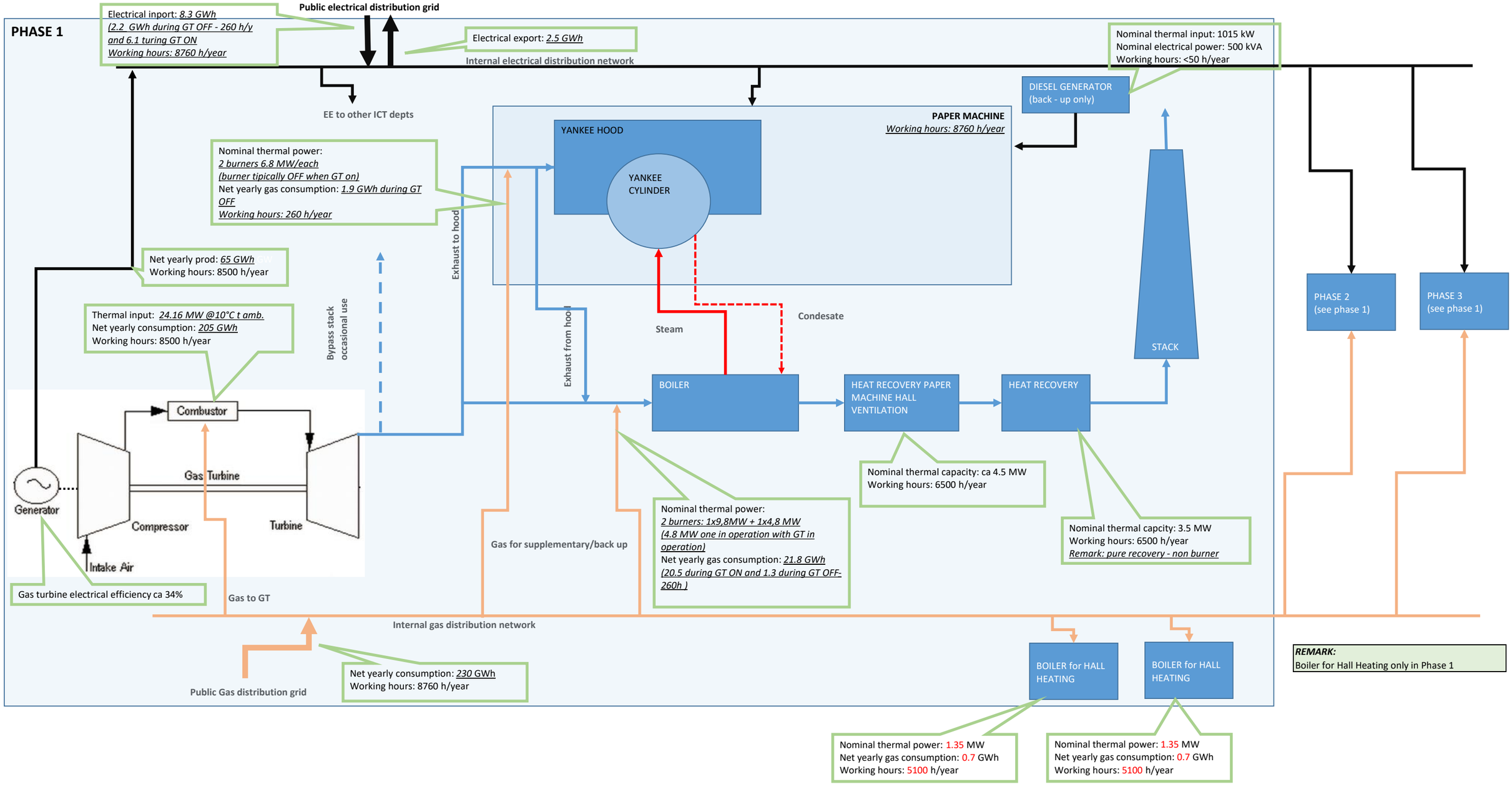
PHASE 1
Electrical inport: 8.3 GWh
(2.2 GWh during GT OFF - 260 h/y
and 6.1 turing GT ON
Working hours: 8760 h/year
Public electrical distribution grid
Electrical export: 2.5 GWh
Internal electrical distribution network
Nominal thermal input: 1015 kW
Nominal electrical power: 500 kVA
Working hours: <50 h/year
DIESEL GENERATOR
(back - up only)
EE to other ICT depts
PAPER MACHINE
Working hours: 8760 h/year
YANKEE HOOD
YANKEE
CYLINDER
Nominal thermal power:
2 burners 6.8 MW/each
(burner tipically OFF when GT on)
Net yearly gas consumption: 1.9 GWh during GT
OFF
Working hours: 260 h/year
Exhaust to hood
Net yearly prod: 65 GWh
Working hours: 8500 h/year
Bypass stack
occasional use
Exhaust from hood
Steam
Condesate
STACK
PHASE 2
(see phase 1)
PHASE 3
(see phase 1)
Thermal input: 24.16 MW @10°C t amb.
Net yearly consumption: 205 GWh
Working hours: 8500 h/year
Combustor
Gas Turbine
Generator
Compressor
Turbine
Intake Air
BOILER
HEAT RECOVERY PAPER
MACHINE HALL
VENTILATION
HEAT RECOVERY
Nominal thermal capacity: ca 4.5 MW
Working hours: 6500 h/year
Nominal thermal power:
2 burners: 1x9,8MW + 1x4,8 MW
(4.8 MW one in operation with GT in
operation)
Net yearly gas consumption: 21.8 GWh
(20.5 during GT ON and 1.3 during GT OFF-
260h)
Nominal thermal capcity: 3.5 MW
Working hours: 6500 h/year
Remark: pure recovery - non burner
Gas for supplementary/back up
Gas turbine electrical efficiency ca 34%
Gas to GT
Internal gas distribution network
Public Gas distribution grid
Net yearly consumption: 230 GWh
Working hours: 8760 h/year
BOILER for HALL
HEATING
BOILER for HALL
HEATING
REMARK:
Boiler for Hall Heating only in Phase 1
Nominal thermal power: 1.35 MW
Net yearly gas consumption: 0.7 GWh
Working hours: 5100 h/year
Nominal thermal power: 1.35 MW
Net yearly gas consumption: 0.7 GWh
Working hours: 5100 h/year