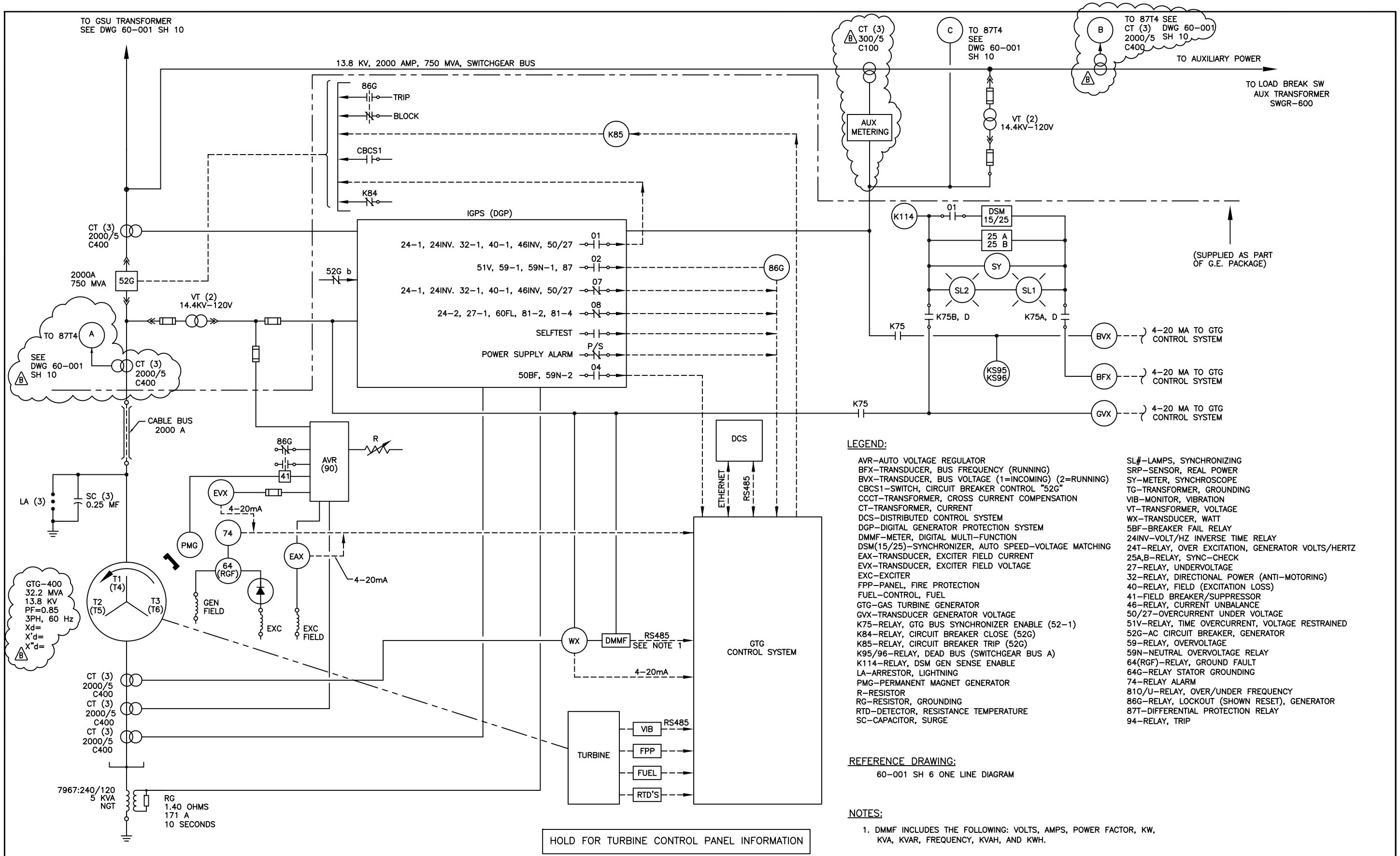

LEGEND:

AVR–AUTO VOLTAGE REGULATOR
BFX–TRANSDUCER, BUS FREQUENCY (RUNNING)
BVX–TRANSDUCER, BUS VOLTAGE (1=INCOMING) (2=RUNNING)
CBCS1–SWITCH, CIRCUIT BREAKER CONTROL "52G"
CCCT–TRANSFORMER, CROSS CURRENT COMPENSATION
CT–TRANSFORMER, CURRENT
DCS–DISTRIBUTED CONTROL SYSTEM
DGP–DIGITAL GENERATOR PROTECTION SYSTEM
DMMF–METER, DIGITAL MULTI–FUNCTION
DSM(15/25)–SYNCHRONIZER, AUTO SPEED–VOLTAGE MATCHING
EAX–TRANSDUCER, EXCITER FIELD CURRENT
EVX–TRANSDUCER, EXCITER FIELD VOLTAGE
EXC–EXCITER
FPP–PANEL, FIRE PROTECTION
FUEL–CONTROL, FUEL
GTG–GAS TURBINE GENERATOR
GVX–TRANSDUCER GENERATOR VOLTAGE
K75–RELAY, GTG BUS SYNCHRONIZER ENABLE (52–1)
K84–RELAY, CIRCUIT BREAKER CLOSE (52G)
K85–RELAY, CIRCUIT BREAKER TRIP (52G)
K95/96–RELAY, DEAD BUS (SWITCHGEAR BUS A)
K114–RELAY, DSM GEN SENSE ENABLE
LA–ARRESTOR, LIGHTNING
PMG–PERMANENT MAGNET GENERATOR
R–RESISTOR
RG–RESISTOR, GROUNDING
RTD–DETECTOR, RESISTANCE TEMPERATURE
SC–CAPACITOR, SURGE
SL#–LAMPS, SYNCHRONIZING
SRP–SENSOR, REAL POWER
SY–METER, SYNCHROSCOPE
TG–TRANSFORMER, GROUNDING
VIB–MONITOR, VIBRATION
VT–TRANSFORMER, VOLTAGE
WX–TRANSDUCER, WATT
5BF–BREAKER FAIL RELAY
24INV–VOLT/HZ INVERSE TIME RELAY
24T–RELAY, OVER EXCITATION, GENERATOR VOLTS/HERTZ
25A,B–RELAY, SYNC–CHECK
27–RELAY, UNDERVOLTAGE
32–RELAY, DIRECTIONAL POWER (ANTI–MOTORING)
40–RELAY, FIELD (EXCITATION LOSS)
41–FIELD BREAKER/SUPPRESSOR
46–RELAY, CURRENT UNBALANCE
50/27–OVERCURRENT UNDER VOLTAGE
51V–RELAY, TIME OVERCURRENT, VOLTAGE RESTRAINED
52G–AC CIRCUIT BREAKER, GENERATOR
59–RELAY, OVERVOLTAGE
59N–NEUTRAL OVERVOLTAGE RELAY
64(RGF)–RELAY, GROUND FAULT
64G–RELAY STATOR GROUNDING
74–RELAY ALARM
81O/U–RELAY, OVER/UNDER FREQUENCY
86G–RELAY, LOCKOUT (SHOWN RESET), GENERATOR
87T–DIFFERENTIAL PROTECTION RELAY
94–RELAY, TRIP

REFERENCE DRAWING:

60–001 SH 6 ONE LINE DIAGRAM

NOTES:

1. DMMF INCLUDES THE FOLLOWING: VOLTS, AMPS, POWER FACTOR, KW, KVA, KVAR, FREQUENCY, KVAH, AND KWH.

REVISED	CUSTOMER INFORMATION

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NO.	DATE	BY	APP'D	DESCRIPTION
				REVISIONS
B	8/06/09	SLP		ADDED CT'S, REVISED TG TAG #

DRAWN	REB	7/1/09
CHECK		
DESIGN	RS	7/1/09
PROJ ENGR		
PROJ MGR		
QA MGR		
SCALE	NONE	SIZE D

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ProEnergy EPC Services, LLC

ONE LINE DIAGRAM
GTG 400, LM–2500 PROTECTION
TACOA POWER PLANT

CARACAS VENEZUELA

JOB. NO.	DWG NO.	SH NO.	REV
0906	60–001	9	B