Cane Island 2
Combustion Turbine Major Inspection & Steam Turbine Minor Inspection
RFP# 2026-207
Questions & Answers – Revision 2 *– 6/8/26*

1Q: What is the expected start date and completion date for the outage?
1A: 4/18 Per RFP Outage will be in April 2027 and Duration – 40 Days or less breaker to breaker (LOTO to LOTO 36 Days).

2Q: Is union labor required?
2A: No.

3Q: Can you please provide relevant drawings of the valves, gas turbine, steam turbine, and generators?
3A: Will have to see what we have available.

4Q: Can you please provide previous outage/overhaul/inspection reports for the valves, gas turbine, steam turbine, and generators?
4A: Will have to see what we have available.

5Q: Would it be possible to get a picture of the nameplate of each generator? Or the information from the nameplate?

4.0 Combustion Turbine Generator
The combustion turbine generator is a GE model 7A6.
5.0 Steam Turbine Generator
The steam turbine generator is a GE model 5A6.

5A: See attached.

6Q: Is self log FME allowed (in reference to the FME attendant requirement)? If not, does the attendant need to be stationed at the entrance 100% of the time?
6A: An attendant would be normal

7Q: Is FME barrier tap sufficient or is a more robust barrier required to defined the FME zone
7A: Tape is sufficient with swing doors at the entrance/exit

8Q: Is customer accepting of having the bearing inspection performed onsite or is a shop inspection desired.
8A: Can do on site but needs to be NDE'ed.

9Q: What vibration equipment does FMPA have installed? Please define expectation of the GT and ST Vibration Monitoring Scope
9A: Bently 3500 on both CT and ST

10Q: Does FMPA have a mechanical labor type requirement or preference (i.e. Union or Non-Union)?
10A: No preference

11Q: Does FMPA need any support on consumable parts (nuts/bolts)?
11A: Please quote separate consumables kit for both CT and ST

12Q: Does customer have laps for valves?
12A: None at this time

13Q: Can FMPA provide dwgs of the HPSV and CV.
13A: Attached

14Q: Provide multiple pics of the steam turbine and generator all sides
14A: Attached

15Q: Provide mechanical outline dwg for steam turbine and generator
15A: Attached

16Q: For pre-shutdown checks on the ST, does FMPA want controls engineer onsite to validate and record these data requests?
16A: Yes

17Q: Pricing sheet includes - Check and Correct Turb-Gen Alignment (2 moves) for the ST. There is currently no scope to disassemble the coupling please confirm this is a scope meant for the ST.
17A: It's an adder for the ST if we decided we need to

18Q: Pricing sheet requests price for installation of a balance shot. Please confirm customer has parts and any installation tooling required.
18A: Believe tooling is on site

19Q: DOR states contractor to oversee any insulation removal/install, and scaffold. Please confirm request as indicated on DOR for these.
19A: Yes

20Q: Please define "Clean all components" for valves. Would this be as typical blast and NDE for valve disassembled components?
20A: Yes

21Q: With regards to the oil in the stator from the previous oil leak, how significant is the expected cleanup? Does the FMPA want a dedicated day to clean up?
21A: Minimum a day.

22Q: What manufacturer & model is the GT & ST control system.
22A: GEV MKVIe

23Q: What combustion system is on the GT, DLN1?
23A: DLN 1 standard

24Q: Pre-shutdown data – Does FMPA have a historian or want a company representative onsite to collect data on site? What type of historian does FMPA have?
24A: Yes, Mk6e and Pi

25Q: Confirm number of bearings to be inspected
25A: 2 on turbine

26Q: In regard to tuning, it states tune fuel oil if available. What does this mean. 1 day per fuel for tuning is required.
26A: We are working to re-commission the fuel oil on this machine. If it is available at the time, we will require tuning on FG and FO.

27Q: What manufacturer & model is the Automatic Voltage Regulator (AVR).
27A: GE EX2100e (both units)

28Q: Confirm "Walk Down and Visually Inspect the Static Excitation System" excludes AVR.
28A: Visual inspection – wiring, cabinet, etc.

29Q: Regarding tuning, it states tune fuel oil if available. Tuning requires 1 day per fuel. Can FMPA explain the situation where fuel oil would not be available, and should we quote tuning one fuel or both?
29A: See above. Currently FO is not available.

30Q: Please confirm that FMPA is providing both Capital and Consumable parts, along with all installation hardware.
30A: Confirm. Consumable parts quoted separately.

31Q: Please confirm that all Compressor Stators are being removed and replaced with new.
31A: Were replaced in 2016, not being replaced this outage.

32Q: Is reference for Dowel replacement and Machining for original axial dowels or have radial dowels been installed as well?
32A: I think there should be radial dowls as well.

33Q: Please confirm the size and quantity of dowels referenced for replacement.
33A: To be determined.

34Q: Please confirm that Alignment referenced is NOT a full tops on laser alignment and only a realignment of turbine & exhaust casing prior to re-doweling.
34A: It will be a full tops on with laser alignment.

35Q: Replacement shrouds blocks being supplied already drilled/machined and contain installation hardware?
35A: Row 1 already drilled, Row 2 and 3 will need to be drilled. All installation hardware provided.

36Q: To what level of Cleaning & Inspection is expected on a Rotor In Generator Minor? access being very limited.
36A: If asking about Gen. field, they are not much you can get to. Maybe retaining rings. Mostly cleaning of the oil on the CTG.

Figure 2: CIPP CT2 Generator Nameplate

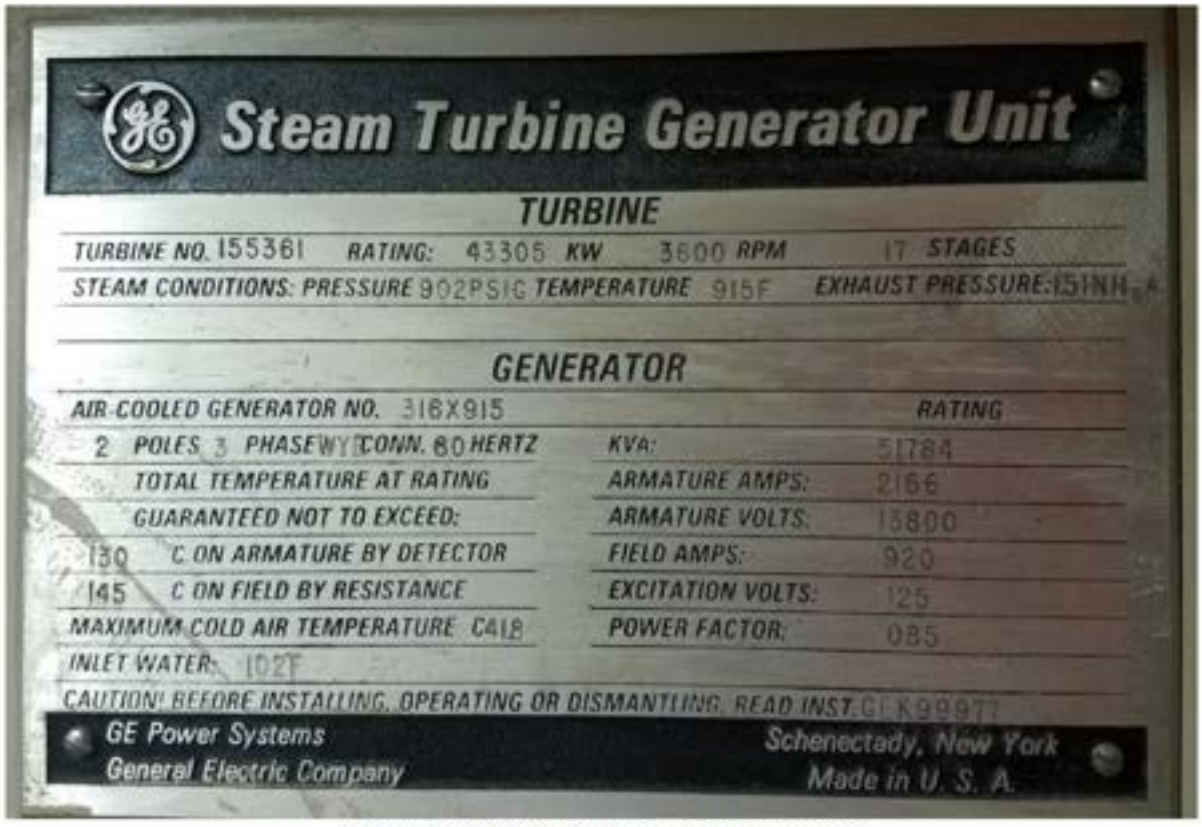


Figure 3: CIPP ST2 Generator Nameplate

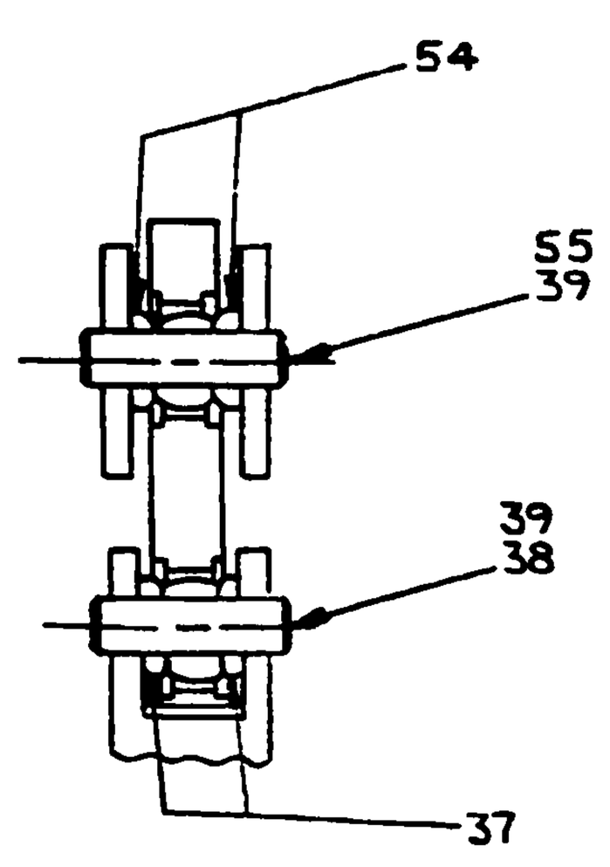
F.C.F. ON P.L. 511L216BB SIM. TO 509E546EC

E | 509E546FA | SH 1 | REV F

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	D.A.Condon, ADDED 155342 INFO TO TABLE III. FOR 155331, DIM "A" WAS .390 & DIM "B" WAS .461 IN TABLE III.	92/04/24	DAC
B	D.A.Condon ADDED 155349 INFO TO TABLE III (C-1).	93/01/6	DAC
C	K.A.Richard ADDED S.O. 155361 INFO. TO TABLE III (C-2)	94/01/12	S.A.Ricci
D	K.A.Richard ADDED S.O. 155383 INFO. TO TABLE III (C-2)	95/06/09	S.A.Ricci
E	B.M.Kerecsery ADDED S.O. 152341 TO TABLE III (C-1&2).	96/10/10	S.A.Ricci
F	GENERAL CHANGES 04025032 O. FRANCO	04/10/08	RM

THIS DRAWING TO BE REVISED ON FORMTEK ONLY



VIEW B-B
(D-7)
SEE NOTE 7

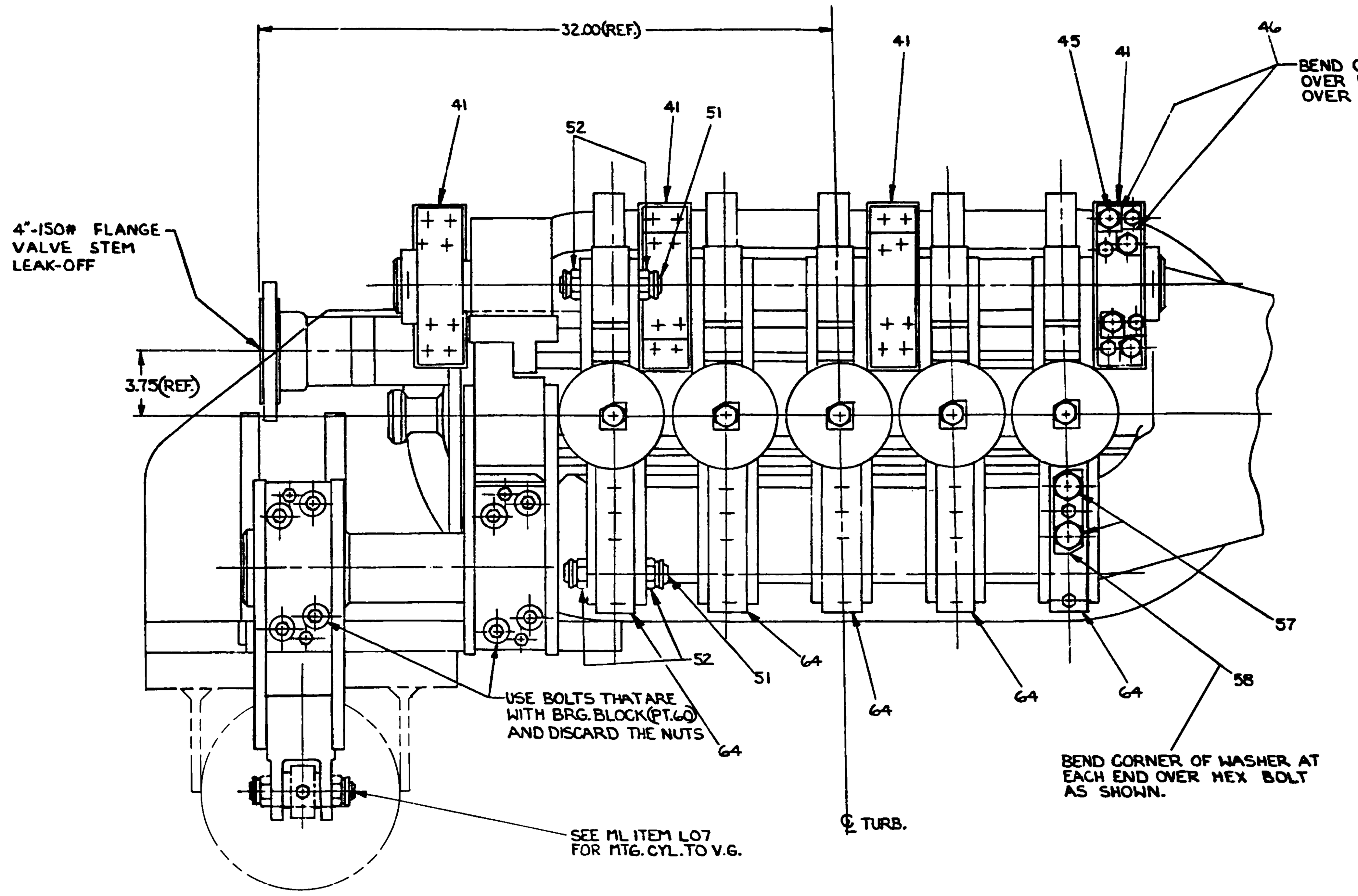
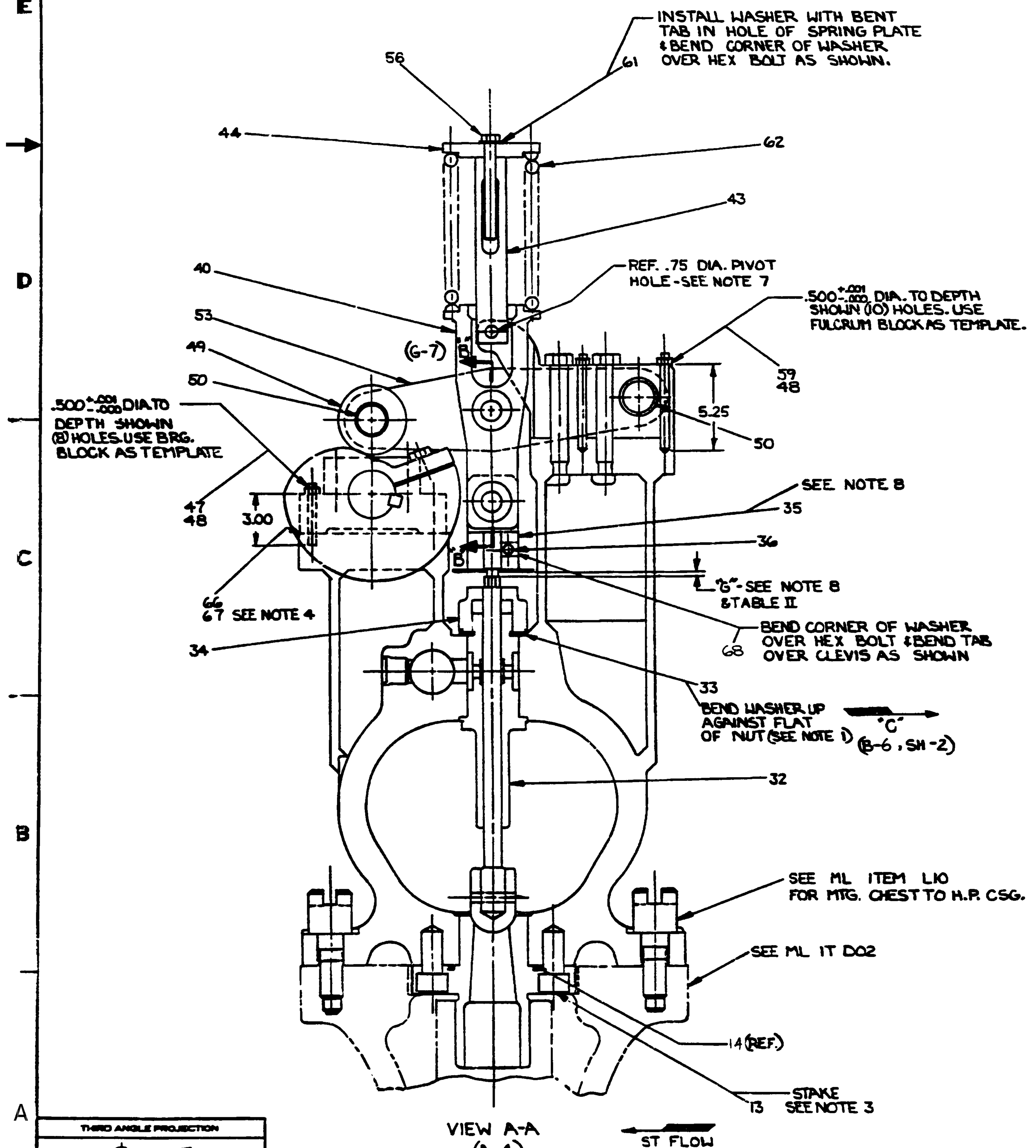


TABLE I
VALVE LIFT CHART

ORDER OF OPENING	VALVE NO.	VALVE STEM LIFT
1	V	ADJUST STEM OF VALVE V TO GIVE TOTAL STEM LIFT OF TABLE II. WITH VALVE V AT .031±.005 LIFT, SET OPERATING CYLINDER .50±.13 OFF BOTTOM, STOP BY ADJUSTING OPERATING CYLINDER PISTON ROD CLEVIS.
2	IV	SET AT .031 WHEN V IS UP D±.005 SEE TABLE III
3	III	SET AT .031 WHEN IV IS UP C±.005 SEE TABLE III
4	II	SET AT .031 WHEN III IS UP B±.005 SEE TABLE III
5	I	SET AT .031 WHEN II IS UP A±.005 SEE TABLE III

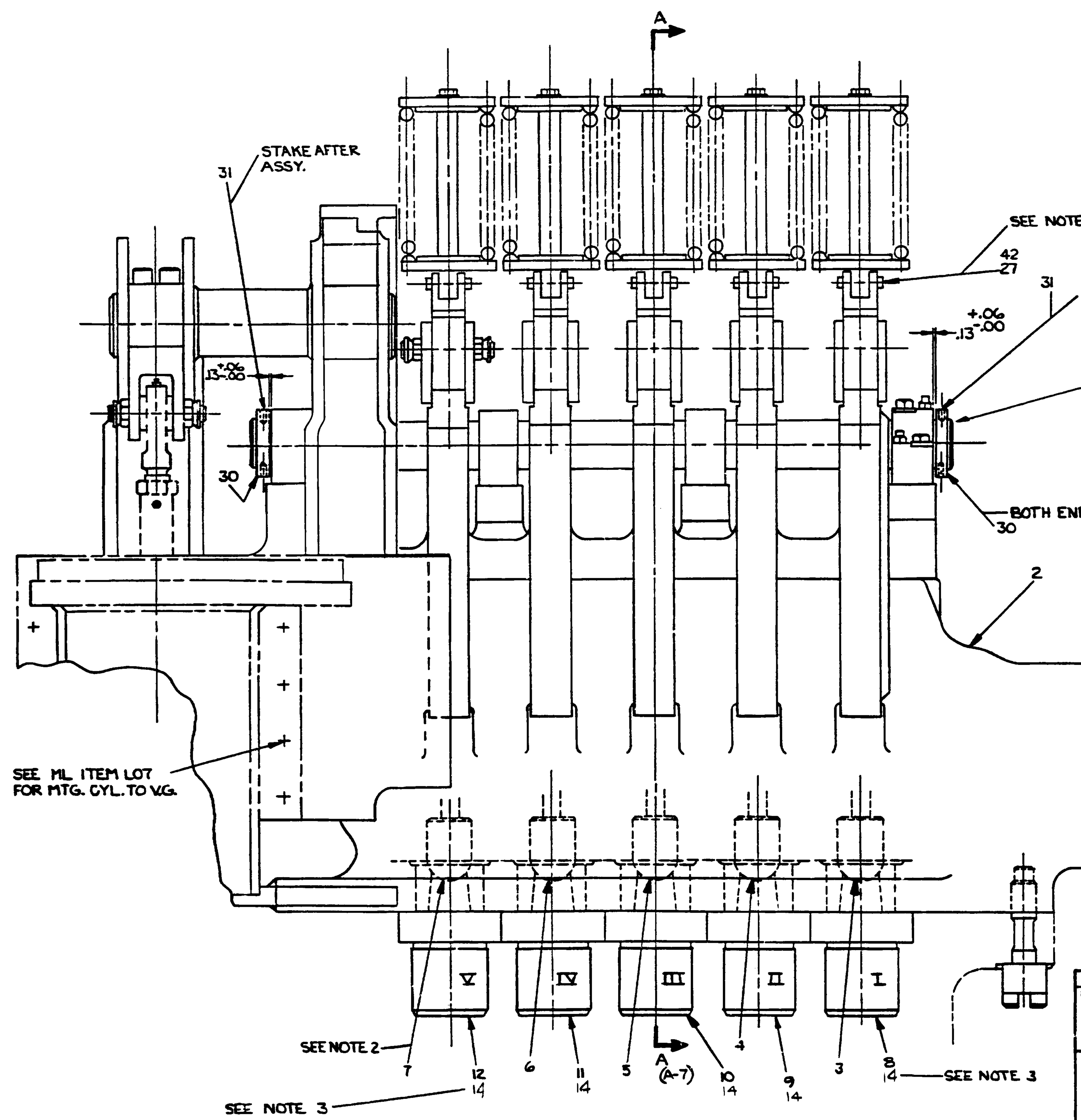
TABLE II
CHECK AFTER SETTING VALVES

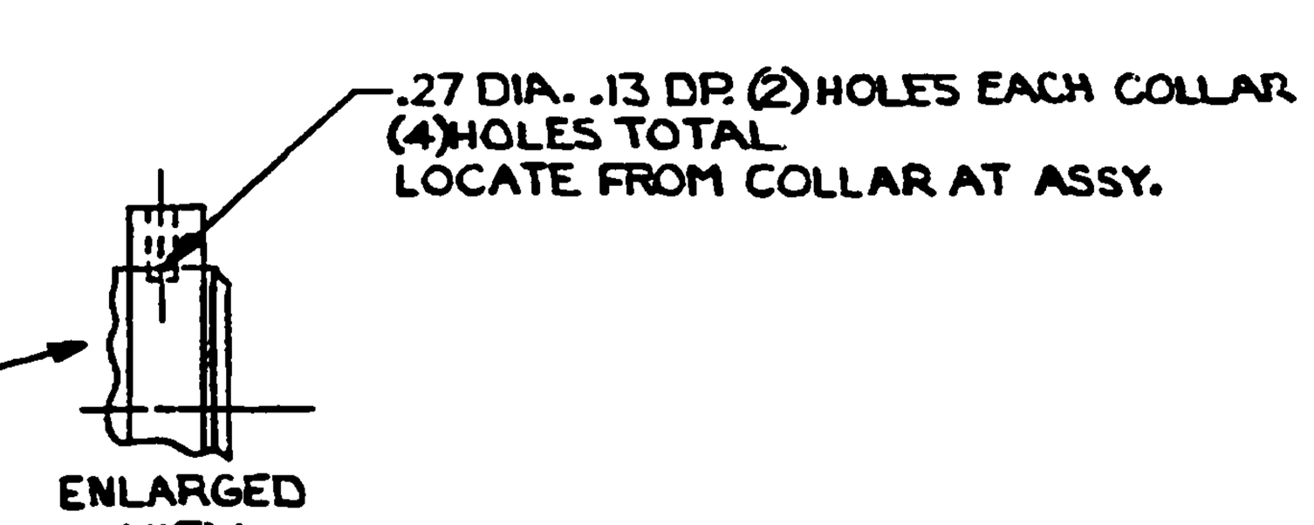
VALVE DESIGNATOR	TOTAL STEM LIFT±.094	PRELIMINARY STEM SETTING "G"
204 OR 304	.750	.72
205 OR 305	.844	.69
206 OR 306	.969	.63
207 OR 307	1.094	.56
208 OR 308	1.250	.47
209 OR 309	1.438	.38
210	1.656	.28



VIEW A-A
(A-4)

ST FLOW





ENLARGED VIEW

TABLE III

S.O.	DIM. A	DIM. B	DIM. C	DIM. D
155331	.470	.400	.460	.600
155342	.300	.350	.400	.350
155349	.433	.413	.434	.579
155361	.440	.497	.408	.573
155383	.538	.496	.581	.683
152341	.425	.360	.404	.534
1SX0067	.431	.473	.482	.576

F	F	REV	REV STATUS OF SHEETS
2	1	SH	

NOTES

1. SEE P.L. PT. 25 FOR NOTES (ASSEMBLY AND SETTING INSTRUCTIONS)

FOR STANDARD SHOP TOLERANCES SEE DWG. NO. 101A701AA

IDENTIFICATION AND MARKING TO BE IN ACCORDANCE WITH P23A-AF3

THIRD ANGLE PROJECTION

GENERAL ELECTRIC CO
NO. 55T FITCHBURG MA

V. GEAR ASSY.

(DA 225)

SIZE E | CAGE CODE 03302 | DWG NO 509E546FA | REV F

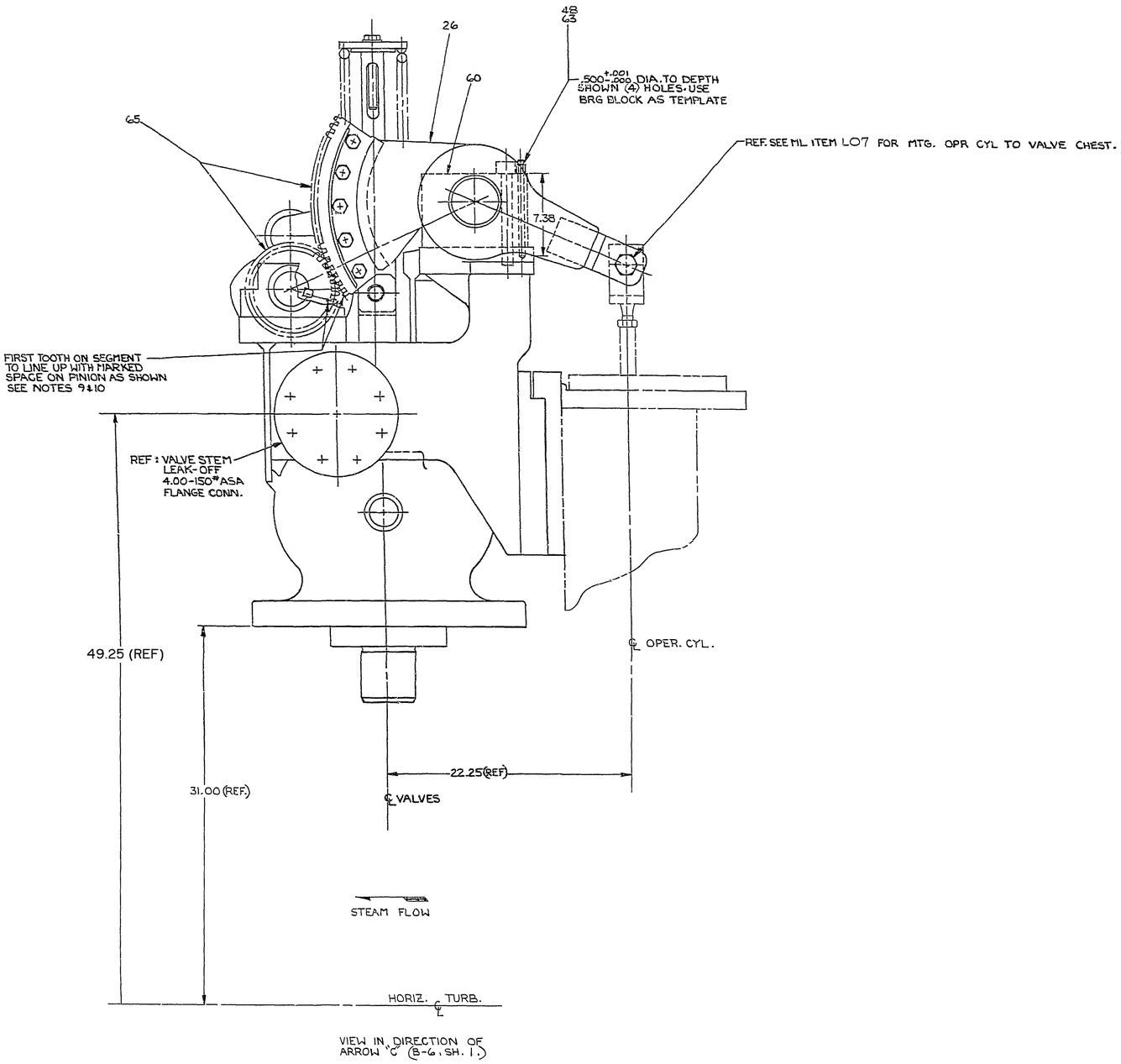
SHEET 1 OF 2

C05

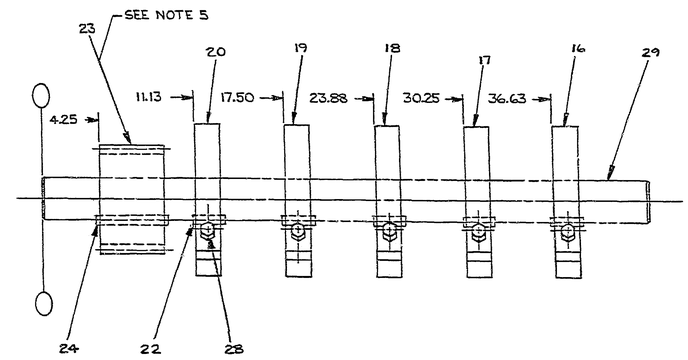
SIZE	DWG NO			
E	509E546FA	2	F	1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
F	GENERAL CHANGES 04025032 O. FRANCO	04/10/08	RM

THIS DRAWING TO BE REVISED ON FORMTEK ONLY



VIEW IN DIRECTION OF ARROW "C" (B-6, SH. 1.)



VIEW OF CAM SHAFT, CAMS & PINION

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES	DRAWN S.M. Worrall	91-5-3
TOLERANCES ON:	CHECKED S.A. Bacci	91-5-3
2 PL DECIMALS ±	ENGR	
3 PL DECIMALS ±	ISSUED F. Noble	91-5-3
ANGLES ±		
FRACTIONS ± ✓		

GENERAL ELECTRIC CO
N&SST FITCHBURG MA

V. GEAR ASSY.

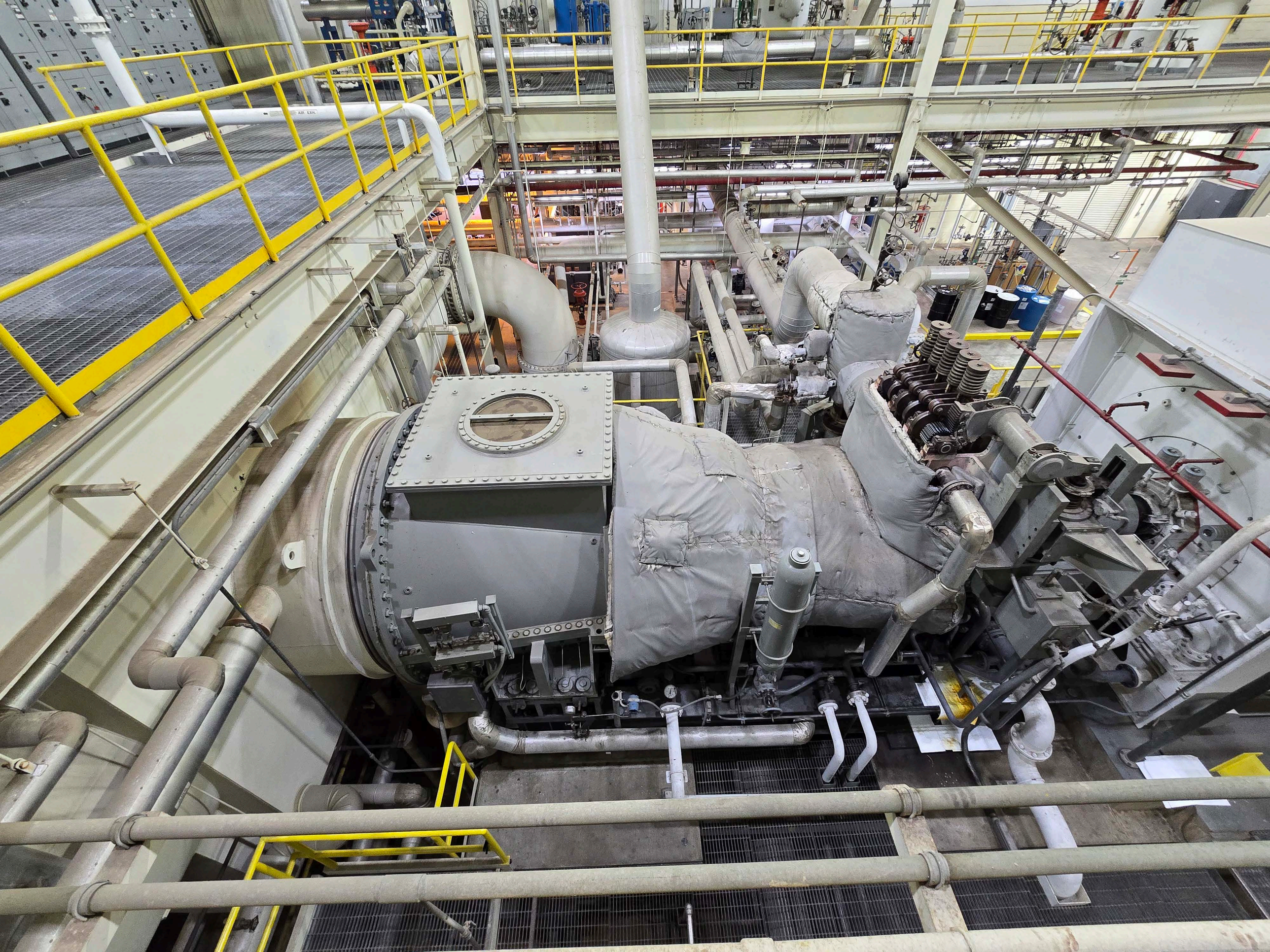
(DA225)

SIZE	CAGE CODE	DWG NO	REV
E	03502	509E546FA	F

SCALE NONE SHEET 2


AUX. COOLING WATER
AUX. COOLING WATER
AUX. COOLING WATER
AUX. COOLING WATER
AUX. COOLING WATER
AUX. COOLING WATER
GENERAL ELECTRIC


AUX. COOLING WATER
AUX. COOLING WATER
AUX. COOLING WATER


AIR EXH.


2B
GENERAL ELECTRIC


GENERAL ELECTRIC

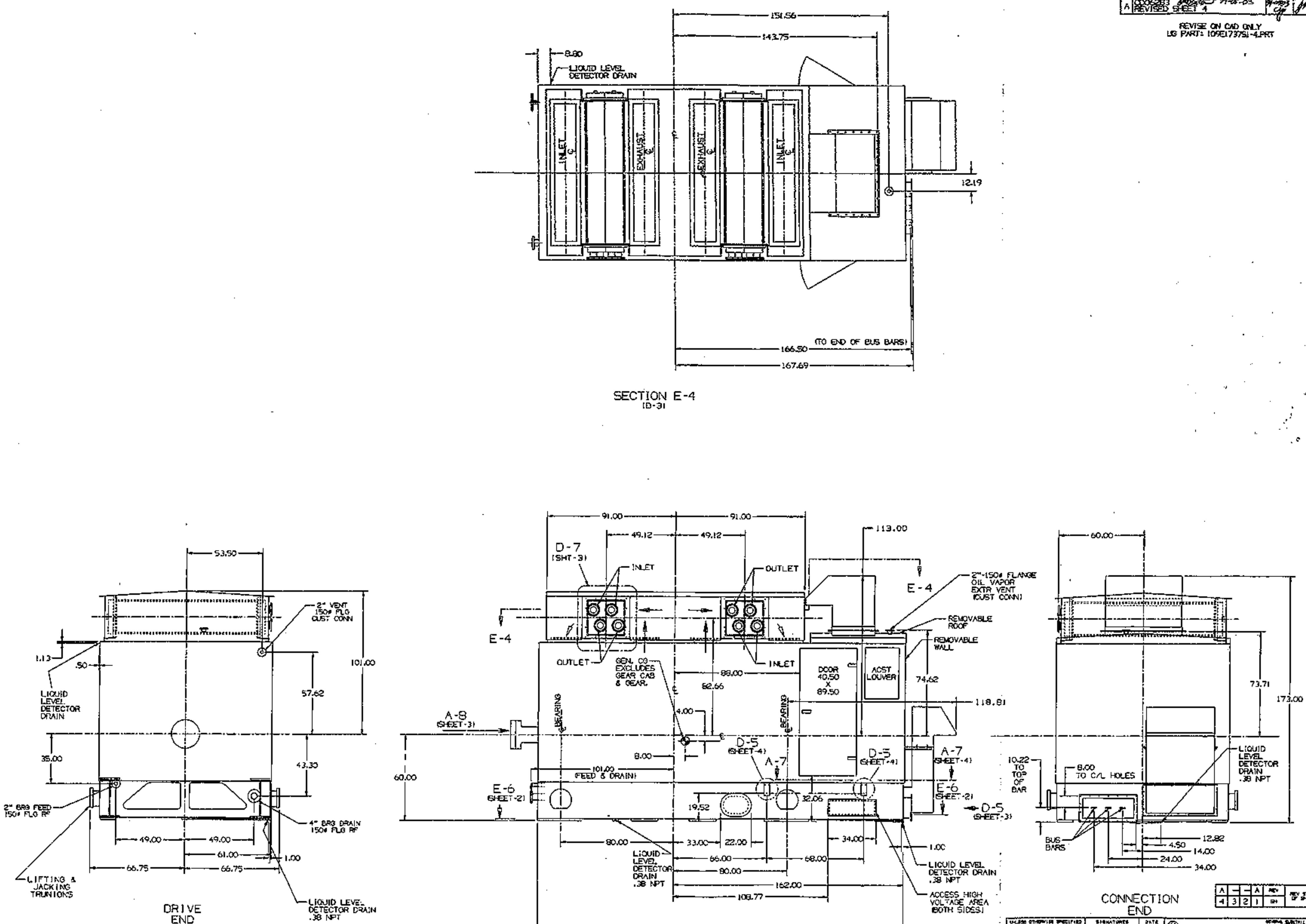

EAST
40 TONS
GENERAL ELECTRIC


BELOW
SEAT
DRAIN
JBX-7C
warning

109E1737 | 1 | A

REV	DESCRIPTION	DATE	APPROVED
A	0006283 94-05-03 REVISED SHEET 4		

REVISE ON CAD ONLY
UG PART: 109E1737S1-4.PRT



A	—	—	A	REV	REV STATUS OF SHEETS
4	3	2	1	SH	

SIGNATURES	DATE
J.H.Burton	94-02-15
J.H.Burton	94-02-25
... RANDALL	94-02-25
E.J.REK	94-02-25

GE Power Generation

MECHANICAL OUTLINE

FIRST MADE FOR 6A3 C064

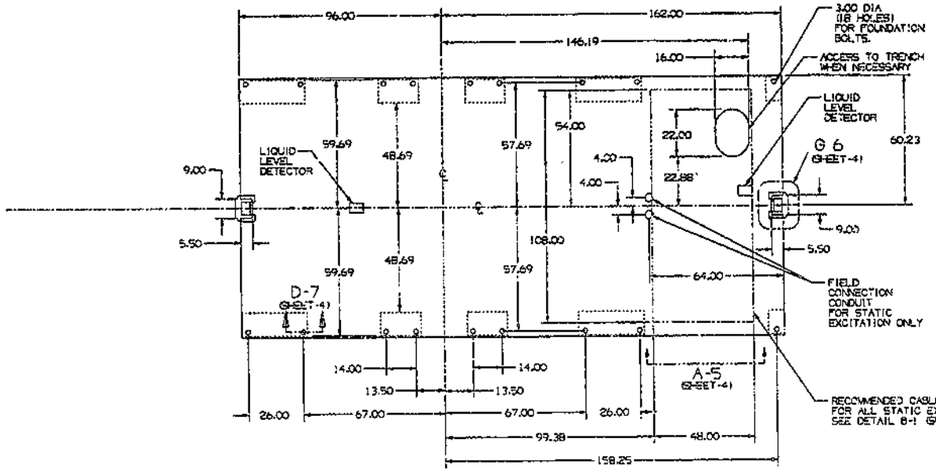
E 109E1737

SCALE NONE | SHEET 1

MADE FROM MAX CASE MODEL: C064_5A3-6A3_913.PRT

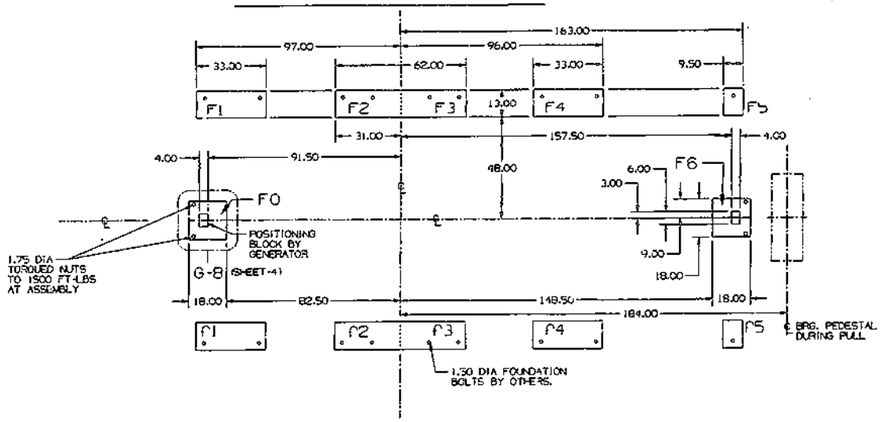
DT-2N

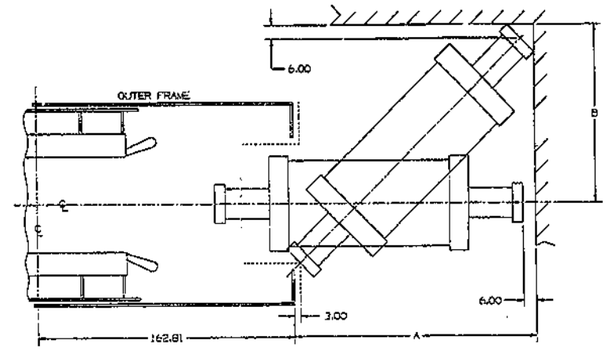
316x915 DA



SECTION E-6
B-3, SH-11

FOUNDATION PLATE REQUIREMENTS





DISTANCE REQUIRED TO REMOVE ROTOR		
METHOD OF REMOVAL	A	B
STRAIGHT PULL WITH CRANE	14FT 6.00	—
STRAIGHT PULL PAST OUTER FRAME	20FT 6.00	—
HORIZONTAL CANTED PULL	15FT 0.00	10FT 6.00

OVERALL ROTOR LENGTH = APPROX. 19 FT
LARGEST DIAMETER OF ROTOR BODY = APPROX. 37.00"

GENERATOR SIZE
APPROXIMATE WEIGHTS

SHIPPED WEIGHT

STATOR CORE	91,000
OUTER FRAME & SHIELD	21,000
BASE	33,000
ROTOR	35,000
PEDESTAL 5,000 EACH	10,000
EXCITER HOUSING	2,000
COOLER PACKAGE	8,000
SHIPPED WEIGHT	200,000 LBS.

6A3 FOUNDATION DESIGN LOADS/FOUNDATION PLATES

+Y, +X, 15 deg, +Z

SUPPORT LOCATION	DEAD LOAD Y	PSEUDO DYNAMIC LOAD Y	THERMAL LOAD (1) X	THERMAL LOAD (1) Z	NORMAL TORQUE Y (2)	EMERGENCY TORQUE LOAD Y (2)	(6) SNOW LOAD Y	SEISMIC LOAD (KIPS) +X FORCE (3) X	+X FORCE (3) Y	-X FORCE (3) X	-X FORCE (3) Y	+Z FORCE (3) Z	+Z FORCE (3) Y	-Z FORCE (3) Z	-Z FORCE (3) Y	Y FORCE Y (4)	WIND LOAD (KIPS) +X FORCE (5) X	+X FORCE (5) Y	+Z FORCE (5) Z	+Z FORCE (5) Y	-Z FORCE (5) Z	-Z FORCE (5) Y
F0	0	0	18.0	15.0	0	0	0	0	0	-70.0	0	35.0	0	-35.0	0	0	0	0	10.9	0	-10.9	0
F1	-25.0	-12.5	7.5	7.5	-1.2	-12.1	-0.5	0	13.1	0	-13.1	0	-9.1	0	9.1	-5.8	0	-8.0	0	1.4	0	-1.4
℄1	-25.0	-12.5	7.5	7.5	1.2	12.1	-0.5	0	13.1	0	-13.1	0	9.1	0	-9.1	-5.8	0	-8.0	0	-1.4	0	1.4
F2	-22.6	-11.3	6.8	6.8	-3.0	-30.2	-1.2	0	-8.8	0	8.8	0	-8.3	0	8.3	-5.2	0	11.4	0	3.6	0	-3.6
℄2	-22.6	-11.3	6.8	6.8	3.0	30.2	-1.2	0	-8.8	0	8.8	0	8.3	0	-8.3	-5.2	0	11.4	0	-3.6	0	3.6
F3	-19.7	-9.8	5.9	5.9	-1.8	-18.1	-0.7	0	6.9	0	-6.9	0	-7.2	0	7.2	-4.5	0	-3.8	0	2.2	0	-2.2
℄3	-19.7	-9.8	5.9	5.9	1.8	18.1	-0.7	0	6.9	0	-6.9	0	7.2	0	-7.2	-4.5	0	-3.8	0	-2.2	0	2.2
F4	-30.0	-15.0	9.0	9.0	-4.2	-41.7	-1.6	0	-9.9	0	9.9	0	-11.0	0	11.0	-6.9	0	0.4	0	5.0	0	-5.0
℄4	-30.0	-15.0	9.0	9.0	4.2	41.7	-1.6	0	-9.9	0	9.9	0	11.0	0	-11.0	-6.9	0	0.4	0	-5.0	0	5.0
F5	-2.7	-1.3	0.8	0.8	-1.5	-15.4	-0.6	0	-1.4	0	1.4	0	-1.0	0	1.0	-0.6	0	0.1	0	1.8	0	-1.9
℄5	-2.7	-1.3	0.8	0.8	1.5	15.4	-0.6	0	-1.4	0	1.4	0	1.0	0	-1.0	-0.6	0	0.1	0	-1.8	0	1.8
F6	0	0	18.0	15.0	0	0	0	70.0	0	0	0	35.0	0	-35.0	0	0	-10.1	0	10.9	0	-10.9	0

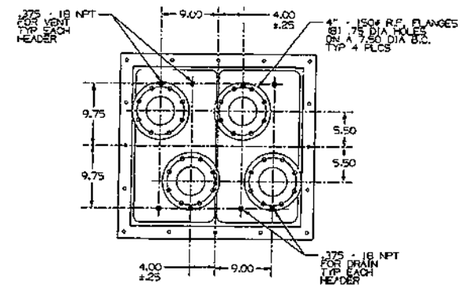
NOTES:

1. THERMAL FRICTION LOADS ARE THE MAXIMUM FOR THE GIVEN SUPPORT PADS, AND MAY NOT OCCUR SIMULTANEOUSLY AT ALL SUPPORT LOCATIONS.
2. NORMAL AND EMERGENCY TORQUE LOADS MAY BE FACTORED DOWNWARDS FOR GENERATOR RATINGS (KVA) LESS THAN 58000 KVA BY MULTIPLYING THE IDENTIFIED LOADS BY THE FACTOR (KVA/58000). LOAD DIRECTIONS ARE BASED ON CLOCKWISE ROTATION OF THE ROTOR VIEWED FROM THE COLLECTOR END.
3. SEISMIC LOADS MAY BE FACTORED DOWNWARD FOR HORIZONTAL SEISMIC ACCELERATIONS (Gh) LESS THAN 0.35g BY MULTIPLYING THE IDENTIFIED LOADS BY THE FACTOR (Gh/0.35g).
4. SEISMIC LOADS MAY BE FACTORED DOWNWARD FOR VERTICAL SEISMIC ACCELERATIONS (Gv) LESS THAN 0.23g BY MULTIPLYING THE IDENTIFIED LOADS BY THE FACTOR (Gv/0.23g).
5. WIND LOADS MAY BE FACTORED DOWNWARD FOR HORIZONTAL WIND PRESSURES (Ph) LESS THAN 80 PSF BY MULTIPLYING THE IDENTIFIED LOADS BY THE FACTOR (Ph/80 PSF). THE GENERATOR IS SHELTERED BY THE TURBINE FROM WIND LOADS IN THE +X DIRECTION.
6. SNOW LOADS MAY BE FACTORED DOWNWARD FOR SNOW PRESSURES (Ps) LESS THAN 40 PSF BY MULTIPLYING THE IDENTIFIED LOADS BY THE FACTOR (Ps/40 PSF).
7. FOUNDATION LOADS ARE BASED ON THE STATED DESIGN LOAD FACTORS, AND MAY BE SCALED TO SITE SPECIFIC CONDITIONS IN ACCORDANCE WITH THE NOTES ABOVE. FOUNDATION LOADS SHALL NOT BE SCALED UPWARD TO SPECIFIC SITE CONDITIONS WHICH EXCEED THE STATED DESIGN LOAD FACTORS.

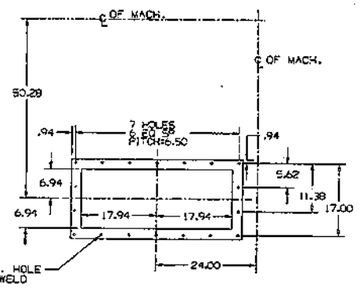
REVISE ON CAD ONLY
UG PART: 109E173751-4.PRT

109E1737 2

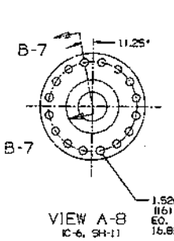
REVISE ON CAD ONLY
UG PART: 109E1737S1-4.PRT



VIEW D-7
(D-5, SH1)

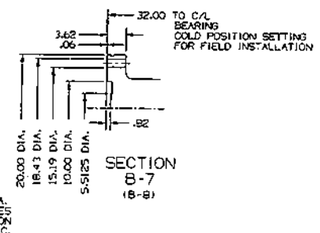


VIEW D-5
(B-2, SH-1)

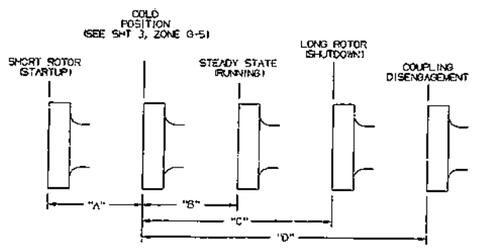


VIEW A-8
(C-6, SH-1)

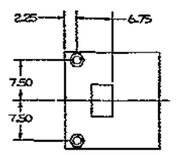
COUPLING CONNECTION



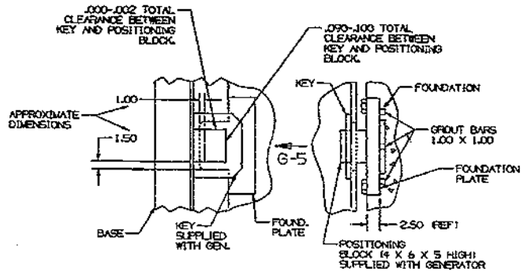
SECTION
8-7
(B-8)



SYM	TURBINE COUPLING EXCURSION FROM COLD POSITION DESCRIPTION	DIM
A	MAXIMUM TOWARD TURBINE	.016
B	STEADY STATE TOWARD GENERATOR	.072
C	MAXIMUM TOWARD GENERATOR	.220
D	MOVEMENT TO DISENGAGE COUPLING RABBET	.750
	GEN SHAFT + THERMAL EXP FROM COUPLING TO CE BRG @	11.30

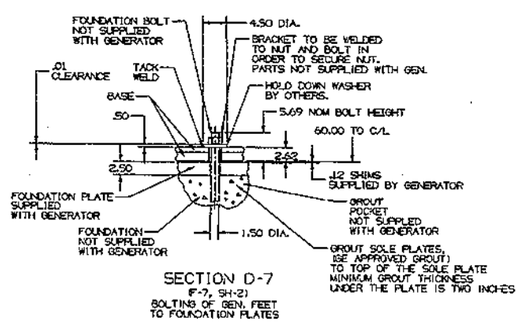


DETAIL G-8
(D-7, SH-2)

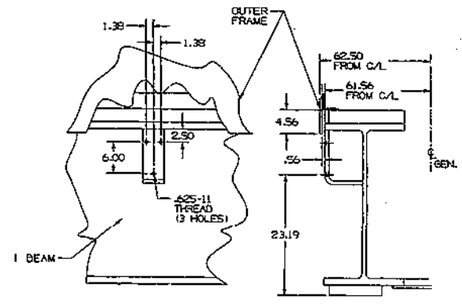


DETAIL G-6
(G-4, SH-2)

VIEW G-5
(G-6)

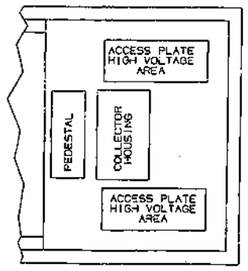


SECTION D-7
(F-7, SH-2)
BOLTING OF GEN. FEET TO FOUNDATION PLATES

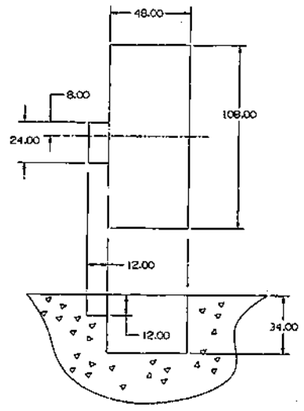


DETAIL D-5
(C-3,C-4, SH-1)

PLATFORM MOUNTING PAD



SECTION A-7
(C-3, SH-1)



DETAIL A-5
(F-5, SH-2)
CABLE ACCESS TRENCH

RECOMMENDED MINIMUM TRENCH DIMENSIONS SHOWN

109E1737

REVISE ON CAD ONLY
UG PART: 109E1737S1-4.PRT

GENERAL NOTES

1. FLEXIBILITY MUST BE PROVIDED IN ALL CONNECTIONS TO PREVENT TRANSMISSION OF EXCESSIVE STRAINS TO TURBINE. PIPING ALLOWABLE FORCES AND MOMENTS PER SHEET 8.
2. MINIMUM PIPE SIZES RECOMMENDED FOR SHORT DIRECT RUNS OF PIPE ARE: STEAM INLET 10 INCHES DIA: STEAM EXHAUST 98 INCHES: EXACT SIZES TO MAINTAIN CONTRACT CONDITIONS AT THE TURBINE CONNECTIONS TO BE DETERMINED BY CUSTOMER.
3. CUSTOMER TO CHECK RATING, STEAM INFORMATION, ROTATION AND DIRECTION OF EXHAUST.
4. A. VALVE STEM LEAK-OFFS SHOULD BE CONNECTED TO SEWER OR ATMOSPHERE WITHOUT POSITIVE HEAD OR SHUT OFF VALVES. LINES MAY BE MANIFOLDED PROVIDED TOTAL AREA IS EQUAL TO SUM OF INDIVIDUAL LEAK-OFF LINES.
   B. STOP VALVE ABOVE SEAT DRAINS SHOULD BE RUN THROUGH INDEPENDENT PIPE LINES AND CONNECTED TO ATMOSPHERE INDEPENDENT OF ALL OTHER PIPING WITH A SHUT OFF VALVE IN EACH LINE.
   C. STOP VALVE BELOW SEAT DRAINS SHOULD BE RUN THROUGH INDEPENDENT PIPE LINES AND CONNECTED TO MAIN CONDENSER INDEPENDENT OF ALL OTHER PIPING WITH A SHUT OFF VALVE IN EACH LINE.
   D. ALL OTHER DRAINS SHOULD BE INDEPENDENTLY RUN AND SHOULD BE CONNECTED TO CONDENSER WITH A SHUT OFF VALVE IN LINE.
5. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.
6. CUSTOMER CONNECTION LOCATIONS ARE WITHIN ±1.00 INCH, UNLESS OTHERWISE SPECIFIED.
7. OPTICAL ALIGNMENT PADS ARE PROVIDED ON THE TOP RAIL OF THE BASE FOR INSTALLATION, LEVELING AND ALIGNMENT. SEE INSTRUCTION BOOK FOR DETAILS.
8. THE LUBRICATION AND HYDRAULIC OIL IS A PREMIUM GRADE MINERAL BASED INHIBITED LIGHT TURBINE OIL, 150 SSU @ 100°F. SEE INSTRUCTION BOOK FOR DETAILS.
9. OIL TANK CHARGE CAPACITY IS APPROXIMATELY 1365 U.S. GALLONS.
10. IF THIS OUTLINE IS COMBINED WITH OTHER DRAWINGS, ALL NOTES MUST BE INCLUDED ON COMBINED DRAWINGS AS THESE COMMENTS ARE VITAL TO THE PROPER AND SAFE OPERATION OF THE TURBINE AND DRIVEN EQUIPMENT.
11. FOR ADDITIONAL DATA, REFERENCE THE FOLLOWING DRAWINGS:

GENERATOR OUTLINE	109E1737
P & ID	8777A54D155361
BILL OF MATERIAL	8777A23A155361
GLAND CONDENSER SYSTEM	70A55A10072
OIL PURIFIER DRAWING	
ELECTRICAL OUTLINE	8777A375155361
LIFTING ARRANGEMENT	8777K09E155361
GENERATOR INTERCONNECT DIAGRAM	109E2610
APPEARANCE LAGGING	165A962RA

12. DOWEL HOLES SHOULD BE REAMED AND ALIGNMENT DOWELS FITTED AFTER FINAL ALIGNMENT.
13. REMOVED
14. THE NOTES FOR CONSTRUCTION OF FOUNDATION ARE GE'S STANDARD RECOMMENDATION FOR FOUNDATION CONSTRUCTION. IT IS THE PURCHASER'S RESPONSIBILITY TO ASSURE ADEQUACY OF DESIGN.
15. THE PURCHASER IS TO PROVIDE THE FOLLOWING:
   A. A RIGID AND SUBSTANTIAL FOUNDATION, FOUNDATION BOLTS AND NUTS.
   B. SHIMS AND ALL FOUNDATION HARDWARE.
   C. ALL PIPING, VALVES, FITTINGS, BOLTS, STUDS, NUTS, GASKETS AND FLANGES TO CUSTOMER CONNECTIONS SHOWN WITH ALL DRAIN PIPING ARRANGED TO AVOID FORMATION OF POCKETS OR WATER LEGS.
   D. AN EXHAUST RELIEF VALVE ADJUSTED TO START RELIEVING AT NOT MORE THAN 5 PSIG AND GIVE FULL RELIEF TO 392805 LB/HR AT NOT MORE THAN 10 PSIG. THIS VALVE MUST BE INSTALLED BETWEEN THE TURBINE AND THE FIRST SHUT-OFF VALVE IN THE EXHAUST LINE. (NO EXHAUST RELIEF VALVE IS FURNISHED)
   E. UNCONTROLLED EXTRACTION (WHEN USED)
      1. TWO NON RETURN VALVES MUST BE INSTALLED IN SERIES IN THE CUSTOMER'S PIPING. THE FIRST NON RETURN VALVE MUST BE INSTALLED IN A HORIZONTAL POSITION LOCATED WITHIN 15 FEET OF THE TURBINE EXTRACTION FLANGE. THE SECOND NON RETURN VALVE MUST BE LOCATED NO MORE THAN 3 FEET DOWNSTREAM OF THE FIRST.
      2. REMOVED
   F. ACCESS HOLES CUT IN THE NEMA 4 ELECTRICAL BOXES FOR CUSTOMER RUN WIRING, CONDUIT AND FITTINGS.
   G. REMOVED
   H. STEAM ADMISSION
      1. THE 1ST ADMISSION VALVE MUST BE INSTALLED IN THE CUSTOMER'S PIPING WITHIN 25 FEET OF PIPE RUN OF THE TURBINE ADMISSION FLANGE. THE VALVE MUST BE INSTALLED IN A HORIZONTAL RUN OF PIPE.
      2. REMOVED
      3. THE ADMISSION STOP & INDUCTION VALVES ARE TO BE INSTALLED SO AS TO PROVIDE POSITIVE DRAINING FROM THE HYDRAULIC TRIP CYLINDER BACK TO THE OIL TANK.
   I. HEAT RETENTION MATERIAL (BLANKET TYPE) IS SUPPLIED FOR THE TURBINE CASING (EXCLUDING EXHAUST) ONLY. INSULATION IS NOT PROVIDED FOR TTVS, NRVS OR STEAM SEAL AND DRAIN PIPING.
   J. UNLESS OTHERWISE SPECIFIED, ALL PIPING BETWEEN THE TURBINE AND GENERATOR WILL REQUIRE A FIELD FIT.

⚠6 THE CONDENSATE LEVEL IN THE CONDENSER HOTWELL SHOULD NOT BE PERMITTED TO RISE TO A LEVEL WITHIN 76" BELOW THE TURBINE CENTERLINE AT THE ALARM POINT & 70" BELOW THE TURBINE CENTERLINE AT THE TURBINE TRIP POINT.

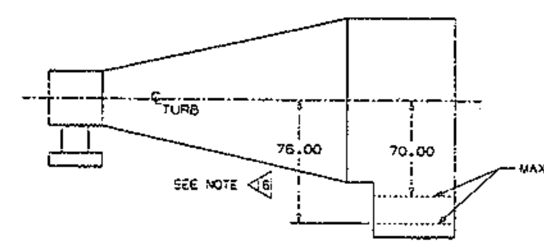
TURBINE STEAM INFORMATION	
LOAD (KW)	43205.0
INLET PRESSURE (PSIG)	897.0
INLET TEMPERATURE (°F)	958.0
EXHAUST PRESSURE ("HGA)	3.0
R.P.M.	3600.0

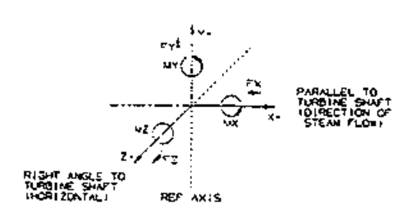
	TURBINE WEIGHTS	POUNDS
SHIPPED WEIGHTS	TOTAL WEIGHT OF ASSEMBLED TURBINE: INCLUDING - CASINGS, DIAPHRAGMS, ROTOR, FRONT STANDARD, VALVE GEAR, PIPING, BASE	160905
	STC / TRIP THROTTLE VALVE	7000
FOR MAINTENANCE PURPOSES	UPPER HALF, H.P. HEAD, EXHAUST CASING, INCLUDING DIAPHRAGMS, VALVE GEAR(S)	35119
	ROTOR (INCLUDING NOZZLE BOX)	22892

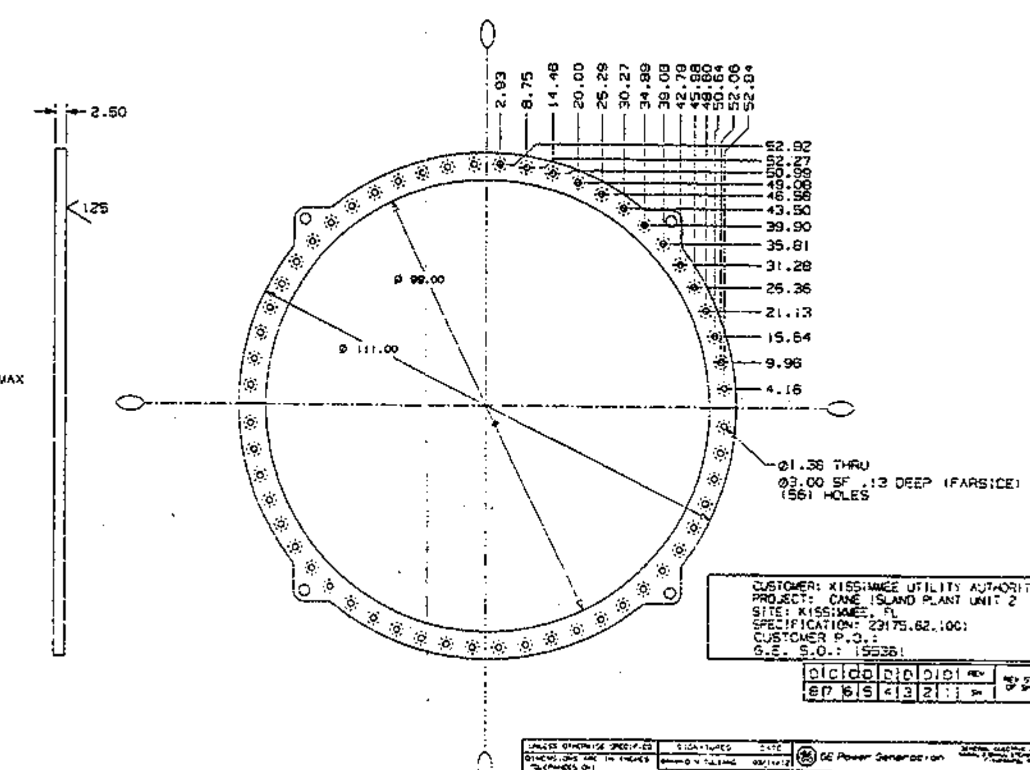
TABLE OF FREE TURBINE EXPANSION	X	Y	Z
H.P. SHAFT	-0.013	0.011	0.000
L.P. SHAFT STEADY STATE	0.656	0.039	0.000
TRANSIENT	0.525 TO 0.656	0.000 TO 0.000	0.000 TO 0.000
INLET (CONN AA)	0.131	0.362	0.550
EXHAUST (CONN AB)	0.651	0.020	0.000
1ST EXTR (AF)	0.255	-0.192	0.000
1ST ADM (AC)	0.440	-.145	0.000
HP SHAFT TRANSIENT	-0.010 TO -0.013	0.000 TO 0.000	0.000 TO 0.000

REVISE ON CAD ONLY
UG PART: 8777A01E155361SH1-2.PRT

REV	DESCRIPTION	DATE	APPROVED
A	D R TULIANO DEL "...AND HOLD DOWN BOLTS AND DOWELS FOR THE GEARBOX" FROM NOTE 13. DEL NOTE 15.E.2. "THE CUSTOMER PIPE SUPPORT SYSTEM TO INCLUDE A SUPPORT DESIGNED FOR THE FIRST NON RETURN VALVE WEIGHING____POUNDS AND THE SECOND WEIGHING __POUNDS." DEL NOTE 15.G. "THE CUSTOMER PIPE SUPPORT SYSTEM SHOULD INCLUDE A SUPPORT ADJACENT TO THE TURBINE INLET CONNECTION DESIGNED FOR A TRIP THROTTLE VALVE WEIGHT OF ____ POUNDS. NOTE 15.H.1. WAS "THE ADMISSION TTV MUST BE INSTALLED IN THE CUSTOMER'S PIPING WITHIN 25 FT OF PIPE RUN OF THE TURBINE ADMISSION FLANGE. THE VALVE MUST BE INSTALLED IN A HORIZONTAL RUN OF PIPE WITH THE HAND WHEEL STEM ____. THE VALVE STEM IF HORIZONTAL WILL POINT ____." DEL NOTE 15.H.2. "THE ADMISSION TRIP THROTTLE VALVE MUST BE LOCATED SO IT IS ACCESSIBLE BY THE TURBINE OPERATOR FOR MACHINE START-UP AND SHUT DOWN. NOTE 15.H.3. WAS "THE TTV IS TO BE INSTALLED SO TO PROVIDE ..." DEL 1ST UNC EXTR PRESS FROM TURB STEAM INFO TABLE. ADDED TURB EXPANSION DATA. ADDED 125 FINISH TO EXH FLANGE FACE. REV SH 2,4 & 8.	93/11/23	D R TULIANO
B	D.A.CONLON .362 WAS .182 (E-3). ADDED TURB WTS (H-3). ADDED 101E1737, 70A55A10072 & 109E2610 TO NOTE 11 (E-8). ADDED 5 PSIG, 10 PSIG & 392805 TO NOTE 15D (D-8).	94/02/25	D.A.C.
C	D.A.CONLON THIS REV SH2-7.	94/03/30	D.A.C.
D	DELETED NOTE 13 "GE TO FURNISH SHIMS, HOLD DOWN BOLTS, DOWELS AND JACKING SCREWS FOR HORIZ AND VERT POSITIONING OF THE TURB ON THE BASEPLATE". DELETED "SOLEPLATES" FROM NOTE 15B. ADDED "CUSTOMER" TO NOTE 15C. THIS REV SH3,4,5,2,8	94/06/15	S.A.C.







DETAIL OF EXHAUST FLANGE "AB"

CUSTOMER: KISSIMMEE UTILITY AUTHORITY
PROJECT: CANE ISLAND PLANT UNIT 2
SITE: KISSIMMEE, FL
SPECIFICATION: 23175.62.100)
CUSTOMER P.O.:
G.E. S.O.: 155361

REV	D	C	D	D	D	D	D	D	REV STATUS OF SHEETS
SH	8	7	6	5	4	3	2	1	

GE Power Generation

OUTLINE (FINAL)

E 03802 8777A01E155361

SCALE NONE

E 8777A01E155361 2 D

REVISE ON CAD ONLY
UG PART: 8777AC1E155361SH1-2.PRT

REV	DESCRIPTION	DATE	APPROVED
A	D R TULIANO IDENTIFIED ALL CONN EXCEPT AA,AB,AC&AF. AA WAS X:-242.63 Y:-5.5 Z:31.25, AC WAS Y:-43.5.	93/11/23	D R TULIANO
B	D.A.CONLON CONN AA Y DIM 54.13 WAS 26.13. CONN WA WAS DY, WB WAS DZ, DM WAS WC, DN WAS WD, DP WAS WE, DO WAS WF, JA2 WAS JA1, LE WAS JB1, LF WAS JB3 & JC2 WAS JC1. ADDED CUST LOCATIONS FROM AX THRU VZ.	94/02/25	D.A.C.
C	D.A.CONLON CONN AK FLG SIZE WAS 1.0. CONN CX, X WAS -96.00. CONN LE, Y WAS -36.00 & Z WAS -35.00.	94/03/30	D.A.C.
D	[illegible] CONN CF ADDED 1.0-600#, X WAS 0.00, Y WAS 0.00.	94/06/15	[illegible]

CUSTOMER CONNECTIONS					LOCATION OF CONNECTIONS			
	STEAM	NPT	FLG SIZE	ANSI LBS	X	Y	Z	REMARKS
AA	STOP VALVE INLET		10.0	1500	-182.94	54.13	79.25	
AB	EXHAUST		96.0		0.00	0.00	0.00	
AC	FIRST ADMISSION		12.0	300	-130.94	-44.25	0.00	
AF	FIRST EXTRACTION (UNCONTROLLED)		8.0	600	-163.31	-32.00	0.00	
AK	STOP VALVE HP STEM LEAKOFF		1.5	1500	-161.94	34.13	64.25	
AL	TRIP THROTTLE (STOP) VALVE LP STEM LEAKOFF		1.0	1500	-161.94	30.00	56.75	
AM	STOP VALVE ABOVE SEAT DRAIN		1.0	1500	-146.75	49.13	56.75	
AN	STOP VALVE BELOW SEAT DRAI		1.0	1500	-148.75	35.88	49.25	
CF	FIRST STAGE CASING DRAIN		1.0	600	-163.31	-49.13	0.00	
CG	JUMPER PIPE DRAIN		0.75	300	-178.03	-54.36	0.78	
CW	STEAM SEAL SUPPLY/MAKEUP		2.0	300	-255.00	-66.00	97.25	
CX	STEAM SEAL RE-ENTRY DRAIN, FROM DUMP VALVE		0.75	300	-109.00	-77.19	66.22	
DA	STEAM SEAL PIPING TO GLAND CONDENSER		6.0	300	-148.00	-59.00	55.00	
DB	STEAM SEAL DRAIN		0.75	300	-172.44	-77.19	97.25	
DM	BASKET TAP	1.00			-8.44	-7.00	49.63	
DN	BASKET TAP	1.00			-8.44	-7.00	-49.63	
DO	BASKET TAP	1.00			-9.50	25.13	-43.50	
DP	BASKET TAP	1.00			-8.50	25.13	43.50	
WA	MOISTURE DRAIN		6.0	150	-26.97	-63.76	[illegible]	
WB	MOISTURE DRAIN		3.0	150	-26.97	-64.91	[illegible]	
	OIL							
JA2	LUBE OIL SUPPLY		3.0	150	-154.44	[illegible]	-55.00	
JC2	CONTROL (HYDRAULIC) OIL SUPPLY		2.5	300	-163.81	40.00	-55.00	
JE1	CONTROL (HYDRAULIC) OIL TRIP HEADER SUPPLY		1.5	300	-230.50	[illegible]	55.00	
JF1	CONTROL (HYDRAULIC) OIL TRIP HEADER SUPPLY		0.5	300	-222.00	30.00	50.44	
JJ1	GENERATOR LUBE OIL SUPPLY		2.0	150	-252.31	-45.00	-37.50	
JJ2	GENERATOR LUBE OIL SUPPLY		2.0	150	-276.75	-35.00	49.00	
JK1	GENERATOR DRAIN		4.0	150	-279.75	-43.30	-49.00	
JK2	GENERATOR DRAIN		4.0	150	-240.50	-35.94	-43.81	
JL1	GENERATOR DRAIN VENT		2.0	150	-278.75	57.62	-53.50	
JL2	GENERATOR DRAIN VENT		3.0	150	-248.61	13.22	-53.50	
LE	LUBE DRAIN		8.0	150	-228.50	-49.00	-69.75	
LF	LUBE DRAIN		4.0	150	-93.31	-44.13	-55.00	
	AIR *12.00							
GD	TRIP SIGNAL TO NON-RETURN VALVES	0.75			-233.31	-11.66	35.50	
GL	SUPPLY TO TRIP RELAY	0.75			-230.50	-13.13	38.31	
GM	SUPPLY TO STEAM SEAL SUPPLY AND DUMP VALVE	0.25			-224.00	-35.00	93.00	
	ELECTRICAL *12.00							
MX	STOP VALVE TERMINAL BOX				-181.06	-7.53	73.03	*1, *2
PD	INLET CONTROL VALVE TERMINAL BOX				-216.44	37.88	-57.50	*1
PV	EXHAUST END TERMINAL BOX				-12.75	-27.75	-53.31	*1
PW	MAIN TERMINAL BOX				-238.63	-28.25	-23.81	*1
PX	HP VIB DETECTOR, ROTOR POSITION AND KEYPHA				-256.00	-26.63	-5.00	*1
SC	TURNING GEAR MOTOR	0.75			-223.06	-4.81	30.25	
SG	TURNING GEAR AND LP END ACCESSORIES				-342.63	17.86	30.75	*1
SP	STEAM PRESS TRANSMITTER TERM BOX				-158.44	-21.53	48.63	*1
TT	TURBINE INSTRUMENTATION, HP END				-249.00	-37.50	50.44	*1
TV	TURBINE INSTRUMENTATION, LP END				-12.75	-27.75	53.31	*1
VM	H.P. BRG DRAIN RTD	0.50			-221.68	-38.50	-28.00	
VN	L.P. BRG DRAIN RTD	0.50			-93.31	-39.13	-45.25	
VZ	ADMISSION STEAM RTD	0.50			-130.94	-37.69	-21.75	

*1 COORDINATE LOCATIONS ARE TO BOTTOM CENTER OF BOX
*2 (2) Ø1.38 HOLES FOR 1.00 CONDUIT IN BOTTOM OF BOX

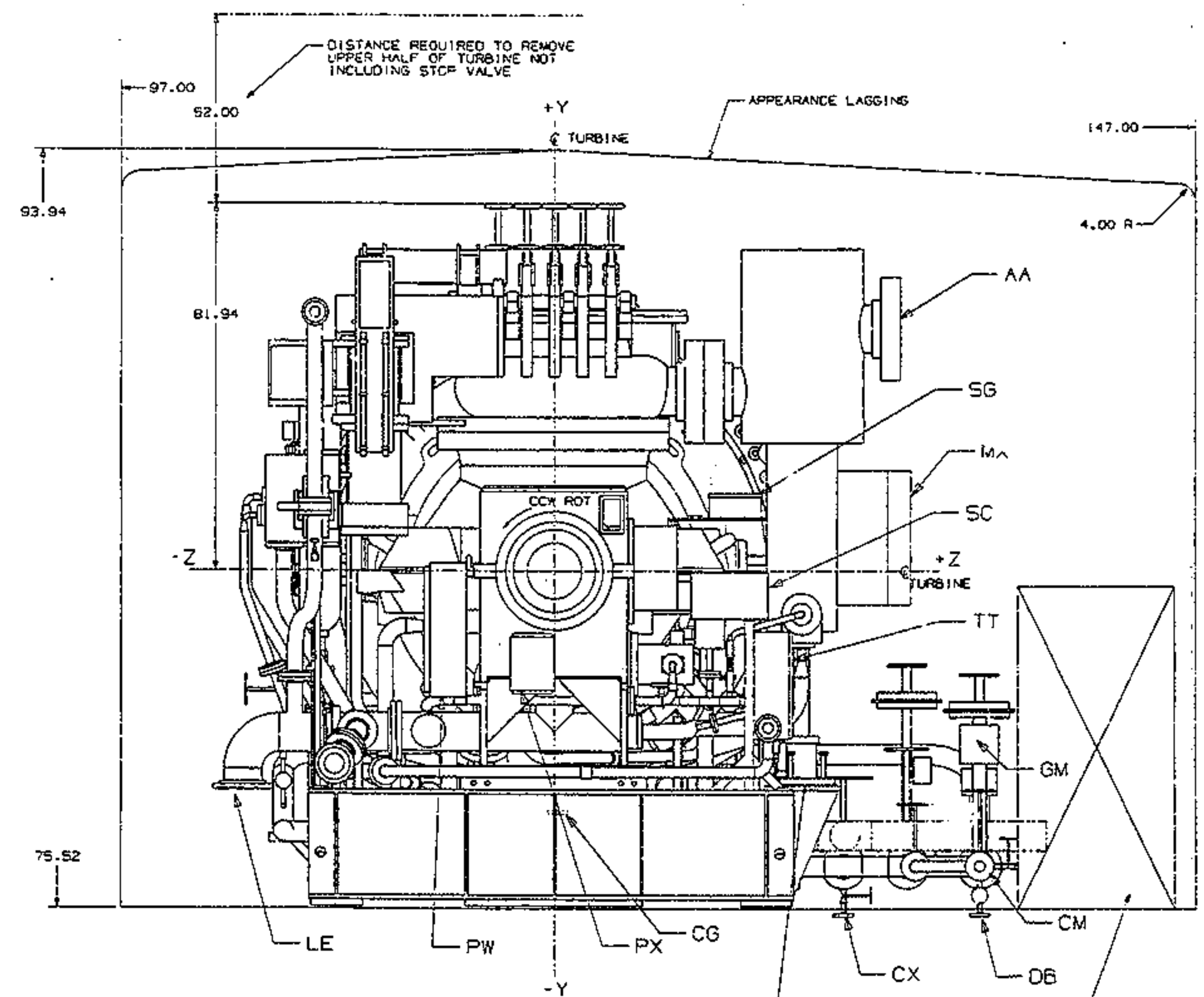
CUSTOMER: KISSIMMEE UTILITY AUTHORITY
PROJECT: CANE ISLAND PLANT UNIT 2
SITE: KISSIMMEE, FL
SPECIFICATION: 23175.62.1001
CUSTOMER P.O.:
G.E. S.O.: 155361

D.R. TULIANO 93/11/12
E 03502 8777AC1E155361

E 8777A01E15536I 3 D

REVISE ON CAD ONLY
UG PART: 8777A01E15536ISH3-A.PRT

REV	DESCRIPTION	DATE	APPROVED
B	D.A.CONLON ADDED PIPING AND CUST CONNS. SEE SH2 FOR DETAILS.	94/02/25	D.A. CONLON
C	D.A.CONLON DIM 52.00 WAS 42.00 (G-6). REVISED CUST CONN LE LOCATION (D-6).	94/03/30	D.A.C.
D	ADDED DELINEATION & RELATING DIMENSIONS OF APPEARANCE LAGGING. MOVED CONN CG TO CORRECT LOCATION (D-5). ADDED TTV SUPT NOTE (C-3)	94/06/15	S.C.C.



VIEW IN DIRECTION OF STEAM FLOW

LOWER THE TTV ONTO THE SPRING SUPPORT WITH THE CRANE. ALIGN THE VALVE WITH THE TURBINE INLET CONNECTION BY EVENLY ADJUSTING THE THREE JACKING BOLTS. THE SPRING SUPPORT IS NOW SUPPORTING THE WEIGHT OF THE TTV IN THE COLD CONDITION WHILE THE CRANE STABILIZES THE VALVE. ATTACH THE TTV TO THE TURBINE. JACK THE SPRING SUPPORT AN ADDITIONAL 0.362 INCHES SO THAT THE SPRING SUPPORT WILL CARRY THE FULL WEIGHT OF THE TTV DURING THE HOT CONDITION.

CUSTOMER: KISSIMMEE UTILITY AUTHORITY
PROJECT: CANE ISLAND PLANT UNIT 2
SITE: KISSIMMEE, FL
SPECIFICATION: 23175.62.1001
CUSTOMER P.O.:
G.E. S.O.: 155361

SEE SHEET 1 FOR NOTES

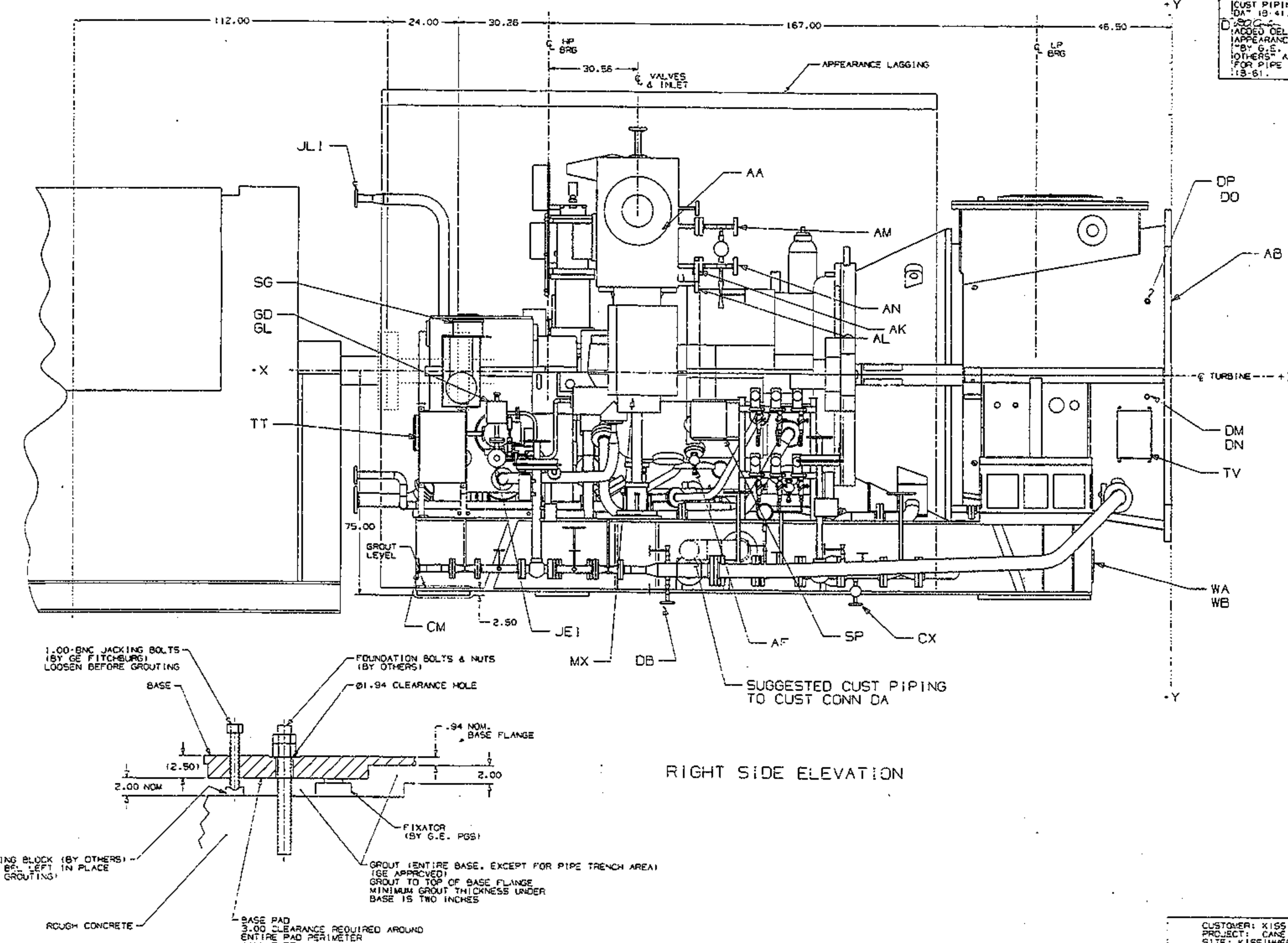
E 07502 8777A01E15536I D

E 8777A01E15536I 4 D

REVISE ON CAD ONLY
UG PART: 8777A01E15536ISH3-B.PRT

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	D.R. TULIANO DEL ±12.00 TOL FROM 157.00 (G-4).	93/11/23	D.R. TULIANO
B	D.A. CONLON ADDED PIPING AND CUST CONNS. SEE SH2 FOR DETAILS.	94/02/25	D.A.C.
C	D.A. CONLON REVISED CUST CONN CX LOCATION (C-3). REVISED DELINEATION OF "SUGGESTED CUST PIPING TO CUST CONN DA" (B-4).	94/03/30	D.A.C.
D	ADDED DELINEATION OF APPEARANCE LAGGING. "BY G.E. PGS" WAS "BY OTHERS" & ADDED "EXCEPT FOR PIPE TRENCH AREA" (B-6).	94/06/	D.A.C.



RIGHT SIDE ELEVATION

CUSTOMER: KISSIMMEE UTILITY AUTHORITY
PROJECT: CANE ISLAND PLANT UNIT 2
SITE: KISSIMMEE, FL
SPECIFICATION: 23175.62.1001
CUSTOMER P.O.:
G.E. S.O.: 155361

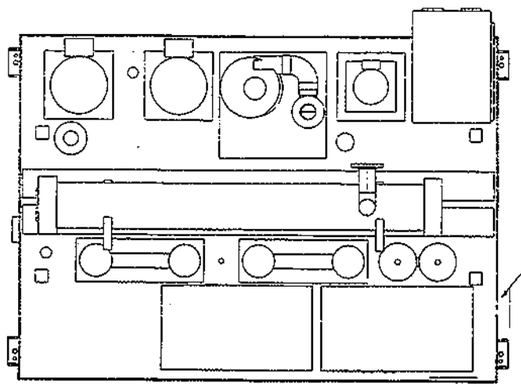
SEE SHEET 1 FOR NOTES

E 03502 8777A01E155361 D

D.R. TULIANO 93/11/12

REVISE ON CAD ONLY
UG PART: 8777A01E155361SH3-8.PRT

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
B	O.A. CONLON ADDED PIPING AND CUST. CONNS. /25 SEE SH2 FOR DETAILS.	94/02	D.A.C.
C	O.A. CONLON REVISED SUGGESTED CUST PIPING TO CUST CONN DA (8-51.	94/03 /30	D.A.C.
D	ADDED DELINEATION AND RELATING DIMENSIONS OF APPEARANCE LAGGING. RELOCATED TANK VIEW TO FIT ON DRAWING.	94/06 /15	S.C.C.



FOR OIL SYSTEM OUTLINE INFORMATION AND LOCATION RECOMMENDATIONS SEE DWG 8777A18E155361

(4) 36.00 x 72.00 DOORS

80.30

193.03

(97.00)

Z

℄ EXH

JL1 LE VM JC2 JA2 AF AC LF PV

JK1

JJ1

PW

DO

AB

-X

℄ TURBINE

+X

FOR GENERATOR OUTLINE DIMS SEE GENERATOR DRAWING 109E1737

110.00

JJ2 TT JE1 JF1

DP

DA

TV

+Z

CM

AA

PLAN VIEW

(147.00)

142.00

269.75

132.00

APPEARANCE LAGGING

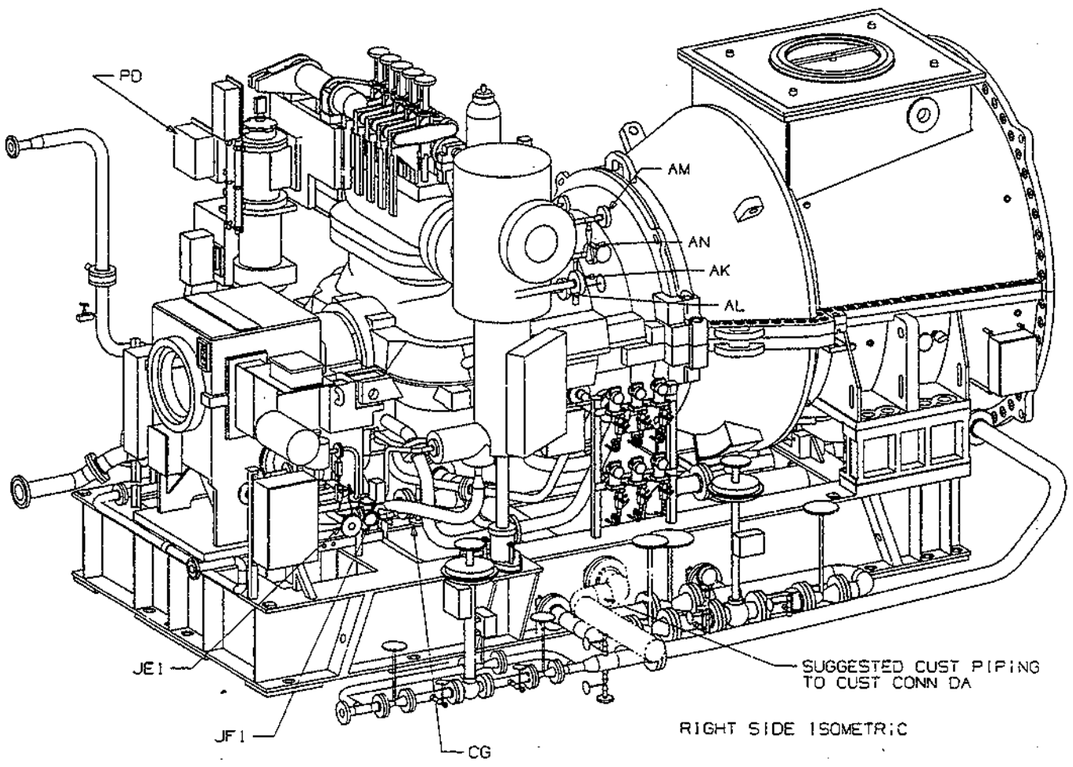
CUSTOMER: KISSIMMEE UTILITY AUTHORITY
PROJECT: CANE ISLAND PLANT UNIT 2
SITE: KISSIMMEE, FL
SPECIFICATION: 23175.82.1001
CUSTOMER P.O.:
G.E. S.O.: 155361

SEE SHEET 1 FOR NOTES

8777A01E155361

REVISE ON CAD ONLY
UG PART: B777A01E155361SH3-B.PRT

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	D.A. CONCON ADDED PIPING AND CUST CONNS. SEE SH2 FOR DETAILS.	94/02	D.A.C.
C	REVISED DESIGNATION ON SUGGESTED CUST PIPING TO CUST CONN DA. (C-3).	94/03	



RIGHT SIDE ISOMETRIC

CUSTOMER P.O.:
G.E. S.O.: 155361

SEE SHEET 1 FOR NOTES

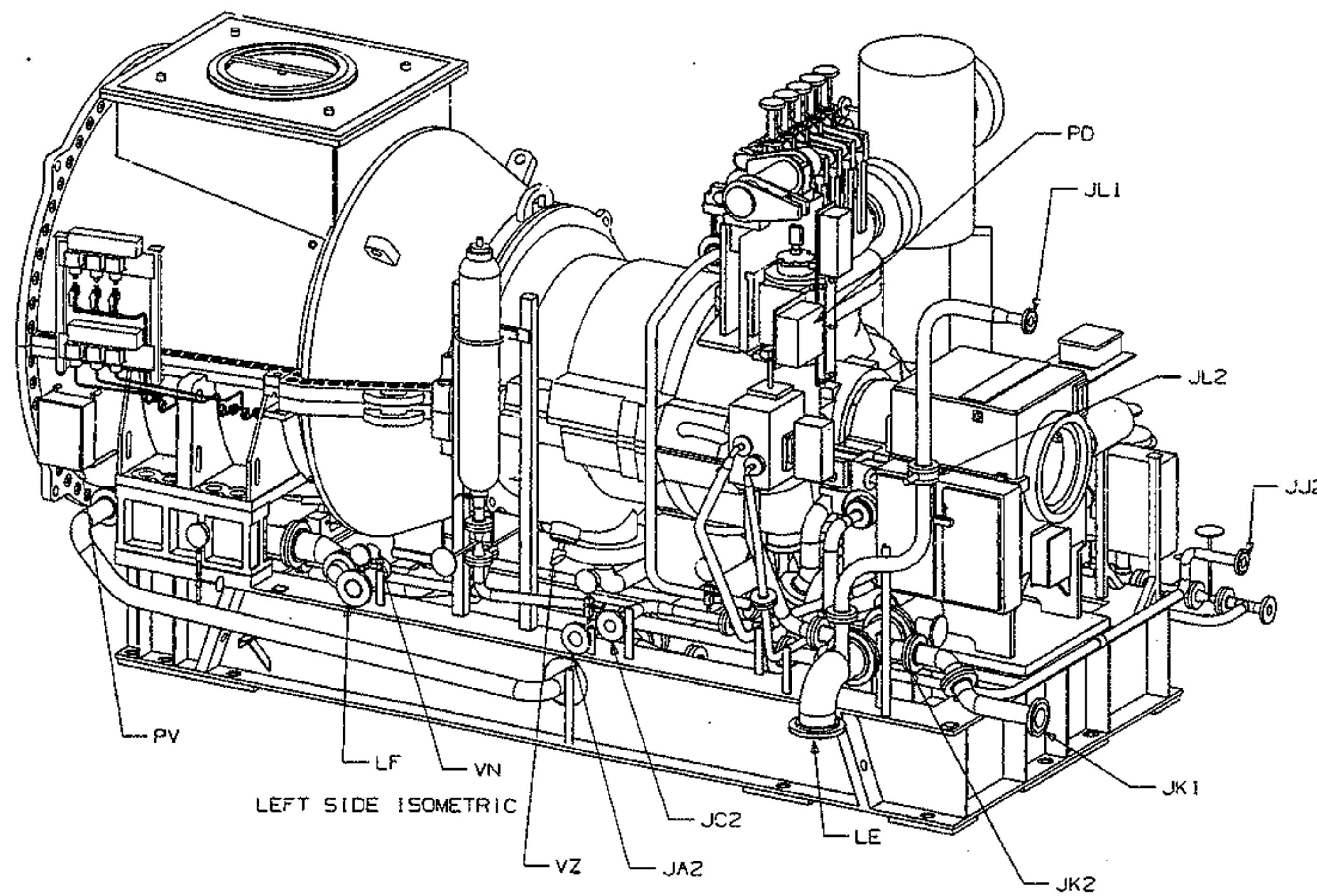
SIZE	CAGE CODE	DRAWING NO.	REV
E	03502	B777A01E155361	C

SHEET 3 OF 3

E 8777A01E15536I 7 C

REVISE ON CAD ONLY
UG PART: B777A01E15536ISH3-8.PRT

REV	DESCRIPTION	DATE	APPROVED
B	D.A.CONLON ADDED PIPING AND CUST CONNS. SEE SH2 FOR DETAILS.	94/02/25	D.A.C.
C	[illegible] REVISED CUST CONN LE LOCATION (C-5).	94/03/??	[illegible]



LEFT SIDE ISOMETRIC

CUSTOMER: KISSIMMEE UTILITY AUTHORITY
PROJECT: CANE ISLAND PLANT UNIT 2
SITE: KISSIMMEE, FL
SPECIFICATION: 23175.62.1001
CUSTOMER P.O.:
G.E. S.O.: 155361

SEE SHEET 1 FOR NOTES

E 03502 8777A01E15536I C

SH 7