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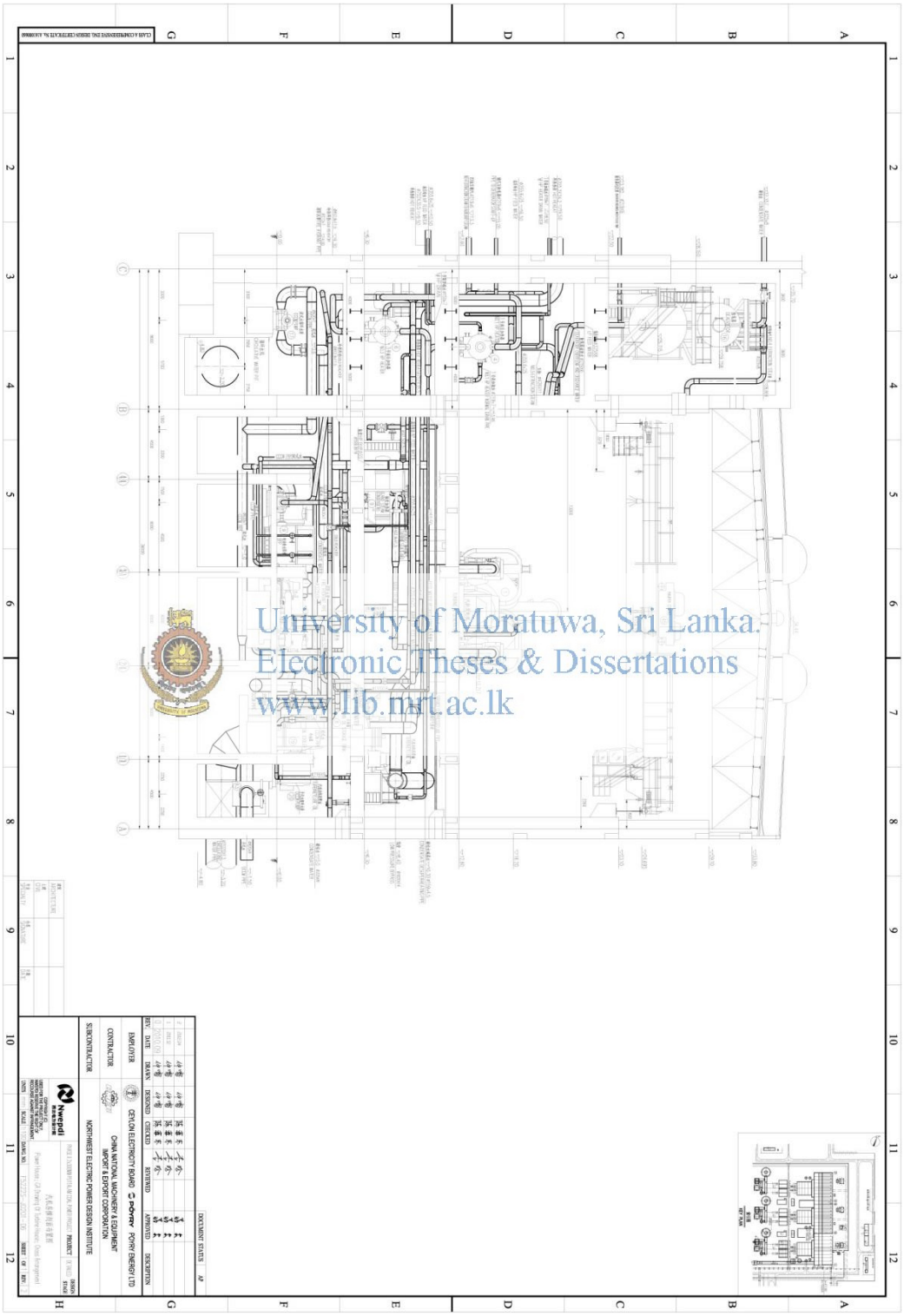
APPENDIX A: SITE LAYOUT OF NOROCHCHOLAI COAL POWER PLANT

APPENDIX B: EQUIPMENT LAYOUT DRAWING OF MPB IN NCPP



APPENDIX C: EQUIPMENT ARRANGEMENT DRAWING OF MPB IN NPP

APPENDIX D: EES CODE OF THE PROGRAMME TO CALCULATE OUTCOMES

EES program to find steam mass flow rate

```
H_1=Enthalpy(steam, P=P_1, T=T_1)
H_2=Enthalpy(steam, T=T_2,X=X_2)

S_1=Entropy(steam, P=P_1, T=T_1)
S_2=Entropy(steam, T=T_2,X=X_2)

P_2=Pressure(steam, T=T_2,X=X_2)



P_pump=5400[kW]
eta=0.75
m=P_pump/(H_1-H_2)/eta

"As a percentage of BMCR"

Per_BMCR=2*m*3600[s/h]/1000[kg/t]/1025[t/h]*100
```


EES program to analyze the current thermodynamic cycle of the power plant without an extraction for the BFPT (i.e. with a motor driven BFP)

```
"----------------------------------------
P : Pressure in MPa
T: Temperature in C
G: Steam mass flow in kg/h
H: Enthalpy in kJ/kg
----------------------------------------"


P_1=16700[kPa]
T_1=538[C]
G_1=964000[kg/h]
H_1=Enthalpy(steam, P=P_1, T=T_1)     {3396.9[kJ/kg]}
S_1=Entropy(steam, P=P_1, T=T_1)

P_2=3913[kPa]
```

T_2=331.2[C]

G_2=799380[kg/h]

H_2=Enthalpy(steam, P=P_2, T=T_2) {3049.4[kJ/kg]}

S_2=Entropy(steam, P=P_2, T=T_2)

P_3=3521[kPa]

T_3=538[C]

G_3=799380[kg/h]

H_3=Enthalpy(steam, P=P_3, T=T_3) {3536.0[kJ/kg]}

S_3=Entropy(steam, P=P_3, T=T_3)

P_4=951[kPa]

T_4=355.5[C]

G_4=726850[kg/h]

H_4=Enthalpy(steam, P=P_4, T=T_4) {3170.1[kJ/kg]}

S_4=Entropy(steam, P=P_4, T=T_4)

P_5=9.7[kPa]

T_5=45.2[C]

G_5=610560[kg/h]

H_5=2404.2[kJ/kg]

X_5=Quality(steam, H=H_5,T=T_5)

S_5=Entropy(steam, P=P_5, X=X_5)

P_6=Pressure(steam, T=T_6,H=H_6)

T_6=45.2[C]

G_6=G_7

H_6=189.3[kJ/kg]

S_6=Entropy(steam, H=H_6, T=T_6)

P_7=Pressure(steam, T=T_7,H=H_7)

T_7=45.6[C]

G_7=757730[kg/h]

H_7=191.1[kJ/kg]

S_7=Entropy(steam, H=H_7, T=T_7)

P_8=Pressure(steam, H=H_8, T=T_8)

T_8=46[C]

G_8=G_7

H_8=192.8[kJ/kg]

S_8=Entropy(steam, H=H_8, T=T_8)

P_9=Pressure(steam, H=H_9, T=T_9)

T_9=61.4[C]

G_9=G_7

H_9=258.5[kJ/kg]

S_9=Entropy(steam, H=H_9, T=T_9)

P_10=Pressure(steam, H=H_10, T=T_10)

T_10=85.4[C]

G_10=G_7

H_10=358.8[kJ/kg]

S_10=Entropy(steam, H=H_10, T=T_10)

P_11=Pressure(steam, H=H_11, T=T_11)

T_11=106.3[C]

G_11=G_7

H_11=446.6[kJ/kg]

S_11=Entropy(steam, H=H_11, T=T_11)

P_12=Pressure(steam, H=H_12, T=T_12)

T_12=139.2[C]

G_12=G_7

H_12=586.6[kJ/kg]

S_12=Entropy(steam, H=H_12, T=T_12)

P_13=Pressure(steam, H=H_13, T=T_13)

T_13=179.8[C]

G_13=G_16

H_13=773.5[kJ/kg]

S_13=Entropy(steam, H=H_13, T=T_13)

P_14=Pressure(steam, H=H_14, T=T_14)

T_14=205.4[C]

G_14=G_16
H_14=884.6[kJ/kg]
S_14=Entropy(steam, H=H_14, T=T_14)

P_15=Pressure(steam, H=H_15, T=T_15)
T_15=246.0[C]
G_15=G_16
H_15=1068.2[kJ/kg]
S_15=Entropy(steam, H=H_15, T=T_15)

P_16=20320[kPa]
T_16=277.9[C]
G_16=992920[kg/h]
H_16=Enthalpy(steam, P=P_16, T=T_16) {1220.9[kJ/kg]}
S_16=Entropy(steam, P=P_16, T=T_16)

"---------- Extraction Steam -HTR_in----------"

P_htr8_in=25.4[kPa]
T_htr8_in=65.3[C]
G_htr8_in=18910[kg/h]
H_htr8_in=2514.7[kJ/kg]

P_htr7_in=69[kPa]
T_htr7_in=89.5[C]
G_htr7_in=29140[kg/h]
H_htr7_in=2651.4[kJ/kg]

P_htr6_in=146[kPa]
T_htr6_in=154.5[C]
G_htr6_in=26180[kg/h]
H_htr6_in=Enthalpy(steam, P=P_htr6_in, T=T_htr6_in) {2781.8[kJ/kg]}

P_htr5_in=402[kPa]
T_htr5_in=251.5[C]
G_htr5_in=42430[kg/h]
H_htr5_in=Enthalpy(steam, P=P_htr5_in,T=T_htr5_in) {2967.6[kJ/kg]}

P_htr4_in=970[kPa]

T_htr4_in=355.2[C]

G_htr4_in=42580[kg/h]

H_htr4_in=Enthalpy(steam, P=P_htr4_in, T=T_htr4_in) {3170.1[kJ/kg]}

P_htr3_in=1830[kPa]

T_htr3_in=442.1[C]

G_htr3_in=32000[kg/h]

H_htr3_in=Enthalpy(steam, P=P_htr3_in, T=T_htr3_in) {3342.8[kJ/kg]}

P_htr2_in=3913[kPa]

T_htr2_in=331.2[C]

G_htr2_in=78400[kg/h]

H_htr2_in=Enthalpy(steam, P=P_htr2_in, T=T_htr2_in) {3049.4[kJ/kg]}

P_htr1_in=6380[kPa]

T_htr1_in=395.4[C]

G_htr1_in=73320[kg/h]

H_htr1_in=Enthalpy(steam, P=P_htr1_in, T=T_htr1_in) {3160.9[kJ/kg]}

"----------HTR_out----------"

T_htr8_out=51.6[C]

G_htr8_out=G_htr7_out+G_htr8_in

H_htr8_out=216.0[kJ/kg]

T_htr7_out=67.0[C]

G_htr7_out=G_htr6_out+G_htr7_in

H_htr7_out=280.3[kJ/kg]

P_htr6_out=Pressure(steam, H=H_htr6_out, T=T_htr6_out)

T_htr6_out=90.9[C]

G_htr6_out=G_htr5_out+G_htr6_in

H_htr6_out=380.8[kJ/kg]

P_htr4_out=Pressure(steam, H=H_htr5_out, T=T_htr5_out)
T_htr4_out=175.9[C]
G_htr4_out=992920[kg/h]
H_htr4_out=747.4[kJ/kg]

P_htr5_out=Pressure(steam, H=H_htr5_out, T=T_htr5_out)
T_htr5_out=111.8[C]
G_htr5_out=G_htr5_in
H_htr5_out=469.0[kJ/kg]

T_htr3_out=185.4[C]
G_htr3_out=G_htr2_out+G_htr3_in
H_htr3_out=786.8[kJ/kg]

P_htr2_out=Pressure(steam, H=H_htr2_out, T=T_htr2_out)
T_htr2_out=211.0[C]
G_htr2_out=G_htr1_out+G_htr2_in
H_htr2_out=902.3[kJ/kg]

P_htr1_out=Pressure(steam, H=H_htr1_out, T=T_htr1_out)
T_htr1_out=251.6[C]
G_htr1_out=G_htr1_in
H_htr1_out=1093.5[kJ/kg]

"----------Calculations----------"

{BFP Power}
P_bfp=G_htr4_out/3600[s/h]*(H_13-H_htr4_out)/1000[kW/MW] {Power added by BFPs}

eta_motor_electric=0.98
eta_pump_mech=0.75

P_bfp_motor=P_bfp/eta_motor_electric/eta_pump_mech

"----------Turbine Power Out put----------"

{HP Turbine}

P_hpt=(G_1*(H_1-H_htr1_in)+(G_1-G_htr1_in)*(H_htr1_in-H_2))/3600[s/h]/1000[kW/MW]

{IP Turbine}

P_ipt=(G_3*(H_3-H_htr3_in)+(G_3-G_htr3_in)*(H_htr3_in-H_4))/3600[s/h]/1000[kW/MW]

{LP Turbine}

P_lpt=(G_4*(H_4-H_htr5_in)+(G_4-G_htr5_in)*(H_htr5_in-H_htr6_in)+(G_4-G_htr5_in-G_htr6_in)*(H_htr6_in-H_htr7_in)+(G_4-G_htr5_in-G_htr6_in-G_htr7_in)*(H_htr7_in-H_htr8_in)+(G_4-G_htr5_in-G_htr6_in-G_htr7_in-G_htr8_in)*(H_htr8_in-H_5))/3600[s/h]/1000[kW/MW]

eta_mech_turb=0.98
eta_elec_gen=0.975

P_net=P_total-P_bfp_motor

P_Gen=(P_hpt+P_ipt+P_lpt)*eta_mech_turb*eta_elec_gen

HR_gross_motor=(G_1*(h_1-h_16)+G_3*(h_3-h_2))/3600[s/h]`/1000[kW/MW]/P_Gen

HR_net_motor=(G_1*(h_1-h_16)+G_3*(h_3-h_2))/3600[s/h]`/1000[kW/MW]/(P_Gen-P_bfpm)

EES program to find steam extraction point for BFPT

Four different EES programs were created for each extraction point and only the program for extraction point A is shown here.

"----------

P : Pressure in MPa

T: Temperature in C

G: Steam mass flow in kg/h

H: Enthalpy in kJ/kg

----------"

P_1=16700[kPa]

T_1=538[C]

G_1=G_1_0-G_1_1

H_1=Enthalpy(steam, P=P_1, T=T_1) {3396.9[kJ/kg]}

S_1=Entropy(steam, P=P_1, T=T_1)

{SH outlet of boiler }

P_1_0=16700[kPa]

T_1_0=538[C]

G_1_0=964000[kg/h]

H_1_0=Enthalpy(steam, P=P_1, T=T_1) {3396.9[kJ/kg]}

S_1_0=Entropy(steam, P=P_1, T=T_1)

{BFPT inlet}

P_1_1=16700[kPa]

T_1_1=538[C]

H_1_1=Enthalpy(steam, P=P_1, T=T_1) {3396.9[kJ/kg]}

S_1_1=Entropy(steam, P=P_1, T=T_1)

P_2=3913[kPa]

T_2=331.2[C]

G_2=799380[kg/h]-G_1_1

H_2=Enthalpy(steam, P=P_2, T=T_2) {3049.4[kJ/kg]}

S_2=Entropy(steam, P=P_2, T=T_2)

P_3=3521[kPa]

T_3=538[C]

G_3=G_2

H_3=Enthalpy(steam, P=P_3, T=T_3) {3536.0[kJ/kg]}

S_3=Entropy(steam, P=P_3, T=T_3)

P_4=951[kPa]

T_4=355.5[C]

G_4=726850[kg/h]-G_1_1

H_4=Enthalpy(steam, P=P_4, T=T_4) {3170.1[kJ/kg]}

S_4=Entropy(steam, P=P_4, T=T_4)

P_5=9.7[kPa]

T_5=45.2[C]

G_5=610560[kg/h]-G_1_1

H_5=2404.2[kJ/kg]

X_5=Quality(steam, H=H_5,T=T_5)

S_5=Entropy(steam, P=P_5, X=X_5)

P_6=Pressure(steam, T=T_6,H=H_6)

T_6=45.2[C]

G_6=G_7

H_6=189.3[kJ/kg]

S_6=Entropy(steam, H=H_6, T=T_6)

P_7=Pressure(steam, T=T_7,H=H_7)

T_7=45.6[C]

G_7=757730[kg/h]

H_7=191.1[kJ/kg]

S_7=Entropy(steam, H=H_7, T=T_7)

P_8=Pressure(steam, H=H_8, T=T_8)

T_8=46[C]

G_8=G_7

H_8=192.8[kJ/kg]

S_8=Entropy(steam, H=H_8, T=T_8)

P_9=Pressure(steam, H=H_9, T=T_9)

T_9=61.4[C]

G_9=G_7

H_9=258.5[kJ/kg]

S_9=Entropy(steam, H=H_9, T=T_9)

P_10=Pressure(steam, H=H_10, T=T_10)

T_10=85.4[C]
G_10=G_7
H_10=358.8[kJ/kg]
S_10=Entropy(steam, H=H_10, T=T_10)

P_11=Pressure(steam, H=H_11, T=T_11)
T_11=106.3[C]
G_11=G_7
H_11=446.6[kJ/kg]
S_11=Entropy(steam, H=H_11, T=T_11)

P_12=Pressure(steam, H=H_12, T=T_12)
T_12=139.2[C]
G_12=G_7
H_12=586.6[kJ/kg]
S_12=Entropy(steam, H=H_12, T=T_12)

P_13=Pressure(steam, H=H_13, T=T_13)
T_13=179.8[C]
G_13=G_16
H_13=773.5[kJ/kg]
S_13=Entropy(steam, H=H_13, T=T_13)

P_14=Pressure(steam, H=H_14, T=T_14)
T_14=205.4[C]
G_14=G_16
H_14=884.6[kJ/kg]
S_14=Entropy(steam, H=H_14, T=T_14)

P_15=Pressure(steam, H=H_15, T=T_15)
T_15=246.0[C]
G_15=G_16
H_15=1068.2[kJ/kg]
S_15=Entropy(steam, H=H_15, T=T_15)

P_16=20320[kPa]
T_16=277.9[C]

G_16=992920[kg/h]

H_16=Enthalpy(steam, P=P_16, T=T_16) {1220.9[kJ/kg]}

S_16=Entropy(steam, P=P_16, T=T_16)

"---------- Extraction Steam -HTR_in----------"

P_htr8_in=25.4[kPa]

T_htr8_in=65.3[C]

G_htr8_in=18910[kg/h]

H_htr8_in=2514.7[kJ/kg]

P_htr7_in=69[kPa]

T_htr7_in=89.5[C]

G_htr7_in=29140[kg/h]

H_htr7_in=2651.4[kJ/kg]

P_htr6_in=146[kPa]

T_htr6_in=154.5[C]

G_htr6_in=26180[kg/h]

H_htr6_in=Enthalpy(steam, P=P_htr6_in, T=T_htr6_in) {2781.8[kJ/kg]}

P_htr5_in=402[kPa]

T_htr5_in=251.5[C]

G_htr5_in=42430[kg/h]

H_htr5_in=Enthalpy(steam, P=P_htr5_in,T=T_htr5_in) {2967.6[kJ/kg]}

P_htr4_in=970[kPa]

T_htr4_in=355.2[C]

G_htr4_in=42580[kg/h]

H_htr4_in=Enthalpy(steam, P=P_htr4_in, T=T_htr4_in) {3170.1[kJ/kg]}

P_htr3_in=1830[kPa]

T_htr3_in=442.1[C]

G_htr3_in=32000[kg/h]

H_htr3_in=Enthalpy(steam, P=P_htr3_in, T=T_htr3_in) {3342.8[kJ/kg]}

P_htr2_in=3913[kPa]

T_htr2_in=331.2[C]

G_htr2_in=78400[kg/h]

H_htr2_in=Enthalpy(steam, P=P_htr2_in, T=T_htr2_in) {3049.4[kJ/kg]}

P_htr1_in=6380[kPa]

T_htr1_in=395.4[C]

G_htr1_in=73320[kg/h]

H_htr1_in=Enthalpy(steam, P=P_htr1_in, T=T_htr1_in) {3160.9[kJ/kg]}

"----------HTR_out----------"

T_htr8_out=51.6[C]

G_htr8_out=G_htr7_out+G_htr8_in

H_htr8_out=216.0[kJ/kg]

T_htr7_out=67.0[C]

G_htr7_out=G_htr6_out+G_htr7_in

H_htr7_out=280.3[kJ/kg]

P_htr6_out=Pressure(steam, H=H_htr6_out, T=T_htr6_out)

T_htr6_out=90.9[C]

G_htr6_out=G_htr5_out+G_htr6_in

H_htr6_out=380.8[kJ/kg]

P_htr4_out=Pressure(steam, H=H_htr5_out, T=T_htr5_out)

T_htr4_out=175.9[C]

G_htr4_out=992920[kg/h]

H_htr4_out=747.4[kJ/kg]

P_htr5_out=Pressure(steam, H=H_htr5_out, T=T_htr5_out)

T_htr5_out=111.8[C]

G_htr5_out=G_htr5_in

H_htr5_out=469.0[kJ/kg]

T_htr3_out=185.4[C]
G_htr3_out=G_htr2_out+G_htr3_in
H_htr3_out=786.8[kJ/kg]

P_htr2_out=Pressure(steam, H=H_htr2_out, T=T_htr2_out)
T_htr2_out=211.0[C]
G_htr2_out=G_htr1_out+G_htr2_in
H_htr2_out=902.3[kJ/kg]

P_htr1_out=Pressure(steam, H=H_htr1_out, T=T_htr1_out)
T_htr1_out=251.6[C]
G_htr1_out=G_htr1_in
H_htr1_out=1093.5[kJ/kg]

"----------Calculations----------"

{BFP Power}
P_bfp=G_htr4_out/3600[s/h]*(H_13-H_htr4_out)/1000[kW/MW] {Power added by BFPs}

eta_bfpt=0.98
eta_pump_mech=0.75

P_bfpt=P_bfp/eta_bfpt/eta_pump_mech
P_bfpt=G_1_1/3600[s/h]*(H_1_1-H_5)/1000[kW/MW]

"----------Turbine Power Out put----------"

{HP Turbine}

P_hpt=(G_1*(H_1-H_htr1_in)+(G_1-G_htr1_in)*(H_htr1_in-H_2))/3600[s/h]/1000[kW/MW]

{IP Turbine}

P_ipt=(G_3*(H_3-H_htr3_in)+(G_3-G_htr3_in)*(H_htr3_in-H_4))/3600[s/h]/1000[kW/MW]

{LP Turbine}

P_lpt=(G_4*(H_4-H_htr5_in)+(G_4-G_htr5_in)*(H_htr5_in-H_htr6_in)+(G_4-G_htr5_in-G_htr6_in)*(H_htr6_in-H_htr7_in)+(G_4-G_htr5_in-G_htr6_in-G_htr7_in)*(H_htr7_in-H_htr8_in)+(G_4-G_htr5_in-G_htr6_in-G_htr7_in-G_htr8_in)*(H_htr8_in-H_5))/3600[s/h]/1000[kW/MW]

eta_mech_turb=0.98
eta_elec_gen=0.975

P_Gen=(P_hpt+P_ipt+P_lpt)*eta_mech_turb*eta_elec_gen

HR_gross_turb=(G_1*(h_1-h_16)+G_3*(h_3-h_2))/3600[s/h]`/1000[kW/MW]/(P_Gen+P_bfpt)

HR_net_turb=(G_1*(h_1-h_16)+G_3*(h_3-h_2))/3600[s/h]`/1000[kW/MW]/P_Gen

Solutions to EES programs for each outcomes.

Iterated inputs	Outcome_1	Outcome_2	Outcome_3	Outcome_4	Outcome_5
eta_bfpt=0.98	eta_bfpt=0.98	eta_bfpt=0.98	eta_elec_gen=0.975	eta_elec_gen=0.975	eta_bfpt=0.98
eta_elec_gen=0.975	eta_elec_gen=0.975	eta_elec_gen=0.975	eta_mech_turb=0.98	eta_mech_turb=0.98	eta_elec_gen=0.975
eta_mech_turb=0.98	eta_mech_turb=0.98	eta_mech_turb=0.98	eta_pump_mech=0.75	eta_motor_electric=0.98	eta_mech_turb=0.98
eta_pump_mech=0.75	eta_pump_mech=0.75	eta_pump_mech=0.75	eta_turbine=0.98	eta_pump_mech=0.75	eta_pump_mech=0.75
G_1=928476 [kg/h]	G_1=964000 [kg/h]	G_1=964000 [kg/h]	G_1=964000 [kg/h]	G_1=964000 [kg/h]	G_1=964000 [kg/h]
G_10=757730 [kg/h]	G_10=757730 [kg/h]	G_10=757730 [kg/h]	G_10=757730 [kg/h]	G_10=757730 [kg/h]	G_10=757730 [kg/h]
G_11=757730 [kg/h]	G_11=757730 [kg/h]	G_11=757730 [kg/h]	G_11=757730 [kg/h]	G_11=757730 [kg/h]	G_11=757730 [kg/h]
G_12=757730 [kg/h]	G_12=757730 [kg/h]	G_12=757730 [kg/h]	G_12=757730 [kg/h]	G_12=757730 [kg/h]	G_12=757730 [kg/h]
G_13=992920 [kg/h]	G_13=992920 [kg/h]	G_13=992920 [kg/h]	G_13=992920 [kg/h]	G_13=992920 [kg/h]	G_13=992920 [kg/h]
G_14=992920 [kg/h]	G_14=992920 [kg/h]	G_14=992920 [kg/h]	G_14=992920 [kg/h]	G_14=992920 [kg/h]	G_14=992920 [kg/h]
G_15=992920 [kg/h]	G_15=992920 [kg/h]	G_15=992920 [kg/h]	G_15=992920 [kg/h]	G_15=992920 [kg/h]	G_15=992920 [kg/h]
G_16=992920 [kg/h]	G_16=992920 [kg/h]	G_16=992920 [kg/h]	G_16=992920 [kg/h]	G_16=992920 [kg/h]	G_16=992920 [kg/h]
G_1_0=964000 [kg/h]	G_2=744463 [kg/h]	G_2=799380 [kg/h]	G_2=799380 [kg/h]	G_2=799380 [kg/h]	G_1_0=999524 [kg/h]
G_1_1=35524 [kg/h]	G_2_0=799380 [kg/h]	G_3=768255 [kg/h]	G_3=799380 [kg/h]	G_3=799380 [kg/h]	G_1_1=35524 [kg/h]
G_2=763856 [kg/h]	G_2_1=54917	G_3_0=799380 [kg/h]	G_4=680809 [kg/h]	G_4=726850 [kg/h]	G_2=763856 [kg/h]
G_3=763856 [kg/h]	G_3=744463 [kg/h]	G_3_1=31125	G_4_0=726850 [kg/h]	G_5=610560 [kg/h]	G_3=763856 [kg/h]
G_4=691326 [kg/h]	G_4=671933 [kg/h]	G_4=695725 [kg/h]	G_4_1=46041	G_6=757730 [kg/h]	G_4=691326 [kg/h]
G_5=575036 [kg/h]	G_5=555643 [kg/h]	G_5=579435 [kg/h]	G_5=564519 [kg/h]	G_7=757730 [kg/h]	G_5=575036 [kg/h]
G_6=757730 [kg/h]	G_6=757730 [kg/h]	G_6=757730 [kg/h]	G_6=757730 [kg/h]	G_8=757730 [kg/h]	G_6=757730 [kg/h]
G_7=757730 [kg/h]	G_7=757730 [kg/h]	G_7=757730 [kg/h]	G_7=757730 [kg/h]	G_9=757730 [kg/h]	G_7=757730 [kg/h]
G_8=757730 [kg/h]	G_8=757730 [kg/h]	G_8=757730 [kg/h]	G_8=757730 [kg/h]	G_htr1_in=73320 [kg/h]	G_8=757730 [kg/h]

G_9=757730 [kg/h]	G_9=757730 [kg/h]	G_9=757730 [kg/h]	G_9=757730 [kg/h]	G_htr1_out=73320 [kg/h]	G_9=757730 [kg/h]
G_htr1_in=73320 [kg/h]	G_htr1_in=73320 [kg/h]	G_htr1_in=73320 [kg/h]	G_htr1_in=73320 [kg/h]	G_htr2_in=78400 [kg/h]	G_htr1_in=73320 [kg/h]
G_htr1_out=73320 [kg/h]	G_htr1_out=73320 [kg/h]	G_htr1_out=73320 [kg/h]	G_htr1_out=73320 [kg/h]	G_htr2_out=151720 [kg/h]	G_htr1_out=73320 [kg/h]
G_htr2_in=78400 [kg/h]	G_htr2_in=78400 [kg/h]	G_htr2_in=78400 [kg/h]	G_htr2_in=78400 [kg/h]	G_htr3_in=32000 [kg/h]	G_htr2_in=78400 [kg/h]
G_htr2_out=151720 [kg/h]	G_htr2_out=151720 [kg/h]	G_htr2_out=151720 [kg/h]	G_htr2_out=151720 [kg/h]	G_htr3_out=183720 [kg/h]	G_htr2_out=151720 [kg/h]
G_htr3_in=32000 [kg/h]	G_htr3_in=32000 [kg/h]	G_htr3_in=32000 [kg/h]	G_htr3_in=32000 [kg/h]	G_htr4_in=42580 [kg/h]	G_htr3_in=32000 [kg/h]
G_htr3_out=183720 [kg/h]	G_htr3_out=183720 [kg/h]	G_htr3_out=183720 [kg/h]	G_htr3_out=183720 [kg/h]	G_htr4_out=992920 [kg/h]	G_htr3_out=183720 [kg/h]
G_htr4_in=42580 [kg/h]	G_htr4_in=42580 [kg/h]	G_htr4_in=42580 [kg/h]	G_htr4_in=42580 [kg/h]	G_htr5_in=42430 [kg/h]	G_htr4_in=42580 [kg/h]
G_htr4_out=992920 [kg/h]	G_htr4_out=992920 [kg/h]	G_htr4_out=992920 [kg/h]	G_htr4_out=992920 [kg/h]	G_htr5_out=42430 [kg/h]	G_htr4_out=992920 [kg/h]
G_htr5_in=42430 [kg/h]	G_htr5_in=42430 [kg/h]	G_htr5_in=42430 [kg/h]	G_htr5_in=42430 [kg/h]	G_htr6_in=26180 [kg/h]	G_htr5_in=42430 [kg/h]
G_htr5_out=42430 [kg/h]	G_htr5_out=42430 [kg/h]	G_htr5_out=42430 [kg/h]	G_htr5_out=42430 [kg/h]	G_htr6_out=68610 [kg/h]	G_htr5_out=42430 [kg/h]
G_htr6_in=26180 [kg/h]	G_htr6_in=26180 [kg/h]	G_htr6_in=26180 [kg/h]	G_htr6_in=26180 [kg/h]	G_htr7_in=29140 [kg/h]	G_htr6_in=26180 [kg/h]
G_htr6_out=68610 [kg/h]	G_htr6_out=68610 [kg/h]	G_htr6_out=68610 [kg/h]	G_htr6_out=68610 [kg/h]	G_htr7_out=97750 [kg/h]	G_htr6_out=68610 [kg/h]
G_htr7_in=29140 [kg/h]	G_htr7_in=29140 [kg/h]	G_htr7_in=29140 [kg/h]	G_htr7_in=29140 [kg/h]	G_htr8_in=18910 [kg/h]	G_htr7_in=29140 [kg/h]
G_htr7_out=97750 [kg/h]	G_htr7_out=97750 [kg/h]	G_htr7_out=97750 [kg/h]	G_htr7_out=97750 [kg/h]	G_htr8_out=116660 [kg/h]	G_htr7_out=97750 [kg/h]
G_htr8_in=18910 [kg/h]	G_htr8_in=18910 [kg/h]	G_htr8_in=18910 [kg/h]	G_htr8_in=18910 [kg/h]	HR_gross_motor=2.304	G_htr8_in=18910 [kg/h]
G_htr8_out=116660 [kg/h]	G_htr8_out=116660 [kg/h]	G_htr8_out=116660 [kg/h]	G_htr8_out=116660 [kg/h]	HR_net_motor=2.382	G_htr8_out=116660 [kg/h]
HR_gross_turb=2.248	HR_gross_turb=2.331	HR_gross_turb=2.287	HR_gross_turb=2.301	H_1=3397 [kJ/kg]	HR_gross_turb=2.295
HR_net_turb=2.325	HR_net_turb=2.412	HR_net_turb=2.364	HR_net_turb=2.378	H_10=358.8 [kJ/kg]	HR_net_turb=2.373
H_1=3397 [kJ/kg]	H_1=3397 [kJ/kg]	H_1=3397 [kJ/kg]	H_1=3397 [kJ/kg]	H_11=446.6 [kJ/kg]	H_1=3397 [kJ/kg]
H_10=358.8 [kJ/kg]	H_10=358.8 [kJ/kg]	H_10=358.8 [kJ/kg]	H_10=358.8 [kJ/kg]	H_12=586.6 [kJ/kg]	H_10=358.8 [kJ/kg]
H_11=446.6 [kJ/kg]	H_11=446.6 [kJ/kg]	H_11=446.6 [kJ/kg]	H_11=446.6 [kJ/kg]	H_13=773.5 [kJ/kg]	H_11=446.6 [kJ/kg]
H_12=586.6 [kJ/kg]	H_12=586.6 [kJ/kg]	H_12=586.6 [kJ/kg]	H_12=586.6 [kJ/kg]	H_14=884.6 [kJ/kg]	H_12=586.6 [kJ/kg]
H_13=773.5 [kJ/kg]	H_13=773.5 [kJ/kg]	H_13=773.5 [kJ/kg]	H_13=773.5 [kJ/kg]	H_15=1068 [kJ/kg]	H_13=773.5 [kJ/kg]
H_14=884.6 [kJ/kg]	H_14=884.6 [kJ/kg]	H_14=884.6 [kJ/kg]	H_14=884.6 [kJ/kg]	H_16=1220 [kJ/kg]	H_14=884.6 [kJ/kg]
H_15=1068 [kJ/kg]	H_15=1068 [kJ/kg]	H_15=1068 [kJ/kg]	H_15=1068 [kJ/kg]	H_2=3046 [kJ/kg]	H_15=1068 [kJ/kg]
H_16=1220 [kJ/kg]	H_16=1220 [kJ/kg]	H_16=1220 [kJ/kg]	H_16=1220 [kJ/kg]	H_3=3537 [kJ/kg]	H_16=1220 [kJ/kg]
H_1_0=3397 [kJ/kg]	H_2=3046 [kJ/kg]	H_2=3046 [kJ/kg]	H_2=3046 [kJ/kg]	H_4=3170 [kJ/kg]	H_1_0=3397 [kJ/kg]
H_1_1=3397 [kJ/kg]	H_2_0=3046 [kJ/kg]	H_3=3537 [kJ/kg]	H_3=3537 [kJ/kg]	H_5=2404 [kJ/kg]	H_1_1=3397 [kJ/kg]
H_2=3046 [kJ/kg]	H_2_1=3046 [kJ/kg]	H_3_0=3537 [kJ/kg]	H_4=3170 [kJ/kg]	H_6=189.3 [kJ/kg]	H_2=3046 [kJ/kg]
H_3=3537 [kJ/kg]	H_3=3537 [kJ/kg]	H_3_1=3537 [kJ/kg]	H_4_0=3170 [kJ/kg]	H_7=191.1 [kJ/kg]	H_3=3537 [kJ/kg]
H_4=3170 [kJ/kg]	H_4=3170 [kJ/kg]	H_4=3170 [kJ/kg]	H_4_1=3170 [kJ/kg]	H_8=192.8 [kJ/kg]	H_4=3170 [kJ/kg]
H_5=2404 [kJ/kg]	H_5=2404 [kJ/kg]	H_5=2404 [kJ/kg]	H_5=2404 [kJ/kg]	H_9=258.5 [kJ/kg]	H_5=2404 [kJ/kg]
H_6=189.3 [kJ/kg]	H_6=189.3 [kJ/kg]	H_6=189.3 [kJ/kg]	H_6=189.3 [kJ/kg]	H_htr1_in=3158 [kJ/kg]	H_6=189.3 [kJ/kg]
H_7=191.1 [kJ/kg]	H_7=191.1 [kJ/kg]	H_7=191.1 [kJ/kg]	H_7=191.1 [kJ/kg]	H_htr1_out=1094 [kJ/kg]	H_7=191.1 [kJ/kg]
H_8=192.8 [kJ/kg]	H_8=192.8 [kJ/kg]	H_8=192.8 [kJ/kg]	H_8=192.8 [kJ/kg]	H_htr2_in=3046 [kJ/kg]	H_8=192.8 [kJ/kg]
H_9=258.5 [kJ/kg]	H_9=258.5 [kJ/kg]	H_9=258.5 [kJ/kg]	H_9=258.5 [kJ/kg]	H_htr2_out=902.3	H_9=258.5 [kJ/kg]

				[kJ/kg]	
H_htr1_in=3158 [kJ/kg]	H_htr1_in=3158 [kJ/kg]	H_htr1_in=3158 [kJ/kg]	H_htr1_in=3158 [kJ/kg]	H_htr3_in=3343 [kJ/kg]	H_htr1_in=3158 [kJ/kg]
H_htr1_out=1094 [kJ/kg]	H_htr1_out=1094 [kJ/kg]	H_htr1_out=1094 [kJ/kg]	H_htr1_out=1094 [kJ/kg]	H_htr3_out=786.8 [kJ/kg]	H_htr1_out=1094 [kJ/kg]
H_htr2_in=3046 [kJ/kg]	H_htr2_in=3046 [kJ/kg]	H_htr2_in=3046 [kJ/kg]	H_htr2_in=3046 [kJ/kg]	H_htr4_in=3169 [kJ/kg]	H_htr2_in=3046 [kJ/kg]
H_htr2_out=902.3 [kJ/kg]	H_htr2_out=902.3 [kJ/kg]	H_htr2_out=902.3 [kJ/kg]	H_htr2_out=902.3 [kJ/kg]	H_htr4_out=747.4 [kJ/kg]	H_htr2_out=902.3 [kJ/kg]
H_htr3_in=3343 [kJ/kg]	H_htr3_in=3343 [kJ/kg]	H_htr3_in=3343 [kJ/kg]	H_htr3_in=3343 [kJ/kg]	H_htr5_in=2967 [kJ/kg]	H_htr3_in=3343 [kJ/kg]
H_htr3_out=786.8 [kJ/kg]	H_htr3_out=786.8 [kJ/kg]	H_htr3_out=786.8 [kJ/kg]	H_htr3_out=786.8 [kJ/kg]	H_htr5_out=469 [kJ/kg]	H_htr3_out=786.8 [kJ/kg]
H_htr4_in=3169 [kJ/kg]	H_htr4_in=3169 [kJ/kg]	H_htr4_in=3169 [kJ/kg]	H_htr4_in=3169 [kJ/kg]	H_htr6_in=2782 [kJ/kg]	H_htr4_in=3169 [kJ/kg]
H_htr4_out=747.4 [kJ/kg]	H_htr4_out=747.4 [kJ/kg]	H_htr4_out=747.4 [kJ/kg]	H_htr4_out=747.4 [kJ/kg]	H_htr6_out=380.8 [kJ/kg]	H_htr4_out=747.4 [kJ/kg]
H_htr5_in=2967 [kJ/kg]	H_htr5_in=2967 [kJ/kg]	H_htr5_in=2967 [kJ/kg]	H_htr5_in=2967 [kJ/kg]	H_htr7_in=2651 [kJ/kg]	H_htr5_in=2967 [kJ/kg]
H_htr5_out=469 [kJ/kg]	H_htr5_out=469 [kJ/kg]	H_htr5_out=469 [kJ/kg]	H_htr5_out=469 [kJ/kg]	H_htr7_out=280.3 [kJ/kg]	H_htr5_out=469 [kJ/kg]
H_htr6_in=2782 [kJ/kg]	H_htr6_in=2782 [kJ/kg]	H_htr6_in=2782 [kJ/kg]	H_htr6_in=2782 [kJ/kg]	H_htr8_in=2515 [kJ/kg]	H_htr6_in=2782 [kJ/kg]
H_htr6_out=380.8 [kJ/kg]	H_htr6_out=380.8 [kJ/kg]	H_htr6_out=380.8 [kJ/kg]	H_htr6_out=380.8 [kJ/kg]	H_htr8_out=216 [kJ/kg]	H_htr6_out=380.8 [kJ/kg]
H_htr7_in=2651 [kJ/kg]	H_htr7_in=2651 [kJ/kg]	H_htr7_in=2651 [kJ/kg]	H_htr7_in=2651 [kJ/kg]	P_1=16700 [kPa]	H_htr7_in=2651 [kJ/kg]
H_htr7_out=280.3 [kJ/kg]	H_htr7_out=280.3 [kJ/kg]	H_htr7_out=280.3 [kJ/kg]	H_htr7_out=280.3 [kJ/kg]	P_10=58.73 [kPa]	H_htr7_out=280.3 [kJ/kg]
H_htr8_in=2515 [kJ/kg]	H_htr8_in=2515 [kJ/kg]	H_htr8_in=2515 [kJ/kg]	H_htr8_in=2515 [kJ/kg]	P_11=126.3 [kPa]	H_htr8_in=2515 [kJ/kg]
H_htr8_out=216 [kJ/kg]	H_htr8_out=216 [kJ/kg]	H_htr8_out=216 [kJ/kg]	H_htr8_out=216 [kJ/kg]	P_12=353.1 [kPa]	H_htr8_out=216 [kJ/kg]
P_1=16700 [kPa]	P_1=16700 [kPa]	P_1=16700 [kPa]	P_1=16700 [kPa]	P_13=997.3 [kPa]	P_1=16700 [kPa]
P_10=58.73 [kPa]	P_10=58.73 [kPa]	P_10=58.73 [kPa]	P_10=58.73 [kPa]	P_14=1737 [kPa]	P_10=58.73 [kPa]
P_11=126.3 [kPa]	P_11=126.3 [kPa]	P_11=126.3 [kPa]	P_11=126.3 [kPa]	P_15=3712 [kPa]	P_11=126.3 [kPa]
P_12=353.1 [kPa]	P_12=353.1 [kPa]	P_12=353.1 [kPa]	P_12=353.1 [kPa]	P_16=20320 [kPa]	P_12=353.1 [kPa]
P_13=997.3 [kPa]	P_13=997.3 [kPa]	P_13=997.3 [kPa]	P_13=997.3 [kPa]	P_2=3913 [kPa]	P_13=997.3 [kPa]
P_14=1737 [kPa]	P_14=1737 [kPa]	P_14=1737 [kPa]	P_14=1737 [kPa]	P_3=3521 [kPa]	P_14=1737 [kPa]
P_15=3712 [kPa]	P_15=3712 [kPa]	P_15=3712 [kPa]	P_15=3712 [kPa]	P_4=951 [kPa]	P_15=3712 [kPa]
P_16=20320 [kPa]	P_16=20320 [kPa]	P_16=20320 [kPa]	P_16=20320 [kPa]	P_5=9.7 [kPa]	P_16=20320 [kPa]
P_1_0=16700 [kPa]	P_2=3913 [kPa]	P_2=3913 [kPa]	P_2=3913 [kPa]	P_6=9.689 [kPa]	P_1_0=16700 [kPa]
P_1_1=16700 [kPa]	P_2_0=3913 [kPa]	P_3=3521 [kPa]	P_3=3521 [kPa]	P_7=9.89 [kPa]	P_1_1=16700 [kPa]
P_2=3913 [kPa]	P_2_1=3913 [kPa]	P_3_0=3521 [kPa]	P_4=951 [kPa]	P_8=10.09 [kPa]	P_2=3913 [kPa]
P_3=3521 [kPa]	P_3=3521 [kPa]	P_3_1=3521 [kPa]	P_4_0=951 [kPa]	P_9=21.26 [kPa]	P_3=3521 [kPa]
P_4=951 [kPa]	P_4=951 [kPa]	P_4=951 [kPa]	P_4_1=951 [kPa]	P_bfp=7.199 [kW]	P_4=951 [kPa]
P_5=9.7 [kPa]	P_5=9.7 [kPa]	P_5=9.7 [kPa]	P_5=9.7 [kPa]	P_bfpm=9.794	P_5=9.7 [kPa]
P_6=9.689 [kPa]	P_6=9.689 [kPa]	P_6=9.689 [kPa]	P_6=9.689 [kPa]	P_Gen=300.2	P_6=9.689 [kPa]
P_7=9.89 [kPa]	P_7=9.89 [kPa]	P_7=9.89 [kPa]	P_7=9.89 [kPa]	P_hpt=91.58 [MW]	P_7=9.89 [kPa]
P_8=10.09 [kPa]	P_8=10.09 [kPa]	P_8=10.09 [kPa]	P_8=10.09 [kPa]	P_htr1_in=6380 [kPa]	P_8=10.09 [kPa]
P_9=21.26 [kPa]	P_9=21.26 [kPa]	P_9=21.26 [kPa]	P_9=21.26 [kPa]	P_htr1_out=4082 [kPa]	P_9=21.26 [kPa]
P_bfp=7.199 [MW]	P_bfp=7.199 [MW]	P_bfp=7.199 [MW]	P_bfp=7.199 [MW]	P_htr2_in=3913 [kPa]	P_bfp=7.199 [MW]
P_bfpt=9.794	P_bfpt=9.794	P_bfpt=9.794	P_bfpt=9.794	P_htr2_out=1945 [kPa]	P_bfpt=9.794

P_Gen=286.2	P_Gen=283.7	P_Gen=290.9	P_Gen=290.9	P_htr3_in=1830 [kPa]	P_Gen=289.5
P_hpt=88.13 [MW]	P_hpt=91.58 [MW]	P_hpt=91.58 [MW]	P_hpt=91.58 [MW]	P_htr4_in=970 [kPa]	P_hpt=91.58 [MW]
P_htr1_in=6380 [kPa]	P_htr1_in=6380 [kPa]	P_htr1_in=6380 [kPa]	P_htr1_in=6380 [kPa]	P_htr4_out=152.1 [kPa]	P_htr1_in=6380 [kPa]
P_htr1_out=4082 [kPa]	P_htr1_out=4082 [kPa]	P_htr1_out=4082 [kPa]	P_htr1_out=4082 [kPa]	P_htr5_in=402 [kPa]	P_htr1_out=4082 [kPa]
P_htr2_in=3913 [kPa]	P_htr2_in=3913 [kPa]	P_htr2_in=3913 [kPa]	P_htr2_in=3913 [kPa]	P_htr5_out=152.1 [kPa]	P_htr2_in=3913 [kPa]
P_htr2_out=1945 [kPa]	P_htr2_out=1945 [kPa]	P_htr2_out=1945 [kPa]	P_htr2_out=1945 [kPa]	P_htr6_in=146 [kPa]	P_htr2_out=1945 [kPa]
P_htr3_in=1830 [kPa]	P_htr3_in=1830 [kPa]	P_htr3_in=1830 [kPa]	P_htr3_in=1830 [kPa]	P_htr6_out=72.55 [kPa]	P_htr3_in=1830 [kPa]
P_htr4_in=970 [kPa]	P_htr4_in=970 [kPa]	P_htr4_in=970 [kPa]	P_htr4_in=970 [kPa]	P_htr7_in=69 [kPa]	P_htr4_in=970 [kPa]
P_htr4_out=152.1 [kPa]	P_htr4_out=152.1 [kPa]	P_htr4_out=152.1 [kPa]	P_htr4_out=152.1 [kPa]	P_htr8_in=25.4 [kPa]	P_htr4_out=152.1 [kPa]
P_htr5_in=402 [kPa]	P_htr5_in=402 [kPa]	P_htr5_in=402 [kPa]	P_htr5_in=402 [kPa]	P_ipt=79.96 [MW]	P_htr5_in=402 [kPa]
P_htr5_out=152.1 [kPa]	P_htr5_out=152.1 [kPa]	P_htr5_out=152.1 [kPa]	P_htr5_out=152.1 [kPa]	P_lpt=142.7 [MW]	P_htr5_out=152.1 [kPa]
P_htr6_in=146 [kPa]	P_htr6_in=146 [kPa]	P_htr6_in=146 [kPa]	P_htr6_in=146 [kPa]	S_1=6.412 [kJ/kg-K]	P_htr6_in=146 [kPa]
P_htr6_out=72.55 [kPa]	P_htr6_out=72.55 [kPa]	P_htr6_out=72.55 [kPa]	P_htr6_out=72.55 [kPa]	S_10=1.142 [kJ/kg-K]	P_htr6_out=72.55 [kPa]
P_htr7_in=69 [kPa]	P_htr7_in=69 [kPa]	P_htr7_in=69 [kPa]	P_htr7_in=69 [kPa]	S_11=1.38 [kJ/kg-K]	P_htr7_in=69 [kPa]
P_htr8_in=25.4 [kPa]	P_htr8_in=25.4 [kPa]	P_htr8_in=25.4 [kPa]	P_htr8_in=25.4 [kPa]	S_12=1.733 [kJ/kg-K]	P_htr8_in=25.4 [kPa]
P_ipt=76.34 [MW]	P_ipt=74.36 [MW]	P_ipt=76.78 [MW]	P_ipt=79.96 [MW]	S_13=2.162 [kJ/kg-K]	P_ipt=76.34 [MW]
P_lpt=135.1 [MW]	P_lpt=131 [MW]	P_lpt=136 [MW]	P_lpt=132.9 [MW]	S_14=2.398 [kJ/kg-K]	P_lpt=135.1 [MW]
S_1=6.412 [kJ/kg-K]	S_1=6.412 [kJ/kg-K]	S_1=6.412 [kJ/kg-K]	S_1=6.412 [kJ/kg-K]	S_15=2.76 [kJ/kg-K]	S_1=6.412 [kJ/kg-K]
S_10=1.142 [kJ/kg-K]	S_10=1.142 [kJ/kg-K]	S_10=1.142 [kJ/kg-K]	S_10=1.142 [kJ/kg-K]	S_16=3.005 [kJ/kg-K]	S_10=1.142 [kJ/kg-K]
S_11=1.38 [kJ/kg-K]	S_11=1.38 [kJ/kg-K]	S_11=1.38 [kJ/kg-K]	S_11=1.38 [kJ/kg-K]	S_2=6.516 [kJ/kg-K]	S_11=1.38 [kJ/kg-K]
S_12=1.733 [kJ/kg-K]	S_12=1.733 [kJ/kg-K]	S_12=1.733 [kJ/kg-K]	S_12=1.733 [kJ/kg-K]	S_3=7.263 [kJ/kg-K]	S_12=1.733 [kJ/kg-K]
S_13=2.162 [kJ/kg-K]	S_13=2.162 [kJ/kg-K]	S_13=2.162 [kJ/kg-K]	S_13=2.162 [kJ/kg-K]	S_4=7.344 [kJ/kg-K]	S_13=2.162 [kJ/kg-K]
S_14=2.398 [kJ/kg-K]	S_14=2.398 [kJ/kg-K]	S_14=2.398 [kJ/kg-K]	S_14=2.398 [kJ/kg-K]	S_5=7.599 [kJ/kg-K]	S_14=2.398 [kJ/kg-K]
S_15=2.76 [kJ/kg-K]	S_15=2.76 [kJ/kg-K]	S_15=2.76 [kJ/kg-K]	S_15=2.76 [kJ/kg-K]	S_6=0.6413 [kJ/kg-K]	S_15=2.76 [kJ/kg-K]
S_16=3.005 [kJ/kg-K]	S_16=3.005 [kJ/kg-K]	S_16=3.005 [kJ/kg-K]	S_16=3.005 [kJ/kg-K]	S_7=0.647 [kJ/kg-K]	S_16=3.005 [kJ/kg-K]
S_1_0=6.412 [kJ/kg-K]	S_2=6.516 [kJ/kg-K]	S_2=6.516 [kJ/kg-K]	S_2=6.516 [kJ/kg-K]	S_8=0.6523 [kJ/kg-K]	S_1_0=6.412 [kJ/kg-K]
S_1_1=6.412 [kJ/kg-K]	S_2_0=6.516 [kJ/kg-K]	S_3=7.263 [kJ/kg-K]	S_3=7.263 [kJ/kg-K]	S_9=0.8532 [kJ/kg-K]	S_1_1=6.412 [kJ/kg-K]
S_2=6.516 [kJ/kg-K]	S_2_1=6.516 [kJ/kg-K]	S_3_0=7.263 [kJ/kg-K]	S_4=7.344 [kJ/kg-K]	T_1=538 [C]	S_2=6.516 [kJ/kg-K]
S_3=7.263 [kJ/kg-K]	S_3=7.263 [kJ/kg-K]	S_3_1=7.263 [kJ/kg-K]	S_4_0=7.344 [kJ/kg-K]	T_10=85.4 [C]	S_3=7.263 [kJ/kg-K]
S_4=7.344 [kJ/kg-K]	S_4=7.344 [kJ/kg-K]	S_4=7.344 [kJ/kg-K]	S_4_1=7.344 [kJ/kg-K]	T_11=106.3 [C]	S_4=7.344 [kJ/kg-K]
S_5=7.599 [kJ/kg-K]	S_5=7.599 [kJ/kg-K]	S_5=7.599 [kJ/kg-K]	S_5=7.599 [kJ/kg-K]	T_12=139.2 [C]	S_5=7.599 [kJ/kg-K]
S_6=0.6413 [kJ/kg-K]	S_6=0.6413 [kJ/kg-K]	S_6=0.6413 [kJ/kg-K]	S_6=0.6413 [kJ/kg-K]	T_13=179.8 [C]	S_6=0.6413 [kJ/kg-K]
S_7=0.647 [kJ/kg-K]	S_7=0.647 [kJ/kg-K]	S_7=0.647 [kJ/kg-K]	S_7=0.647 [kJ/kg-K]	T_14=205.4 [C]	S_7=0.647 [kJ/kg-K]
S_8=0.6523 [kJ/kg-K]	S_8=0.6523 [kJ/kg-K]	S_8=0.6523 [kJ/kg-K]	S_8=0.6523 [kJ/kg-K]	T_15=246 [C]	S_8=0.6523 [kJ/kg-K]
S_9=0.8532 [kJ/kg-K]	S_9=0.8532 [kJ/kg-K]	S_9=0.8532 [kJ/kg-K]	S_9=0.8532 [kJ/kg-K]	T_16=277.9 [C]	S_9=0.8532 [kJ/kg-K]
T_1=538 [C]	T_1=538 [C]	T_1=538 [C]	T_1=538 [C]	T_2=331.2 [C]	T_1=538 [C]
T_10=85.4 [C]	T_10=85.4 [C]	T_10=85.4 [C]	T_10=85.4 [C]	T_3=538 [C]	T_10=85.4 [C]
T_11=106.3 [C]	T_11=106.3 [C]	T_11=106.3 [C]	T_11=106.3 [C]	T_4=355.5 [C]	T_11=106.3 [C]
T_12=139.2 [C]	T_12=139.2 [C]	T_12=139.2 [C]	T_12=139.2 [C]	T_5=45.2 [C]	T_12=139.2 [C]
T_13=179.8 [C]	T_13=179.8 [C]	T_13=179.8 [C]	T_13=179.8 [C]	T_6=45.2 [C]	T_13=179.8 [C]

T_14=205.4 [C]	T_14=205.4 [C]	T_14=205.4 [C]	T_14=205.4 [C]	T_7=45.6 [C]	T_14=205.4 [C]
T_15=246 [C]	T_15=246 [C]	T_15=246 [C]	T_15=246 [C]	T_8=46 [C]	T_15=246 [C]
T_16=277.9 [C]	T_16=277.9 [C]	T_16=277.9 [C]	T_16=277.9 [C]	T_9=61.4 [C]	T_16=277.9 [C]
T_1_0=538 [C]	T_2=331.2 [C]	T_2=331.2 [C]	T_2=331.2 [C]	T_htr1_in=395.4 [C]	T_1_0=538 [C]
T_1_1=538 [C]	T_2_0=331.2 [C]	T_3=538 [C]	T_3=538 [C]	T_htr1_out=251.6 [C]	T_1_1=538 [C]
T_2=331.2 [C]	T_2_1=331.2 [C]	T_3_0=538 [C]	T_4=355.5 [C]	T_htr2_in=331.2 [C]	T_2=331.2 [C]
T_3=538 [C]	T_3=538 [C]	T_3_1=538 [C]	T_4_0=355.5 [C]	T_htr2_out=211 [C]	T_3=538 [C]
T_4=355.5 [C]	T_4=355.5 [C]	T_4=355.5 [C]	T_4_1=355.5 [C]	T_htr3_in=442.1 [C]	T_4=355.5 [C]
T_5=45.2 [C]	T_5=45.2 [C]	T_5=45.2 [C]	T_5=45.2 [C]	T_htr3_out=185.4 [C]	T_5=45.2 [C]
T_6=45.2 [C]	T_6=45.2 [C]	T_6=45.2 [C]	T_6=45.2 [C]	T_htr4_in=355.2 [C]	T_6=45.2 [C]
T_7=45.6 [C]	T_7=45.6 [C]	T_7=45.6 [C]	T_7=45.6 [C]	T_htr4_out=175.9 [C]	T_7=45.6 [C]
T_8=46 [C]	T_8=46 [C]	T_8=46 [C]	T_8=46 [C]	T_htr5_in=251.5 [C]	T_8=46 [C]
T_9=61.4 [C]	T_9=61.4 [C]	T_9=61.4 [C]	T_9=61.4 [C]	T_htr5_out=111.8 [C]	T_9=61.4 [C]
T_htr1_in=395.4 [C]	T_htr1_in=395.4 [C]	T_htr1_in=395.4 [C]	T_htr1_in=395.4 [C]	T_htr6_in=154.5 [C]	T_htr1_in=395.4 [C]
T_htr1_out=251.6 [C]	T_htr1_out=251.6 [C]	T_htr1_out=251.6 [C]	T_htr1_out=251.6 [C]	T_htr6_out=90.9 [C]	T_htr1_out=251.6 [C]
T_htr2_in=331.2 [C]	T_htr2_in=331.2 [C]	T_htr2_in=331.2 [C]	T_htr2_in=331.2 [C]	T_htr7_in=89.5 [C]	T_htr2_in=331.2 [C]
T_htr2_out=211 [C]	T_htr2_out=211 [C]	T_htr2_out=211 [C]	T_htr2_out=211 [C]	T_htr7_out=67 [C]	T_htr2_out=211 [C]
T_htr3_in=442.1 [C]	T_htr3_in=442.1 [C]	T_htr3_in=442.1 [C]	T_htr3_in=442.1 [C]	T_htr8_in=65.3 [C]	T_htr3_in=442.1 [C]
T_htr3_out=185.4 [C]	T_htr3_out=185.4 [C]	T_htr3_out=185.4 [C]	T_htr3_out=185.4 [C]	T_htr8_out=51.6 [C]	T_htr3_out=185.4 [C]
T_htr4_in=355.2 [C]	T_htr4_in=355.2 [C]	T_htr4_in=355.2 [C]	T_htr4_in=355.2 [C]	X_5=0.9254	T_htr4_in=355.2 [C]
T_htr4_out=175.9 [C]	T_htr4_out=175.9 [C]	T_htr4_out=175.9 [C]	T_htr4_out=175.9 [C]		T_htr4_out=175.9 [C]
T_htr5_in=251.5 [C]	T_htr5_in=251.5 [C]	T_htr5_in=251.5 [C]	T_htr5_in=251.5 [C]		T_htr5_in=251.5 [C]
T_htr5_out=111.8 [C]	T_htr5_out=111.8 [C]	T_htr5_out=111.8 [C]	T_htr5_out=111.8 [C]		T_htr5_out=111.8 [C]
T_htr6_in=154.5 [C]	T_htr6_in=154.5 [C]	T_htr6_in=154.5 [C]	T_htr6_in=154.5 [C]		T_htr6_in=154.5 [C]
T_htr6_out=90.9 [C]	T_htr6_out=90.9 [C]	T_htr6_out=90.9 [C]	T_htr6_out=90.9 [C]		T_htr6_out=90.9 [C]
T_htr7_in=89.5 [C]	T_htr7_in=89.5 [C]	T_htr7_in=89.5 [C]	T_htr7_in=89.5 [C]		T_htr7_in=89.5 [C]
T_htr7_out=67 [C]	T_htr7_out=67 [C]	T_htr7_out=67 [C]	T_htr7_out=67 [C]		T_htr7_out=67 [C]
T_htr8_in=65.3 [C]	T_htr8_in=65.3 [C]	T_htr8_in=65.3 [C]	T_htr8_in=65.3 [C]		T_htr8_in=65.3 [C]
T_htr8_out=51.6 [C]	T_htr8_out=51.6 [C]	T_htr8_out=51.6 [C]	T_htr8_out=51.6 [C]		T_htr8_out=51.6 [C]
X_5=0.9254	X_5=0.9254	X_5=0.9254	X_5=0.9254		X=687