NuScale50 EXERGY BALANCE

		Q_th (kW)	*η_energy*			
component	**Resource**	**Product**	**Exergy efficiency**	**Irreversibilities**	**% total**	
extraction pump	126.10	103.02	81.70%	23.08	0.08%	
FWH_LP2	1,948.26	1,386.48	71.17%	561.78	2.06%	
FWH_LP3	3,061.32	2,557.08	83.53%	504.24	1.85%	
FWH_HP4	2,195.28	2,002.19	91.20%	193.09	0.71%	
Turbine 1	24,563.39	21,942.86	89.33%	2,620.53	9.59%	
Turbine 5	1,383.30	1,187.72	85.86%	195.58	0.72%	
Secondary pump	164.19	166.87	101.63%	-2.68	-0.01%	
SG inlet vane	4.59	0.00	0.00%	4.59	0.02%	
Turbine 6	4,805.90	4,116.73	85.66%	689.17	2.52%	
Turbine 7	8,013.76	6,800.72	84.86%	1,213.04	4.44%	
Condenser inlet	9,502.05	9,496.99	99.95%	5.06	0.02%	
Turbine 2	7,722.06	6,984.02	90.44%	738.04	2.70%	
Turbine 4	6,625.04	5,729.01	86.48%	896.03	3.28%	
LPH1 mixer	56.37	50.27	89.18%	6.10	0.02%	
Turbine 3	5,530.14	4,817.13	87.11%	713.01	2.61%	
mix_cond_3	292.00	292.89	100.30%	-0.89	0.00%	
LP1	25.22	18.23	0.00%	6.99	0.03%	LPH1 heater-LPH1
Condenser	9,177.45	5,679.49	61.89%	3,497.96	12.80%	Tk = 31,00 °C
Steam generator	84,277.11	68,823.55	81.66%	15,453.56	56.57%	Tk = 339,00 °C
global	**84,277.11**	**56,958.86**	**67.59%**	**27,318.25**	**100.00%**	
T0 = 288,15 K	***159,229.12***	***35.77%***				