



	High Pressure Turbine			Low Pressure Turbine		
	Wheel Power, MWs	Stage Group Eff.	Dry Eff, BF=0.5	Wheel Power, MWs	Stage Group Eff.	Dry Eff, BF=1.0
CS	110.66	64.72%	66.29 %	236.85	93.63%	93.63%
1st	102.19	88.15%	91.68 %	229.75	91.67%	93.70%
2nd	100.68	84.62%	89.52 %	102.22	89.08%	95.68%
3rd	86.85	78.94%	84.95 %	86.53	87.16%	95.40 %
4th	---	---	---	39.64	73.41%	83.02%
L-0 A	---	---	---	39.64	73.41%	83.02%
L-0 B	---	---	---	39.64	73.41%	83.02%
L-0 C	---	---	---	39.64	73.41%	83.02%

GROSS GENERATOR OUTPUT
1156.9 MW
AT 0.90 POWER FACTOR AND
RATED H₂ PRES
75.00 PSIA H₂ PRESSURE
7451 kW MECH. LOSSES
10300 kW ELEC. LOSSES
1285.4MVA RATING

- NOTE:
- ASME 1967 Steam Tables.
 - Turbine performance is estimate, not guaranteed.
 - EFTR is estimated not guaranteed.
 - S/G, T/G, condenser, and feedwater heater performance assume clean conditions with 0% tube plugging.
 - Turbine and extraction arrangement is schematic only.
 - Feedwater heater vents are not modeled.
 - Scavenging steam modeled at 4.7% and 2.9% for 1st and 2nd stage reheater sections, respectively.
 - Cycle isolation is assumed. No fugitive, diversionary, bypass, or leakage flows are modeled (unless otherwise indicated).
 - S/G blowdown not modeled.
 - Generator power factor is used for computing variable losses. It should not be used in power flow calculations.
 - S/G leaving steam conditions are estimated based on Tcold=555°F.
 - Licensed thermal power is taken 3983 MWt with corresponding NSSS power taken as 4011.1 MWt.
 - The indicated HP turbine bowl pressure is for information. Control stage performance of the HP turbine is estimated based on partial admission.
 - Feedwater heaters TTD and DCA are scaled with heater tube-side mass flow rates.
 - The pressure drops in Main Steam and Extraction Steam lines are modeled based on volumetric fow rate.

Gross Power: 1156.9 MW
NSSS Power: 4011.1MWt

Doosan T/G TC6F-52" LSB 1800 rpm
PEPSE Version 82

HEAT STORAGE OPERATION - CASE 2

P - pressure, psia
F - temperature, °F
H - enthalpy, Btu/lbm
- flow Rate, lbm/hr
x - quality

MW - Megawatts
MWs - Megawatts Shaft
MWt - Megawatts Thermal
B - British Thermal Units
kWh - Kilowatt Hours

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