

Central State Hospital
Heating Plant Day Operations Report

12/1/2019
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	23.10			hdd	
Total Plant Steam Flow	321.98			klbs	
Steam Flow Per Heating Degree Day	13.9			klbs/hdd	
Total Condensate Return Water Flow	8.7			klbs	
Total Plant Gas Flow	414.71			kscf	
Total Plant Gas Cost	\$2,546.62			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$2,546.62			\$	
Fuel Cost Per Heating Degree Day	\$110.23			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.34			\$/klbs	
Total Plant Efficiency By I/O	76.0			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.6	hrs
Steam Flow	0.00	321.98	0.00	0.00	klbs
Gas Flow	0.00	410.83	0.00	3.88	kscf
Natural Gas Cost	\$0.00	\$2,522.78	\$0.00	\$23.84	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,522.78	\$0.00	\$23.84	\$
Average Steam Cost	—	\$7.84	—	—	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	74.9	%
Efficiency By I/O		76.8			%

Central State Hospital
Heating Plant Day Operations Report

12/2/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	21.00	hdd			
Total Plant Steam Flow	317.01	klbs			
Steam Flow Per Heating Degree Day	15.1	klbs/hdd			
Total Condensate Return Water Flow	8.8	klbs			
Total Plant Gas Flow	407.76	kscf			
Total Plant Gas Cost	\$2,503.96	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,503.96	\$			
Fuel Cost Per Heating Degree Day	\$119.22	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.38	\$/klbs			
Total Plant Efficiency By I/O	76.1	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	317.01	0.00	0.00	klbs
Gas Flow	0.00	404.54	0.00	3.22	kscf
Natural Gas Cost	\$0.00	\$2,484.17	\$0.00	\$19.79	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,484.17	\$0.00	\$19.79	\$
Average Steam Cost	—	\$7.84	—	—	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	74.7	%
Efficiency By I/O		76.7			%

Central State Hospital
Heating Plant Day Operations Report

12/3/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	22.29	hdd			
Total Plant Steam Flow	347.33	klbs			
Steam Flow Per Heating Degree Day	15.6	klbs/hdd			
Total Condensate Return Water Flow	8.5	klbs			
Total Plant Gas Flow	445.68	kscf			
Total Plant Gas Cost	\$2,736.80	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,736.80	\$			
Fuel Cost Per Heating Degree Day	\$122.80	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.35	\$/klbs			
Total Plant Efficiency By I/O	76.3	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.6	hrs
Steam Flow	0.00	347.33	0.00	0.00	klbs
Gas Flow	0.00	441.38	0.00	4.30	kscf
Natural Gas Cost	\$0.00	\$2,710.39	\$0.00	\$26.41	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,710.39	\$0.00	\$26.41	\$
Average Steam Cost	---	\$7.80	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	76.8	%
Efficiency By I/O		77.1			%

Central State Hospital
Heating Plant Day Operations Report

12/4/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	24.15	hdd			
Total Plant Steam Flow	343.69	klbs			
Steam Flow Per Heating Degree Day	14.2	klbs/hdd			
Total Condensate Return Water Flow	8.8	klbs			
Total Plant Gas Flow	441.83	kscf			
Total Plant Gas Cost	\$2,713.14	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,713.14	\$			
Fuel Cost Per Heating Degree Day	\$112.35	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.33	\$/klbs			
Total Plant Efficiency By I/O	76.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.6	hrs
Steam Flow	0.00	343.69	0.00	0.00	klbs
Gas Flow	0.00	437.79	0.00	4.04	kscf
Natural Gas Cost	\$0.00	\$2,688.35	\$0.00	\$24.79	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,688.35	\$0.00	\$24.79	\$
Average Steam Cost	---	\$7.82	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	75.1	%
Efficiency By I/O		76.9			%

Central State Hospital
Heating Plant Day Operations Report

12/5/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	25.00	hdd			
Total Plant Steam Flow	343.20	klbs			
Steam Flow Per Heating Degree Day	13.7	klbs/hdd			
Total Condensate Return Water Flow	8.9	klbs			
Total Plant Gas Flow	428.74	kscf			
Total Plant Gas Cost	\$2,632.79	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,632.79	\$			
Fuel Cost Per Heating Degree Day	\$105.30	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.31	\$/klbs			
Total Plant Efficiency By I/O	78.4	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	343.20	0.00	0.00	klbs
Gas Flow	0.00	425.32	0.00	3.43	kscf
Natural Gas Cost	\$0.00	\$2,611.76	\$0.00	\$21.04	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,611.76	\$0.00	\$21.04	\$
Average Steam Cost	—	\$7.61	—	—	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	78.5	%
Efficiency By I/O		79.0			%

Central State Hospital
Heating Plant Day Operations Report

12/6/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	24.00	hdd			
Total Plant Steam Flow	354.20	klbs			
Steam Flow Per Heating Degree Day	14.8	klbs/hdd			
Total Condensate Return Water Flow	8.5	klbs			
Total Plant Gas Flow	440.72	kscf			
Total Plant Gas Cost	\$2,706.36	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,706.36	\$			
Fuel Cost Per Heating Degree Day	\$112.78	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.32	\$/klbs			
Total Plant Efficiency By I/O	78.7	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.7	hrs
Steam Flow	0.00	354.19	0.00	0.01	klbs
Gas Flow	0.00	436.34	0.00	4.39	kscf
Natural Gas Cost	\$0.00	\$2,679.43	\$0.00	\$26.93	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,679.43	\$0.00	\$26.93	\$
Average Steam Cost	—	\$7.57	—	\$2,907.69	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	75.2	%
Efficiency By I/O		79.5			%

Central State Hospital
Heating Plant Day Operations Report

12/7/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	24.49	hdd			
Total Plant Steam Flow	343.96	klbs			
Steam Flow Per Heating Degree Day	14.0	klbs/hdd			
Total Condensate Return Water Flow	8.8	klbs			
Total Plant Gas Flow	426.37	kscf			
Total Plant Gas Cost	\$2,618.24	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,618.24	\$			
Fuel Cost Per Heating Degree Day	\$106.91	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.31	\$/klbs			
Total Plant Efficiency By I/O	79.0	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.1	0.5	hrs
Steam Flow	0.00	343.96	0.00	0.00	klbs
Gas Flow	0.00	422.97	0.00	3.40	kscf
Natural Gas Cost	\$0.00	\$2,597.34	\$0.00	\$20.90	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,597.34	\$0.00	\$20.90	\$
Average Steam Cost	---	\$7.55	---	---	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	76.3	%
Efficiency By I/O		79.6			%

Central State Hospital
Heating Plant Day Operations Report

12/8/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	29.01	hdd			
Total Plant Steam Flow	358.48	klbs			
Steam Flow Per Heating Degree Day	12.4	klbs/hdd			
Total Condensate Return Water Flow	8.5	klbs			
Total Plant Gas Flow	443.60	kscf			
Total Plant Gas Cost	\$2,724.03	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.01	\$			
Total Plant Fuel Cost	\$2,724.04	\$			
Fuel Cost Per Heating Degree Day	\$93.89	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.26	\$/klbs			
Total Plant Efficiency By I/O	79.1	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.8	hrs
Steam Flow	0.00	358.37	0.00	0.11	klbs
Gas Flow	0.00	438.09	0.00	5.50	kscf
Natural Gas Cost	\$0.00	\$2,690.23	\$0.00	\$33.80	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.01	\$
Total Fuel Cost	\$0.00	\$2,690.23	\$0.00	\$33.81	\$
Average Steam Cost	---	\$7.51	—	\$318.05	\$/klbs
Efficiency By Losses	0.0	79.8	0.0	72.5	%
Efficiency By I/O		80.1		1.9	%

Central State Hospital
Heating Plant Day Operations Report

12/9/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	29.01	hdd			
Total Plant Steam Flow	333.05	klbs			
Steam Flow Per Heating Degree Day	11.5	klbs/hdd			
Total Condensate Return Water Flow	8.9	klbs			
Total Plant Gas Flow	412.51	kscf			
Total Plant Gas Cost	\$2,533.09	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,533.09	\$			
Fuel Cost Per Heating Degree Day	\$87.31	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.26	\$/klbs			
Total Plant Efficiency By I/O	79.1	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	333.05	0.00	0.00	klbs
Gas Flow	0.00	409.99	0.00	2.51	kscf
Natural Gas Cost	\$0.00	\$2,517.66	\$0.00	\$15.44	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,517.66	\$0.00	\$15.44	\$
Average Steam Cost	---	\$7.56	---	—	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	79.0	%
Efficiency By I/O		79.6			%

Central State Hospital
Heating Plant Day Operations Report

12/10/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	14.89	hdd			
Total Plant Steam Flow	321.23	klbs			
Steam Flow Per Heating Degree Day	21.6	klbs/hdd			
Total Condensate Return Water Flow	8.7	klbs			
Total Plant Gas Flow	399.13	kscf			
Total Plant Gas Cost	\$2,450.97	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,450.97	\$			
Fuel Cost Per Heating Degree Day	\$164.55	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.51	\$/klbs			
Total Plant Efficiency By I/O	78.8	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	321.23	0.00	0.00	klbs
Gas Flow	0.00	396.75	0.00	2.38	kscf
Natural Gas Cost	\$0.00	\$2,436.37	\$0.00	\$14.59	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,436.37	\$0.00	\$14.59	\$
Average Steam Cost	---	\$7.58	---	---	\$/klbs
Efficiency By Losses	0.0	80.1	0.0	70.7	%
Efficiency By I/O		79.3			%

Central State Hospital
Heating Plant Day Operations Report

12/11/2019
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	8.60			hdd	
Total Plant Steam Flow	314.09			klbs	
Steam Flow Per Heating Degree Day	36.5			klbs/hdd	
Total Condensate Return Water Flow	9.1			klbs	
Total Plant Gas Flow	389.60			kscf	
Total Plant Gas Cost	\$2,392.41			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.02			\$	
Total Plant Fuel Cost	\$2,392.43			\$	
Fuel Cost Per Heating Degree Day	\$278.33			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.89			\$/klbs	
Total Plant Efficiency By I/O	79.0			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.6	hrs
Steam Flow	0.00	314.09	0.00	0.00	klbs
Gas Flow	0.00	385.85	0.00	3.75	kscf
Natural Gas Cost	\$0.00	\$2 369.39	\$0.00	\$23.01	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.02	\$
Total Fuel Cost	\$0.00	\$2,369.39	\$0.00	\$23.03	\$
Average Steam Cost	---	\$7.54	---	---	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	74.2	%
Efficiency By I/O		79.7			%

Central State Hospital
Heating Plant Day Operations Report

12/12/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	28.43	hdd			
Total Plant Steam Flow	379.31	klbs			
Steam Flow Per Heating Degree Day	13.3	klbs/hdd			
Total Condensate Return Water Flow	8.1	klbs			
Total Plant Gas Flow	480.36	kscf			
Total Plant Gas Cost	\$2,949.76	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.16	\$			
Total Plant Fuel Cost	\$2,949.91	\$			
Fuel Cost Per Heating Degree Day	\$103.75	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.27	\$/klbs			
Total Plant Efficiency By I/O	77.3	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.8	hrs
Steam Flow	0.00	379.24	0.00	0.07	klbs
Gas Flow	0.00	475.12	0.00	5.24	kscf
Natural Gas Cost	\$0.00	\$2,917.58	\$0.00	\$32.17	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.16	\$
Total Fuel Cost	\$0.00	\$2,917.58	\$0.00	\$32.33	\$
Average Steam Cost	---	\$7.69	---	\$466.73	\$/klbs
Efficiency By Losses	0.0	79.7	0.0	77.6	%
Efficiency By I/O		78.2		1.3	%

Central State Hospital
Heating Plant Day Operations Report

12/13/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	32.29	hdd			
Total Plant Steam Flow	391.97	klbs			
Steam Flow Per Heating Degree Day	12.1	klbs/hdd			
Total Condensate Return Water Flow	7.6	klbs			
Total Plant Gas Flow	506.43	kscf			
Total Plant Gas Cost	\$3,109.83	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$3,109.83	\$			
Fuel Cost Per Heating Degree Day	\$96.31	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.25	\$/klbs			
Total Plant Efficiency By I/O	75.8	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.7	hrs
Steam Flow	0.00	391.79	0.00	0.18	klbs
Gas Flow	0.00	501.40	0.00	5.02	kscf
Natural Gas Cost	\$0.00	\$3,078.98	\$0.00	\$30.86	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$3,078.98	\$0.00	\$30.86	\$
Average Steam Cost	—	\$7.86	—	\$167.54	\$/klbs
Efficiency By Losses	0.0	79.7	0.0	77.2	%
Efficiency By I/O		76.5		3.6	%

Central State Hospital
Heating Plant Day Operations Report

12/14/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	30.22	hdd			
Total Plant Steam Flow	391.31	klbs			
Steam Flow Per Heating Degree Day	12.9	klbs/hdd			
Total Condensate Return Water Flow	6.9	klbs			
Total Plant Gas Flow	493.43	kscf			
Total Plant Gas Cost	\$3,030.03	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.14	\$			
Total Plant Fuel Cost	\$3,030.18	\$			
Fuel Cost Per Heating Degree Day	\$100.27	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.26	\$/klbs			
Total Plant Efficiency By I/O	77.7	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	21.1	0.0	2.9	hrs
Steam Flow	0.00	347.32	0.00	43.99	klbs
Gas Flow	0.00	434.40	0.00	59.03	kscf
Natural Gas Cost	\$0.00	\$2,667.57	\$0.00	\$362.46	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.14	\$
Total Fuel Cost	\$0.00	\$2,667.57	\$0.00	\$362.61	\$
Average Steam Cost	---	\$7.68	---	\$8.24	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	75.5	%
Efficiency By I/O		78.3		73.0	%

Central State Hospital
Heating Plant Day Operations Report

12/15/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	19.01	hdd			
Total Plant Steam Flow	368.40	klbs			
Steam Flow Per Heating Degree Day	19.4	klbs/hdd			
Total Condensate Return Water Flow	7.6	klbs			
Total Plant Gas Flow	458.04	kscf			
Total Plant Gas Cost	\$2,812.71	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,812.71	\$			
Fuel Cost Per Heating Degree Day	\$147.97	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.40	\$/klbs			
Total Plant Efficiency By I/O	78.8	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	368.40	0.00	0.00	klbs
Gas Flow	0.00	454.99	0.00	3.05	kscf
Natural Gas Cost	\$0.00	\$2,793.96	\$0.00	\$18.74	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,793.96	\$0.00	\$18.74	\$
Average Steam Cost	---	\$7.58	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	73.2	%
Efficiency By I/O		79.3			%

Central State Hospital
Heating Plant Day Operations Report

12/16/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	19.21	hdd			
Total Plant Steam Flow	359.79	klbs			
Steam Flow Per Heating Degree Day	18.7	klbs/hdd			
Total Condensate Return Water Flow	7.3	klbs			
Total Plant Gas Flow	447.18	kscf			
Total Plant Gas Cost	\$2,746.02	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,746.02	\$			
Fuel Cost Per Heating Degree Day	\$142.96	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.40	\$/klbs			
Total Plant Efficiency By I/O	78.8	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	359.79	0.00	0.00	klbs
Gas Flow	0.00	443.65	0.00	3.52	kscf
Natural Gas Cost	\$0.00	\$2,724.37	\$0.00	\$21.64	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,724.37	\$0.00	\$21.64	\$
Average Steam Cost	---	\$7.57	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	73.8	%
Efficiency By I/O		79.4			%

Central State Hospital
Heating Plant Day Operations Report

12/17/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	17.37	hdd			
Total Plant Steam Flow	356.03	klbs			
Steam Flow Per Heating Degree Day	20.5	klbs/hdd			
Total Condensate Return Water Flow	7.6	klbs			
Total Plant Gas Flow	442.90	kscf			
Total Plant Gas Cost	\$2,719.72	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.10	\$			
Total Plant Fuel Cost	\$2,719.82	\$			
Fuel Cost Per Heating Degree Day	\$156.54	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.44	\$/klbs			
Total Plant Efficiency By I/O	78.7	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	356.03	0.00	0.00	klbs
Gas Flow	0.00	440.18	0.00	2.71	kscf
Natural Gas Cost	\$0.00	\$2,703.05	\$0.00	\$16.67	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.10	\$
Total Fuel Cost	\$0.00	\$2,703.05	\$0.00	\$16.76	\$
Average Steam Cost	—	\$7.59	—	—	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	81.1	%
Efficiency By I/O		79.2			%

Central State Hospital
Heating Plant Day Operations Report

12/18/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	15.19	hdd			
Total Plant Steam Flow	348.23	klbs			
Steam Flow Per Heating Degree Day	22.9	klbs/hdd			
Total Condensate Return Water Flow	8.1	klbs			
Total Plant Gas Flow	435.14	kscf			
Total Plant Gas Cost	\$2,672.10	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.17	\$			
Total Plant Fuel Cost	\$2,672.27	\$			
Fuel Cost Per Heating Degree Day	\$175.93	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.51	\$/klbs			
Total Plant Efficiency By I/O	78.4	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.6	hrs
Steam Flow	0.00	348.23	0.00	0.00	klbs
Gas Flow	0.00	431.05	0.00	4.09	kscf
Natural Gas Cost	\$0.00	\$2,647.00	\$0.00	\$25.10	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.17	\$
Total Fuel Cost	\$0.00	\$2,647.00	\$0.00	\$25.27	\$
Average Steam Cost	---	\$7.60	---	---	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	77.2	%
Efficiency By I/O		79.1			%

Central State Hospital
Heating Plant Day Operations Report

12/19/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	28.67	hdd			
Total Plant Steam Flow	369.96	klbs			
Steam Flow Per Heating Degree Day	12.9	klbs/hdd			
Total Condensate Return Water Flow	8.0	klbs			
Total Plant Gas Flow	457.33	kscf			
Total Plant Gas Cost	\$2,808.37	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,808.37	\$			
Fuel Cost Per Heating Degree Day	\$97.95	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.26	\$/klbs			
Total Plant Efficiency By I/O	79.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.8	hrs
Steam Flow	0.00	369.55	0.00	0.41	klbs
Gas Flow	0.00	452.08	0.00	5.25	kscf
Natural Gas Cost	\$0.00	\$2,776.12	\$0.00	\$32.26	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,776.12	\$0.00	\$32.26	\$
Average Steam Cost	---	\$7.51	---	\$78.63	\$/klbs
Efficiency By Losses	0.0	79.8	0.0	71.4	%
Efficiency By I/O		80.1		7.6	%

Central State Hospital
Heating Plant Day Operations Report

12/20/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	35.49	hdd			
Total Plant Steam Flow	381.84	klbs			
Steam Flow Per Heating Degree Day	10.8	klbs/hdd			
Total Condensate Return Water Flow	8.0	klbs			
Total Plant Gas Flow	468.40	kscf			
Total Plant Gas Cost	\$2,876.33	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,876.33	\$			
Fuel Cost Per Heating Degree Day	\$81.04	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.21	\$/klbs			
Total Plant Efficiency By I/O	79.8	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	1.1	hrs
Steam Flow	0.00	380.36	0.00	1.48	klbs
Gas Flow	0.00	461.02	0.00	7.38	kscf
Natural Gas Cost	\$0.00	\$2,831.01	\$0.00	\$45.32	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,831.01	\$0.00	\$45.32	\$
Average Steam Cost	—	\$7.44	—	\$30.69	\$/klbs
Efficiency By Losses	0.0	79.8	0.0	78.5	%
Efficiency By I/O		80.8		19.6	%

Central State Hospital
Heating Plant Day Operations Report

12/21/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	32.85	hdd			
Total Plant Steam Flow	375.63	klbs			
Steam Flow Per Heating Degree Day	11.4	klbs/hdd			
Total Condensate Return Water Flow	6.8	klbs			
Total Plant Gas Flow	462.32	kscf			
Total Plant Gas Cost	\$2,838.96	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,838.96	\$			
Fuel Cost Per Heating Degree Day	\$86.42	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.23	\$/klbs			
Total Plant Efficiency By I/O	79.6	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.3	hrs
Steam Flow	0.00	375.40	0.00	0.22	klbs
Gas Flow	0.00	460.01	0.00	2.30	kscf
Natural Gas Cost	\$0.00	\$2,824.82	\$0.00	\$14.14	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,824.82	\$0.00	\$14.14	\$
Average Steam Cost	---	\$7.52	---	\$63.73	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	72.0	%
Efficiency By I/O		79.9		9.4	%

Central State Hospital
Heating Plant Day Operations Report

12/22/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	29.37	hdd			
Total Plant Steam Flow	367.73	klbs			
Steam Flow Per Heating Degree Day	12.5	klbs/hdd			
Total Condensate Return Water Flow	7.0	klbs			
Total Plant Gas Flow	461.57	kscf			
Total Plant Gas Cost	\$2,834.40	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,834.40	\$			
Fuel Cost Per Heating Degree Day	\$96.50	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.26	\$/klbs			
Total Plant Efficiency By I/O	78.0	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	367.73	0.00	0.00	klbs
Gas Flow	0.00	458.45	0.00	3.12	kscf
Natural Gas Cost	\$0.00	\$2,815.23	\$0.00	\$19.17	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,815.23	\$0.00	\$19.17	\$
Average Steam Cost	---	\$7.66	---	---	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	79.7	%
Efficiency By I/O		78.6			%

Central State Hospital
Heating Plant Day Operations Report

12/23/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	28.61				hdd
Total Plant Steam Flow	361.26				klbs
Steam Flow Per Heating Degree Day	12.6				klbs/hdd
Total Condensate Return Water Flow	7.6				klbs
Total Plant Gas Flow	445.27				kscf
Total Plant Gas Cost	\$2,734.27				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,734.27				\$
Fuel Cost Per Heating Degree Day	\$95.56				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.26				\$/klbs
Total Plant Efficiency By I/O	79.5				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	361.26	0.00	0.00	klbs
Gas Flow	0.00	442.89	0.00	2.38	kscf
Natural Gas Cost	\$0.00	\$2,719.68	\$0.00	\$14.59	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,719.68	\$0.00	\$14.59	\$
Average Steam Cost	—	\$7.53	—	—	\$/klbs
Efficiency By Losses	0.0	80.1	0.0	74.7	%
Efficiency By I/O		79.9			%

Central State Hospital
Heating Plant Day Operations Report

12/24/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	20.76	hdd			
Total Plant Steam Flow	372.14	klbs			
Steam Flow Per Heating Degree Day	17.9	klbs/hdd			
Total Condensate Return Water Flow	6.9	klbs			
Total Plant Gas Flow	455.16	kscf			
Total Plant Gas Cost	\$2,795.01	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,795.01	\$			
Fuel Cost Per Heating Degree Day	\$134.66	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.36	\$/klbs			
Total Plant Efficiency By I/O	80.1	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	372.14	0.00	0.00	klbs
Gas Flow	0.00	452.09	0.00	3.07	kscf
Natural Gas Cost	\$0.00	\$2,776.18	\$0.00	\$18.83	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,776.18	\$0.00	\$18.83	\$
Average Steam Cost	---	\$7.46	---	---	\$/klbs
Efficiency By Losses	0.0	80.1	0.0	77.6	%
Efficiency By I/O		80.6			%

Central State Hospital
Heating Plant Day Operations Report

12/25/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	21.05				hdd
Total Plant Steam Flow	354.61				klbs
Steam Flow Per Heating Degree Day	16.8				klbs/hdd
Total Condensate Return Water Flow	7.6				klbs
Total Plant Gas Flow	435.23				kscf
Total Plant Gas Cost	\$2,672.63				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,672.63				\$
Fuel Cost Per Heating Degree Day	\$126.96				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.36				\$/klbs
Total Plant Efficiency By I/O	79.8				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.5	hrs
Steam Flow	0.00	354.61	0.00	0.00	klbs
Gas Flow	0.00	431.93	0.00	3.30	kscf
Natural Gas Cost	\$0.00	\$2,652.38	\$0.00	\$20.25	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,652.38	\$0.00	\$20.25	\$
Average Steam Cost	—	\$7.48	—	---	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	78.9	%
Efficiency By I/O		80.4			%

Central State Hospital
Heating Plant Day Operations Report

12/26/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	24.19	hdd			
Total Plant Steam Flow	359.88	klbs			
Steam Flow Per Heating Degree Day	14.9	klbs/hdd			
Total Condensate Return Water Flow	7.8	klbs			
Total Plant Gas Flow	440.10	kscf			
Total Plant Gas Cost	\$2,702.55	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,702.55	\$			
Fuel Cost Per Heating Degree Day	\$111.74	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.31	\$/klbs			
Total Plant Efficiency By I/O	80.1	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	359.88	0.00	0.00	klbs
Gas Flow	0.00	437.43	0.00	2.67	kscf
Natural Gas Cost	\$0.00	\$2,686.13	\$0.00	\$16.42	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,686.13	\$0.00	\$16.42	\$
Average Steam Cost	---	\$7.46	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	79.3	%
Efficiency By I/O		80.6			%

Central State Hospital
Heating Plant Day Operations Report

12/27/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	20.22	hdd			
Total Plant Steam Flow	329.82	klbs			
Steam Flow Per Heating Degree Day	16.3	klbs/hdd			
Total Condensate Return Water Flow	8.9	klbs			
Total Plant Gas Flow	404.72	kscf			
Total Plant Gas Cost	\$2,485.29	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,485.29	\$			
Fuel Cost Per Heating Degree Day	\$122.89	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.37	\$/klbs			
Total Plant Efficiency By I/O	79.8	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	329.82	0.00	0.00	klbs
Gas Flow	0.00	401.99	0.00	2.73	kscf
Natural Gas Cost	\$0.00	\$2,468.52	\$0.00	\$16.77	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,468.52	\$0.00	\$16.77	\$
Average Steam Cost	---	\$7.48	---	---	\$/klbs
Efficiency By Losses	0.0	80.1	0.0	78.8	%
Efficiency By I/O		80.3			%

Central State Hospital
Heating Plant Day Operations Report

12/28/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	15.53	hdd			
Total Plant Steam Flow	303.89	klbs			
Steam Flow Per Heating Degree Day	19.6	klbs/hdd			
Total Condensate Return Water Flow	9.1	klbs			
Total Plant Gas Flow	375.68	kscf			
Total Plant Gas Cost	\$2,306.98	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,306.98	\$			
Fuel Cost Per Heating Degree Day	\$148.54	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.49	\$/klbs			
Total Plant Efficiency By I/O	79.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	303.89	0.00	0.00	klbs
Gas Flow	0.00	373.13	0.00	2.55	kscf
Natural Gas Cost	\$0.00	\$2,291.33	\$0.00	\$15.66	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,291.33	\$0.00	\$15.66	\$
Average Steam Cost	---	\$7.54	---	---	\$/klbs
Efficiency By Losses	0.0	79.9	0.0	76.9	%
Efficiency By I/O		79.8			%

Central State Hospital
Heating Plant Day Operations Report

12/29/2019
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	12.32			hdd	
Total Plant Steam Flow	277.57			klbs	
Steam Flow Per Heating Degree Day	22.5			klbs/hdd	
Total Condensate Return Water Flow	9.2			klbs	
Total Plant Gas Flow	344.83			kscf	
Total Plant Gas Cost	\$2,117.54			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$2,117.54			\$	
Fuel Cost Per Heating Degree Day	\$171.88			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.62			\$/klbs	
Total Plant Efficiency By I/O	78.8			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.4	hrs
Steam Flow	0.00	277.57	0.00	0.00	klbs
Gas Flow	0.00	342.33	0.00	2.50	kscf
Natural Gas Cost	\$0.00	\$2,102.17	\$0.00	\$15.37	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,102.17	\$0.00	\$15.37	\$
Average Steam Cost	---	\$7.57	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	80.9	%
Efficiency By I/O		79.4			%

Central State Hospital
Heating Plant Day Operations Report

12/30/2019
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	11.06			hdd	
Total Plant Steam Flow	272.19			klbs	
Steam Flow Per Heating Degree Day	24.6			klbs/hdd	
Total Condensate Return Water Flow	9.2			klbs	
Total Plant Gas Flow	339.81			kscf	
Total Plant Gas Cost	\$2,086.70			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$2,086.70			\$	
Fuel Cost Per Heating Degree Day	\$188.73			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.69			\$/klbs	
Total Plant Efficiency By I/O	78.4			%	
Condensate Transfer Pump #1 Run Time	23.4			hrs	
Condensate Transfer Pump #2 Run Time	23.4			hrs	
Condensate Transfer Pump #3 Run Time	23.4			hrs	
Boiler Feed Pump #1 Run Time	23.4			hrs	
Boiler Feed Pump #2 Run Time	23.4			hrs	
Boiler Feed Pump #3 Run Time	23.4			hrs	
Boiler Feed Pump #4 Run Time	23.4			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.4			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.4	0.0	0.3	hrs
Steam Flow	0.00	272.19	0.00	0.00	klbs
Gas Flow	0.00	337.77	0.00	2.04	kscf
Natural Gas Cost	\$0.00	\$2,074.15	\$0.00	\$12.55	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,074.15	\$0.00	\$12.55	\$
Average Steam Cost	---	\$7.62	---	---	\$/klbs
Efficiency By Losses	0.0	80.3	0.0	72.8	%
Efficiency By I/O		78.9			%

Central State Hospital
Heating Plant Day Operations Report

12/31/2019
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	29.67			hdd	
Total Plant Steam Flow	289.22			klbs	
Steam Flow Per Heating Degree Day	9.7			klbs/hdd	
Total Condensate Return Water Flow	9.1			klbs	
Total Plant Gas Flow	357.09			kscf	
Total Plant Gas Cost	\$2,192.83			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$2,192.83			\$	
Fuel Cost Per Heating Degree Day	\$73.90			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.26			\$/klbs	
Total Plant Efficiency By I/O	79.3			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	23.5	0.0	0.3	hrs
Steam Flow	0.00	289.22	0.00	0.00	klbs
Gas Flow	0.00	355.43	0.00	1.67	kscf
Natural Gas Cost	\$0.00	\$2,182.59	\$0.00	\$10.23	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$2,182.59	\$0.00	\$10.23	\$
Average Steam Cost	---	\$7.55	---	---	\$/klbs
Efficiency By Losses	0.0	80.0	0.0	73.9	%
Efficiency By I/O		79.7			%