

Candu EXERGY BALANCE

		Q_th (kW)	η_energy		
component	Resource	Product	Exergy efficiency	Irreversibilities	% total
HP vane	16,746.76	0.00	0.00%	16,746.76	6.50%
Reheater 2 vane	1,429.68	0.00	0.00%	1,429.68	0.56%
HP1 turbine	202,631.73	184,589.88	91.10%	18,041.85	7.01%
Extraction pump	1,231.47	1,115.63	90.59%	115.85	0.05%
Feedwater heater	59,152.34	58,489.07	98.88%	663.27	0.26%
Feedwater pump	4,016.34	3,442.53	85.71%	573.81	0.22%
SG inlet vane	58.47	0.00	0.00%	58.47	0.02%
LP1 turbine	70,625.35	68,270.17	96.67%	2,355.18	0.91%
LP2 turbine	68,818.61	63,670.74	92.52%	5,147.87	2.00%
LP3 turbine	67,891.70	61,957.08	91.26%	5,934.62	2.31%
Condenser inlet	67,397.11	67,434.47	100.06%	-37.36	-0.01%
LP vane	862.89	0.00	0.00%	862.89	0.34%
HP2 turbine	61,345.30	46,020.26	75.02%	15,325.04	5.95%
LP4 turbine	72,524.42	58,505.83	80.67%	14,018.59	5.44%
FWH_LP1	10,887.93	7,827.21	71.89%	3,060.73	1.19%
FWH_LP2	11,034.22	9,518.80	86.27%	1,515.42	0.59%
FWH_LP3	12,444.71	11,258.57	90.47%	1,186.14	0.46%
FWH_HP6	28,334.91	26,778.26	94.51%	1,556.65	0.60%
LP5 turbine	110,305.90	83,282.80	75.50%	27,023.10	10.50%
inlet mix	117,991.73	117,663.31	99.72%	328.42	0.13%
mix HP1	34,058.06	34,058.06	100.00%	0.00	0.00%
LP4 mix	10,386.77	10,386.77	100.00%	0.00	0.00%
FWH_HP5	17,577.23	16,659.81	94.78%	917.42	0.36%
mix_HP5	23,656.23	23,656.23	100.00%	0.00	0.00%
?	44,444.83	44,444.83	2.00%	0.00	0.00% mix HP1-LP4 mix
Reheater 2	52,000.04	39,643.14	0.00%	12,356.90	4.80% Reheat 2-Reheater 2
Condenser	66,142.13	0.00	0.00%	66,142.13	25.69% Tk = 15,00 °C
Steam Generator	814,491.79	752,355.86	92.37%	62,135.93	24.13% Tk = 292,00 °C
global	814,491.79	557,032.43	68.39%	257,459.35	100.00%
T0 = 288,15 K	1,661,769.07	33.52%			