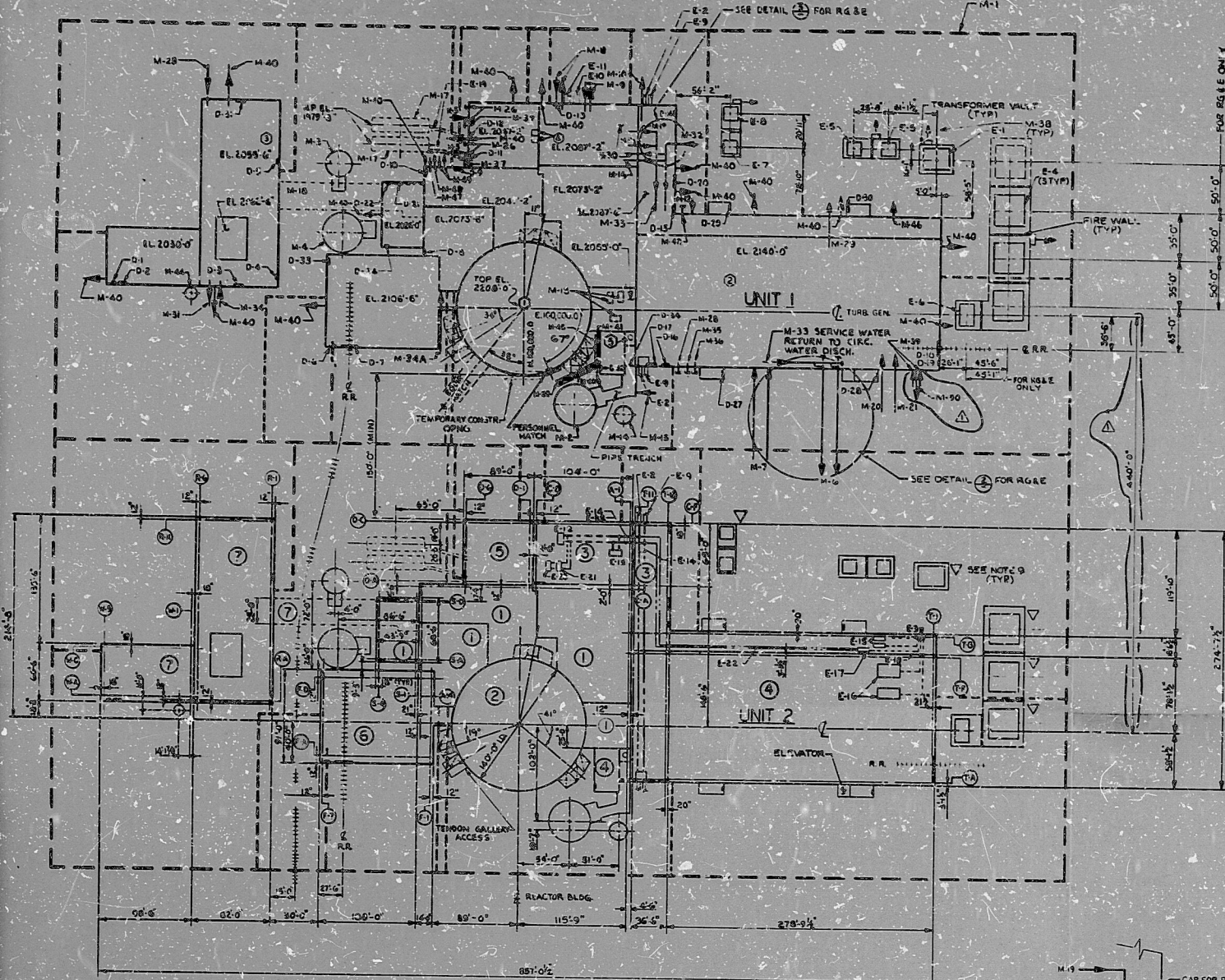


10000-W



MECHANICAL & ELECTRICAL DESIGNATION

- MECHANICAL**
- M-1 FC FIRE LOOP
 - M-2 AP CONDENSATE MTR. TK. (40000 GALS.)
 - M-3 BL REACTOR MAKEUP MTR. TK. (100000 GALS. LIQUID)
 - M-4 DN REFUELING MTR. TK. (40000 GALS. LIQUID)
 - M-5 JE EMERGENCY FUEL OIL LINE (2 PER UNIT)
 - M-6 CA MTR. INLET (10'-0" SQUARE CONCRETE PIPE)
 - M-7 OA CIRC. MTR. INLET (10'-0" SQUARE CONCRETE PIPE)
 - M-8 ET ESW. MTR. INLET (10'-0" DIA.)
 - M-9 EF ESW. MTR. INLET (10'-0" DIA.)
 - M-10 LA SEWAGE LINE
 - M-11 EA SERVICE MTR. RETURN 'A' (10'-0" DIA.) (NOTE 14)
 - M-12 KD DOMESTIC WATER LINE (6'-0" DIA.)
 - M-13 AN DEMINERALIZED WATER LINE (6'-0" DIA.)
 - M-14 AN DEMINERALIZED WATER LINE (6'-0" DIA.)
 - M-15 AL AIR - 200' DRUMS
 - M-16 EA SERVICE MTR. SUPPLY 'A' (10'-0" DIA.) (NOTE 15)
 - M-17 JE 700' EMER. ESW. TAKE OFF (20000 GALS. EACH)
 - M-18 EA SERVICE MTR. RETURN 'B' (10'-0" DIA.) (NOTE 14)
 - M-19 EA SERVICE MTR. RETURN 'C' (10'-0" DIA.) (NOTE 14)
 - M-20 HA HYDROGEN SUPPLY TO GAS CASING & VOL. CONTROL TK.
 - M-21 HA CARBON DIOXIDE SUPPLY TO GAS PURGE SYS.
 - M-22 HA OXYGEN SUPPLY TO GAS PURGE SYS.
 - M-23 JE F. S. OIL LINE (10'-0" DIA.) (NOTE 14)
 - M-24 LE TURBINE LUBE OIL WASTE OUTLET (LUBE OIL SUMP TRUCK CONN.)
 - M-25 JE TURBINE LUBE OIL WASTE OUTLET (LUBE OIL SUMP TRUCK CONN.)
 - M-26 EA SERVICE MTR. SUPPLY 'B' (10'-0" DIA.) (NOTE 15)
 - M-27 HA IMPROVED LIQUID RELEASE
 - M-28 EA SERVICE WATER SUPPLY HEAD (42'-0" DIA. INSIDE POWER BLOCK)
 - M-29 EA SERVICE WATER RETURN HEAD (42'-0" DIA.)
 - M-30 HA NITROGEN SUPPLY (HIGH PRESSURE)
 - M-31 HA NITROGEN SUPPLY (LOW PRESSURE)
 - M-32 CF TURBINE WASTE OIL OUTLET (TRUCK CONN.)
 - M-33 CF TURBINE WASTE OIL SUPPLY (TRUCK CONN.)
 - M-34 LE DIESEL GEN. BLDG. WASTE OUTLET (TRUCK CONN.)
 - M-35 LE TRANSFORMER VAULT DRAIN PIPING
 - M-36 HA CONDENSATE DEMIN. CHEM. MAKEUP (2 PER UNIT) (NOTE 14)
 - M-37 HA ROOF DRAINS
 - M-38 HA AUXILIARY FEEDWATER FROM CONDENSATE WATER TANK
 - M-39 HA SERVICE AIR CONNECTION (CONSTRUCTION AIR)
 - M-40 HA UNIT CEMENT STORAGE TANK (TRUCK CONN.)
 - M-41 HA FUEL OIL FOR MTR. BOILER (RECIRC.)
 - M-42 HA ACID WASH TANK VENT
 - M-43 GP 'B' LIFT SUMP LINE
 - M-44 GP 'B' LIFT EXHAUST LINE
 - M-45 GP 'B' LIFT COOLING WATER LINES
 - M-46 MS DOW WATER SUPPLY TO BULK CHEMICAL STORAGE BLDG. (NOTE 14)

BLDG. KEY

- AUXILIARY BLDG. - NOT MACHINE SHOP
- REACTOR BLDG.
- CONTROL BLDG., COMMUNICATIONS CORRIDOR
- TURBINE BLDG., AUXILIARY BLDG., ROOM
- DIESEL GENERATOR BLDG.
- FUEL BLDG.
- RADWASTE BLDG., DRUM STORAGE (SOLID WASTE)
- RADWASTE & PERSONNEL ACCESS TUNNEL

NOTES:

1. CIRC. WTR. LINE LAYOUT IS BASED ON A MULTI-PRESSURE CONDENSER.
2. EQUIP. IDENTIFIED FOR (1) UNIT.
3. ALL ELEVATIONS ARE SHOWN TO TOP OF ROOF SLAB. GROUND FLOOR IS AT EL. 2000'-0" WITH GRADE AT EL. 1994'-6".
4. UNDER BECKETL SCOPE OF SUPPLY.
5. INTERFACE & COLUMN LINE DESIGNATIONS ARE TYPICAL OF BOTH UNITS.
6. SEE DETAIL 1 FOR EXPLANATION OF DIMENSIONING TO EXTERIOR WALLS AND COLUMNS.
7. BECKETL SCOPE OF SUPPLY ENDS 5'-0" FROM OUTSIDE OF BUILDING WALLS, INCLUDING TRANSFORMER VAULT DRAINS.
8. DOOR NUMBERS SHOWN ARE FOR THIS DWG. ONLY.
9. △ INDICATES TRANSFORMER CT LEAD INTERFACES WITH THE SWITCHYARD.
10. CALCULATING WATER SYSTEM WITH 20°F TEMPERATURE RISE (RG&E ONLY).
11. DASHED LINE SHOWN IS FOR UNDERGROUND FIRE LOOP (M-1) AND THE PHANTOM LINE INDICATES FIRE PROTECTION DELUGE (M-1A) PIPING FOR TR. SFORMERS.
12. RELEASE POINTS ARE TAKEN AT ROOF ELEVATIONS. ACTUAL RELEASE POINTS ARE APPROX. 10'-0" ABOVE ROOF ELEVATIONS.
13. FOR INTERFACE PIPING LOCATIONS SEE DWG. M-06006 AND M-06007.
14. THE TURBINE BUILDING AIR IS EXHAUSTED TO THE ATMOSPHERE BY EXHAUST FANS LOCATED WITHIN LAUNDED PENITHOUSES AT THE ROOF.
15. M-11, M-16, M-19, AND M-30 REPRESENT THE INTERFACE BETWEEN THE ESW SYSTEM AND THE SERVICE WATER SYSTEM INSIDE THE POWER BLOCK.
16. BECKETL SCOPE OF SUPPLY FOR CALLAWAY UNITS 1 & 2 (BECKETL SYSTEM IS)

ELECTRICAL

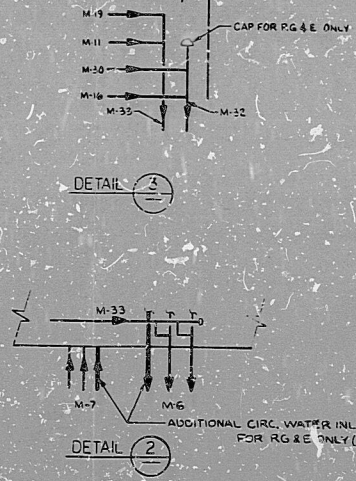
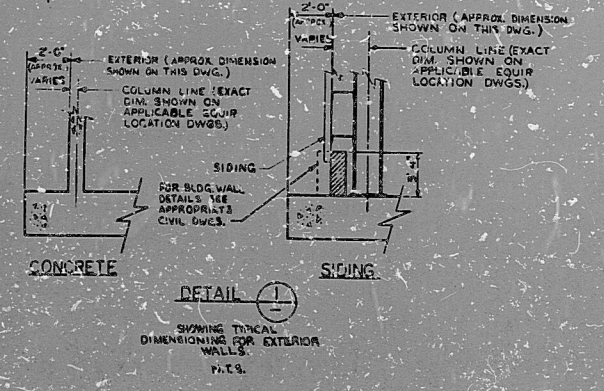
- E-1 START-UP TRANSFORMER 249KV (11.5 KV FOR RG&E) - SPACING (SEE NOTE 9)
- E-2 DUCT BANK FOR CONTROL & INSTRUMENTATION FROM REMOTE SITE BLDGS. AND EQUIP TO CONTROL TOWER (2 PER UNIT)
- E-3 CABLE PITS FOR 13.8KV 1250V DC POWER TO SITE AND SWITCHYARD PROTECTIVE RELAYING TO E17
- E-4 MAIN TRANSFORMERS (BASED ON 785 K.V. SPACING AND THREE SINGLE PHASE UNITS (SEE NOTE 9))
- E-5 STATION SERVICE TRANSFORMERS (13.8KV 10 KW)
- E-6 UNIT AUXILIARY TRANSFORMER
- E-7 ESP TRANSFORMER (13.8KV 10 KW)
- E-8 ESP TRANSFORMER (13.8KV 10 KW) SITE AE TO PROVIDE PRIMARY SUPPLY (SEE NOTE 9)
- E-9 ELECTRICAL DUCT - TELEPHONE SYSTEM INTERFACE (2 PER UNIT)
- E-10 ESW DUCT BANK - SEPARATION GROUP 1
- E-11 ESW DUCT BANK - SEPARATION GROUP 2
- E-12 SITE INTERFACE PANEL FOR CONTROL INSTRUMENTATION FROM SITE CONTROL ROOM (ELEV. 2047'-6")
- E-13 SITE RELATED SECT. OF MTR. CONTROL ROOM (ELEV. 2047'-6")
- E-14 RACEWAYS INSIDE BLDG. FROM E12 TO E17
- E-15 DC SWITCHBOARDS (EL. 2033'-0")
- E-16 13.8 KV SWITCHGEAR (EL. 2033'-0")
- E-17 GENERATOR TRANSFORMER RELAY CABINET (EL. 2033'-0")
- E-18 RACEWAYS INSIDE BLDG. FROM E17 TO E15, E14, E17
- E-19 DUCT BANKS EMER. FUEL OIL TANKS
- E-20 ANNUNCIATOR CONTROL PANEL
- E-21 COMPUTER I/O CABINET
- E-22 RACEWAYS INSIDE BUILDING FROM E17 TO E12, E13, E-20 & E-21

TI APERTURE CARD

VENT RELEASE POINTS

- ① UNIT VENT (EL. 2200'-0"; SEE NOTE 12)
- ② TURBINE BUILDING VENT (EL. 2140'-0"; SEE NOTE 14)
- ③ RADWASTE BUILDING VENT (EL. 2055'-6"; SEE NOTE 12)
- ④ STACKS FOR DIESEL EXHAUST (TOP EL. 2076'-0")
- ⑤ VENT STACK FOR AUXILIARY BOILER (TOP EL. 2150'-0")

DOOR SCHEDULE			
DOOR NO.	SIZE (CLEAR OPENING)	DOOR NO.	SIZE (CLEAR OPENING)
D-1	3'-8" x 7'-0"	D-18	3'-8" x 7'-0"
D-2	10'-0" x 7'-0"	D-19	3'-8" x 7'-0"
D-3	10'-0" x 7'-0"	D-20	3'-8" x 7'-0"
D-4	3'-8" x 7'-0"	D-21	8'-0" x 12'-0"
D-5	3'-8" x 7'-0"	D-22	3'-8" x 7'-0"
D-6	3'-8" x 7'-0"	D-23	3'-8" x 7'-0"
D-7	17'-0" x 22'-0"	D-24	3'-8" x 7'-0"
D-8	3'-8" x 7'-0"		
D-9	3'-8" x 7'-0"		
D-10	17'-0" x 12'-0"		
D-11	6'-0" x 10'-0"		
D-12	10'-0" x 10'-0"		
D-13	3'-8" x 7'-0"		
D-14	3'-8" x 7'-0"		
D-15	3'-8" x 7'-0"		
D-16	3'-8" x 7'-0"		
D-17	10'-0" x 12'-0"		
D-18	17'-0" x 22'-0"		
D-19	3'-8" x 7'-0"		
D-20	3'-8" x 7'-0"		
D-21	8'-0" x 12'-0"		
D-22	3'-8" x 7'-0"		
D-23	3'-8" x 7'-0"		
D-24	3'-8" x 7'-0"		
D-25	3'-8" x 7'-0"		



REVIEW LEVEL 1

1	MTR. MTR. INLET	MTR. MTR. INLET
2	MTR. MTR. INLET	MTR. MTR. INLET
3	MTR. MTR. INLET	MTR. MTR. INLET
4	MTR. MTR. INLET	MTR. MTR. INLET
5	MTR. MTR. INLET	MTR. MTR. INLET
6	MTR. MTR. INLET	MTR. MTR. INLET
7	MTR. MTR. INLET	MTR. MTR. INLET
8	MTR. MTR. INLET	MTR. MTR. INLET
9	MTR. MTR. INLET	MTR. MTR. INLET
10	MTR. MTR. INLET	MTR. MTR. INLET
11	MTR. MTR. INLET	MTR. MTR. INLET
12	MTR. MTR. INLET	MTR. MTR. INLET
13	MTR. MTR. INLET	MTR. MTR. INLET
14	MTR. MTR. INLET	MTR. MTR. INLET
15	MTR. MTR. INLET	MTR. MTR. INLET
16	MTR. MTR. INLET	MTR. MTR. INLET
17	MTR. MTR. INLET	MTR. MTR. INLET
18	MTR. MTR. INLET	MTR. MTR. INLET
19	MTR. MTR. INLET	MTR. MTR. INLET
20	MTR. MTR. INLET	MTR. MTR. INLET
21	MTR. MTR. INLET	MTR. MTR. INLET
22	MTR. MTR. INLET	MTR. MTR. INLET
23	MTR. MTR. INLET	MTR. MTR. INLET
24	MTR. MTR. INLET	MTR. MTR. INLET
25	MTR. MTR. INLET	MTR. MTR. INLET

ADDED TIME PER DESIGNAL BEAS
 8-11-50 MTR. DESIGNAL
 8-11-50 MTR. DESIGNAL
 8-11-50 MTR. DESIGNAL

NO. DATE REVISIONS BY CHK. DESIGNED DRAWN CB

SCALE 1"=50'-0" DATE 8-27-74 DESIGNED DRAWN CB

BECHTEL
GATHERSBERG MARSHLAND

SNUPPS
PENINSULAR PLANT ARRANGMENT
STANDARD POWER SYSTEMS
& STRUCTURE INTERFACE

UTILITY SHEET NO. 10466 M-06001

DDAFAC

8410050571

PDR RUDS

