

Central State Hospital
Heating Plant Day Operations Report

10/1/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	152.47	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.1	klbs			
Total Plant Gas Flow	192.36	kscf			
Total Plant Gas Cost	\$1,181.23	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,181.23	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/klbs			
Total Plant Efficiency By I/O	77.6	%			
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	23.5	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	152.47	0.00	klbs
Gas Flow	3.41	0.00	186.91	2.04	kscf
Natural Gas Cost	\$20.93	\$0.00	\$1,147.76	\$12.54	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$20.93	\$0.00	\$1,147.76	\$12.54	\$
Average Steam Cost	---	---	\$7.53	---	\$/klbs
Efficiency By Losses	72.2	0.0	83.2	80.6	%
Efficiency By I/O			79.9		%

Central State Hospital
Heating Plant Day Operations Report

10/2/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	146.46	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.2	klbs			
Total Plant Gas Flow	178.43	kscf			
Total Plant Gas Cost	\$1,095.72	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,095.72	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/klbs			
Total Plant Efficiency By I/O	80.4	%			
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	23.5	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.6	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	146.46	0.00	klbs
Gas Flow	3.10	0.00	173.44	1.89	kscf
Natural Gas Cost	\$19.04	\$0.00	\$1,065.08	\$11.61	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$19.04	\$0.00	\$1,065.08	\$11.61	\$
Average Steam Cost	---	---	\$7.27	---	\$/klbs
Efficiency By Losses	77.6	0.0	83.2	81.3	%
Efficiency By I/O			82.7		%

Central State Hospital
Heating Plant Day Operations Report

10/3/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	143.74	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.3	klbs			
Total Plant Gas Flow	174.43	kscf			
Total Plant Gas Cost	\$1,071.11	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,071.11	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/klbs			
Total Plant Efficiency By I/O	80.7	%			
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	23.5	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.6	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	143.74	0.00	klbs
Gas Flow	3.13	0.00	169.52	1.78	kscf
Natural Gas Cost	\$19.22	\$0.00	\$1,040.99	\$10.90	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$19.22	\$0.00	\$1,040.99	\$10.90	\$
Average Steam Cost	---	---	\$7.24	---	\$/klbs
Efficiency By Losses	76.4	0.0	83.2	79.5	%
Efficiency By I/O			83.0		%

Central State Hospital
Heating Plant Day Operations Report

10/4/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	141.41	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.3	klbs			
Total Plant Gas Flow	169.49	kscf			
Total Plant Gas Cost	\$1,040.79	\$			
Total Plant Oil Flow	53.0	gals			
Total Plant Oil Cost	\$204.70	\$			
Total Plant Fuel Cost	\$1,245.49	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/klbs			
Total Plant Efficiency By I/O	78.3	%			
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	3.8	hrs			
Fuel Oil Pump #2 Run Time	17.6	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	1.0	0.0	22.8	0.3	hrs
Steam Flow	2.70	0.00	138.71	0.00	klbs
Gas Flow	1.17	0.00	165.95	2.37	kscf
Natural Gas Cost	\$7.18	\$0.00	\$1,019.07	\$14.54	\$
Oil Flow	53.0	0.0	0.0	0.0	gals
Oil Cost	\$204.70	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$211.88	\$0.00	\$1,019.07	\$14.54	\$
Average Steam Cost	\$78.38	---	\$7.35	---	\$/klbs
Efficiency By Losses	0.0	0.0	83.2	76.2	%
Efficiency By I/O	31.2		81.9		%

Central State Hospital
Heating Plant Day Operations Report

10/5/2019
7:00 AM
Daily Report

Description

	Plant		Units		
Heating Degree Days	0.00		hdd		
Total Plant Steam Flow	143.55		klbs		
Steam Flow Per Heating Degree Day	---		klbs/hdd		
Total Condensate Return Water Flow	9.1		klbs		
Total Plant Gas Flow	174.57		kscf		
Total Plant Gas Cost	\$1,072.02		\$		
Total Plant Oil Flow	100.6		gals		
Total Plant Oil Cost	\$388.26		\$		
Total Plant Fuel Cost	\$1,460.28		\$		
Fuel Cost Per Heating Degree Day	---		\$/hdd		
Plant Average Steam Cost Per Degree Day	---		\$/klbs		
Total Plant Efficiency By I/O	74.6		%		
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	2.1	0.0	21.2	0.5	hrs
Steam Flow	13.32	0.00	130.23	0.00	klbs
Gas Flow	10.83	0.00	160.44	3.30	kscf
Natural Gas Cost	\$66.50	\$0.00	\$985.24	\$20.28	\$
Oil Flow	100.6	0.0	0.0	0.0	gals
Oil Cost	\$388.26	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$454.76	\$0.00	\$985.24	\$20.28	\$
Average Steam Cost	\$34.14	---	\$7.57	---	\$/klbs
Efficiency By Losses	67.9	0.0	83.0	75.3	%
Efficiency By I/O	52.8		79.5		%

Central State Hospital
Heating Plant Day Operations Report

10/6/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	2.29	hdd			
Total Plant Steam Flow	150.38	klbs			
Steam Flow Per Heating Degree Day	65.7	klbs/hdd			
Total Condensate Return Water Flow	9.1	klbs			
Total Plant Gas Flow	191.14	kscf			
Total Plant Gas Cost	\$1,173.75	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,173.75	\$			
Fuel Cost Per Heating Degree Day	\$513.16	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$3.41	\$/klbs			
Total Plant Efficiency By I/O	77.0	%			
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	0.7	0.0	23.5	0.4	hrs
Steam Flow	0.00	0.00	150.38	0.00	klbs
Gas Flow	3.39	0.00	185.07	2.68	kscf
Natural Gas Cost	\$20.84	\$0.00	\$1,136.46	\$16.45	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$20.84	\$0.00	\$1,136.46	\$16.45	\$
Average Steam Cost	---	---	\$7.56	---	\$/klbs
Efficiency By Losses	75.2	0.0	83.2	80.2	%
Efficiency By I/O			79.6		%

Central State Hospital
Heating Plant Day Operations Report

10/7/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	146.82	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.2	klbs			
Total Plant Gas Flow	178.31	kscf			
Total Plant Gas Cost	\$1,094.96	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,094.96	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/klbs			
Total Plant Efficiency By I/O	80.6	%			
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	0.7	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	146.82	0.00	klbs
Gas Flow	3.30	0.00	173.18	1.83	kscf
Natural Gas Cost	\$20.24	\$0.00	\$1,063.49	\$11.24	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$20.24	\$0.00	\$1,063.49	\$11.24	\$
Average Steam Cost	---	---	\$7.24	---	\$/klbs
Efficiency By Losses	76.5	0.0	83.2	78.0	%
Efficiency By I/O			83.0		%

Central State Hospital
Heating Plant Day Operations Report

10/8/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	151.74	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.1	klbs			
Total Plant Gas Flow	184.68	kscf			
Total Plant Gas Cost	\$1,134.05	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,134.05	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/klbs			
Total Plant Efficiency By I/O	80.5	%			
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	0.7	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	151.74	0.00	klbs
Gas Flow	3.39	0.00	179.47	1.82	kscf
Natural Gas Cost	\$20.80	\$0.00	\$1,102.07	\$11.18	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$20.80	\$0.00	\$1,102.07	\$11.18	\$
Average Steam Cost	---	---	\$7.26	---	\$/klbs
Efficiency By Losses	80.1	0.0	83.2	79.9	%
Efficiency By I/O			82.8		%

Central State Hospital
Heating Plant Day Operations Report

10/9/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	1.19	hdd
Total Plant Steam Flow	172.93	klbs
Steam Flow Per Heating Degree Day	144.7	klbs/hdd
Total Condensate Return Water Flow	8.8	klbs
Total Plant Gas Flow	221.51	kscf
Total Plant Gas Cost	\$1,360.25	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,360.25	\$
Fuel Cost Per Heating Degree Day	\$1,138.53	\$/hdd
Plant Average Steam Cost Per Degree Day	\$6.58	\$/klbs
Total Plant Efficiency By I/O	76.5	%

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	0.7	0.0	23.5	0.5	hrs
Steam Flow	0.00	0.00	172.93	0.00	klbs
Gas Flow	3.82	0.00	214.46	3.23	kscf
Natural Gas Cost	\$23.47	\$0.00	\$1,316.95	\$19.83	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$23.47	\$0.00	\$1,316.95	\$19.83	\$
Average Steam Cost	---	---	\$7.62	---	\$/klbs
Efficiency By Losses	80.3	0.0	83.1	81.8	%
Efficiency By I/O			79.0		%

10/10/2019
7:00 AM
Daily Report

	Plant	Units
Heating Degree Days	4.34	hdd
Total Plant Steam Flow	177.25	klbs
Steam Flow Per Heating Degree Day	40.8	klbs/hdd
Total Condensate Return Water Flow	8.4	klbs
Total Plant Gas Flow	227.71	kscf
Total Plant Gas Cost	\$1,398.31	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,398.31	\$
Fuel Cost Per Heating Degree Day	\$322.24	\$/hdd
Plant Average Steam Cost Per Degree Day	\$1.82	\$/klbs
Total Plant Efficiency By I/O	76.2	%

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	0.6	hrs
Steam Flow	0.00	0.00	177.25	0.00	kilbs
Gas Flow	4.09	0.00	219.77	3.86	kscf
Natural Gas Cost	\$25.11	\$0.00	\$1,349.52	\$23.68	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$25.11	\$0.00	\$1,349.52	\$23.68	\$
Average Steam Cost	---	---	\$7.61	---	\$/kilbs
Efficiency By Losses	75.0	0.0	83.2	77.6	%
Efficiency By I/O			79.0		%

Central State Hospital
Heating Plant Day Operations Report

10/11/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.82	hdd			
Total Plant Steam Flow	178.22	klbs			
Steam Flow Per Heating Degree Day	216.2	klbs/hdd			
Total Condensate Return Water Flow	7.7	klbs			
Total Plant Gas Flow	231.90	kscf			
Total Plant Gas Cost	\$1,424.03	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,424.03	\$			
Fuel Cost Per Heating Degree Day	\$1,727.73	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$9.69	\$/klbs			
Total Plant Efficiency By I/O	75.3	%			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	1.0	hrs
Steam Flow	0.00	0.00	178.22	0.00	klbs
Gas Flow	3.97	0.00	221.45	6.48	kscf
Natural Gas Cost	\$24.37	\$0.00	\$1,359.86	\$39.80	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$24.37	\$0.00	\$1,359.86	\$39.80	\$
Average Steam Cost	---	---	\$7.63	---	\$/klbs
Efficiency By Losses	78.1	0.0	83.2	79.0	%
Efficiency By I/O			78.8		%

10/12/2019
7:00 AM
Daily Report

	Plant	Units
Heating Degree Days	3.92	hdd
Total Plant Steam Flow	182.01	klbs
Steam Flow Per Heating Degree Day	46.4	klbs/hdd
Total Condensate Return Water Flow	8.0	klbs
Total Plant Gas Flow	237.46	kscf
Total Plant Gas Cost	\$1,458.19	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,458.19	\$
Fuel Cost Per Heating Degree Day	\$371.85	\$/hdd
Plant Average Steam Cost Per Degree Day	\$2.04	\$/klbs
Total Plant Efficiency By I/O	75.1	%

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.5	0.0	23.4	0.8	hrs
Steam Flow	0.33	0.00	181.03	0.65	kilbs
Gas Flow	3.78	0.00	226.30	7.38	kscf
Natural Gas Cost	\$23.23	\$0.00	\$1,389.63	\$45.33	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$23.23	\$0.00	\$1,389.63	\$45.33	\$
Average Steam Cost	\$70.43	—	\$7.68	\$69.79	\$/kilbs
Efficiency By Losses	79.9	0.0	83.1	75.6	%
Efficiency By I/O	8.5		78.3	8.6	%

Central State Hospital
Heating Plant Day Operations Report

10/13/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	1.13				hdd
Total Plant Steam Flow	158.59				klbs
Steam Flow Per Heating Degree Day	140.6				klbs/hdd
Total Condensate Return Water Flow	8.7				klbs
Total Plant Gas Flow	206.08				kscf
Total Plant Gas Cost	\$1,265.49				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,265.49				\$
Fuel Cost Per Heating Degree Day	\$1,121.65				\$/hdd
Plant Average Steam Cost Per Degree Day	\$7.07				\$/klbs
Total Plant Efficiency By I/O	75.4				%
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	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	158.59	0.00	klbs
Gas Flow	3.58	0.00	196.36	6.14	kscf
Natural Gas Cost	\$21.96	\$0.00	\$1,205.82	\$37.71	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$21.96	\$0.00	\$1,205.82	\$37.71	\$
Average Steam Cost	---	---	\$7.60	---	\$/klbs
Efficiency By Losses	77.6	0.0	83.2	75.2	%
Efficiency By I/O			79.1		%

Central State Hospital
Heating Plant Day Operations Report

10/14/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	1.48	hdd			
Total Plant Steam Flow	157.75	klbs			
Steam Flow Per Heating Degree Day	106.6	klbs/hdd			
Total Condensate Return Water Flow	8.5	klbs			
Total Plant Gas Flow	206.90	kscf			
Total Plant Gas Cost	\$1,270.55	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,270.55	\$			
Fuel Cost Per Heating Degree Day	\$858.62	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$5.44	\$/klbs			
Total Plant Efficiency By I/O	74.7	%			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	157.75	0.00	klbs
Gas Flow	3.57	0.00	197.25	6.08	kscf
Natural Gas Cost	\$21.89	\$0.00	\$1,211.29	\$37.37	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$21.89	\$0.00	\$1,211.29	\$37.37	\$
Average Steam Cost	---	---	\$7.68	---	\$/klbs
Efficiency By Losses	79.9	0.0	83.3	78.8	%
Efficiency By I/O			78.3		%

10/15/2019
7:00 AM
Daily Report

	Plant	Units
Heating Degree Days	1.47	hdd
Total Plant Steam Flow	168.88	klbs
Steam Flow Per Heating Degree Day	114.9	klbs/hdd
Total Condensate Return Water Flow	8.3	klbs
Total Plant Gas Flow	220.26	kscf
Total Plant Gas Cost	\$1,352.55	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,352.55	\$
Fuel Cost Per Heating Degree Day	\$919.95	\$/hdd
Plant Average Steam Cost Per Degree Day	\$5.45	\$/klbs
Total Plant Efficiency By I/O	75.1	%

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	168.88	0.00	klbs
Gas Flow	3.96	0.00	210.13	6.17	kscf
Natural Gas Cost	\$24.30	\$0.00	\$1,290.33	\$37.92	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$24.30	\$0.00	\$1,290.33	\$37.92	\$
Average Steam Cost	---	---	\$7.64	---	\$/klbs
Efficiency By Losses	78.8	0.0	83.1	75.9	%
Efficiency By I/O			78.7		%

Central State Hospital
Heating Plant Day Operations Report

10/16/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	4.71	hdd
Total Plant Steam Flow	183.71	klbs
Steam Flow Per Heating Degree Day	39.0	klbs/hdd
Total Condensate Return Water Flow	8.2	klbs
Total Plant Gas Flow	236.53	kscf
Total Plant Gas Cost	\$1,452.49	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,452.49	\$
Fuel Cost Per Heating Degree Day	\$308.39	\$/hdd
Plant Average Steam Cost Per Degree Day	\$1.68	\$/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	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.8	hrs
Steam Flow	0.00	0.00	183.71	0.00	klbs
Gas Flow	3.52	0.00	227.37	5.64	kscf
Natural Gas Cost	\$21.63	\$0.00	\$1,396.23	\$34.62	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$21.63	\$0.00	\$1,396.23	\$34.62	\$
Average Steam Cost	---	---	\$7.60	---	\$/klbs
Efficiency By Losses	75.7	0.0	83.2	79.8	%
Efficiency By I/O			79.1		%

Central State Hospital
Heating Plant Day Operations Report

10/17/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	8.80				hdd
Total Plant Steam Flow	205.82				klbs
Steam Flow Per Heating Degree Day	23.4				klbs/hdd
Total Condensate Return Water Flow	8.4				klbs
Total Plant Gas Flow	263.84				kscf
Total Plant Gas Cost	\$1,620.19				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,620.19				\$
Fuel Cost Per Heating Degree Day	\$184.21				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.90				\$/klbs
Total Plant Efficiency By I/O	76.4				%
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	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.9	0.0	23.5	1.0	hrs
Steam Flow	0.00	0.00	205.82	0.00	klbs
Gas Flow	4.73	0.00	252.55	6.56	kscf
Natural Gas Cost	\$29.06	\$0.00	\$1,550.87	\$40.26	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$29.06	\$0.00	\$1,550.87	\$40.26	\$
Average Steam Cost	—	—	\$7.54	—	\$/klbs
Efficiency By Losses	73.3	0.0	83.0	78.1	%
Efficiency By I/O			79.8		%

Central State Hospital
Heating Plant Day Operations Report

10/18/2019

7:00 AM

Daily Report

Description

Units	Plant	Boiler 1	Boiler 2	Boiler 3	Boiler 4
Heating Degree Days	hdd	13.11	226.56	17.3	8.4
Total Plant Steam Flow	klbs	0.00	0.00	226.56	0.00
Steam Flow Per Heating Degree Day	klbs/hdd	0.00	0.00	226.56	0.00
Total Condensate Return Water Flow	klbs	0.00	0.00	226.56	0.00
Total Plant Gas Flow	kscf	4.26	0.00	276.97	6.80
Total Plant Gas Cost	\$	\$26.16	\$0.00	\$1,700.83	\$41.76
Total Plant Oil Flow	gals	0.0	0.0	0.0	0.0
Total Plant Oil Cost	\$	\$0.00	\$0.00	\$0.00	\$0.00
Total Plant Fuel Cost	\$	\$26.16	\$0.00	\$1,700.83	\$41.76
Fuel Cost Per Heating Degree Day	\$/hdd	2.00	0.00	7.51	---
Plant Average Steam Cost Per Degree Day	\$/klbs	76.0	0.0	83.0	79.2
Total Plant Efficiency By I/O	%	76.0	0.0	80.1	79.2
Run Time	hrs	0.8	0.0	23.5	1.0
Steam Flow	klbs	0.00	0.00	226.56	0.00
Gas Flow	kscf	4.26	0.00	276.97	6.80
Natural Gas Cost	\$	\$26.16	\$0.00	\$1,700.83	\$41.76
Oil Flow	gals	0.0	0.0	0.0	0.0
Oil Cost	\$	\$0.00	\$0.00	\$0.00	\$0.00
Total Fuel Cost	\$	\$26.16	\$0.00	\$1,700.83	\$41.76
Average Steam Cost	\$/klbs	---	---	\$7.51	---
Efficiency By Losses	%	76.0	0.0	83.0	79.2
Efficiency By I/O	%	76.0	0.0	80.1	79.2

Mid-Atlantic Controls Corporation

Day Report

Page 1 of 1

Central State Hospital
Heating Plant Day Operations Report

10/19/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	14.63	hdd
Total Plant Steam Flow	235.43	klbs
Steam Flow Per Heating Degree Day	16.1	klbs/hdd
Total Condensate Return Water Flow	8.0	klbs
Total Plant Gas Flow	296.94	kscf
Total Plant Gas Cost	\$1,823.43	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,823.43	\$
Fuel Cost Per Heating Degree Day	\$124.65	\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.53	\$/klbs
Total Plant Efficiency By I/O	77.6	%

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	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	1.0	hrs
Steam Flow	0.00	0.00	235.43	0.00	klbs
Gas Flow	4.08	0.00	286.20	6.66	kscf
Natural Gas Cost	\$25.08	\$0.00	\$1,757.48	\$40.87	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$25.08	\$0.00	\$1,757.48	\$40.87	\$
Average Steam Cost	---	---	\$7.46	---	\$/klbs
Efficiency By Losses	79.0	0.0	82.9	77.5	%
Efficiency By I/O			80.6		%

Central State Hospital
Heating Plant Day Operations Report

10/20/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	13.63	hdd			
Total Plant Steam Flow	215.92	klbs			
Steam Flow Per Heating Degree Day	15.8	klbs/hdd			
Total Condensate Return Water Flow	8.7	klbs			
Total Plant Gas Flow	271.47	kscf			
Total Plant Gas Cost	\$1,667.05	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,667.05	\$			
Fuel Cost Per Heating Degree Day	\$122.30	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.57	\$/klbs			
Total Plant Efficiency By I/O	77.9	%			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.6	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	215.92	0.00	klbs
Gas Flow	3.29	0.00	262.27	5.92	kscf
Natural Gas Cost	\$20.19	\$0.00	\$1,610.53	\$36.33	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$20.19	\$0.00	\$1,610.53	\$36.33	\$
Average Steam Cost	---	---	\$7.46	---	\$/klbs
Efficiency By Losses	76.9	0.0	83.0	74.9	%
Efficiency By I/O			80.6		%

Central State Hospital

Heating Plant Day Operations Report

10/21/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	8.92				hdd
Total Plant Steam Flow	229.64				klbs
Steam Flow Per Heating Degree Day	25.7				klbs/hdd
Total Condensate Return Water Flow	8.7				klbs
Total Plant Gas Flow	289.00				kscf
Total Plant Gas Cost	\$1,774.66				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,774.66				\$
Fuel Cost Per Heating Degree Day	\$198.98				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.87				\$/klbs
Total Plant Efficiency By I/O	77.8				%
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	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	229.64	0.00	klbs
Gas Flow	4.10	0.00	278.59	6.31	kscf
Natural Gas Cost	\$25.18	\$0.00	\$1,710.75	\$38.73	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$25.18	\$0.00	\$1,710.75	\$38.73	\$
Average Steam Cost	---	---	\$7.45	---	\$/klbs
Efficiency By Losses	78.0	0.0	83.0	76.4	%
Efficiency By I/O			80.7		%

Central State Hospital
Heating Plant Day Operations Report

10/22/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	8.61				hdd
Total Plant Steam Flow	230.35				klbs
Steam Flow Per Heating Degree Day	26.7				klbs/hdd
Total Condensate Return Water Flow	8.3				klbs
Total Plant Gas Flow	290.05				kscf
Total Plant Gas Cost	\$1,781.12				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,781.12				\$
Fuel Cost Per Heating Degree Day	\$206.75				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.90				\$/klbs
Total Plant Efficiency By I/O	77.8				%
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	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	230.35	0.00	klbs
Gas Flow	3.94	0.00	280.12	5.99	kscf
Natural Gas Cost	\$24.21	\$0.00	\$1,720.15	\$36.76	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$24.21	\$0.00	\$1,720.15	\$36.76	\$
Average Steam Cost	---	---	\$7.47	---	\$/klbs
Efficiency By Losses	77.6	0.0	83.1	77.1	%
Efficiency By I/O			80.5		%

Central State Hospital
Heating Plant Day Operations Report

10/23/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	2.88	hdd			
Total Plant Steam Flow	225.82	klbs			
Steam Flow Per Heating Degree Day	78.5	klbs/hdd			
Total Condensate Return Water Flow	8.4	klbs			
Total Plant Gas Flow	284.84	kscf			
Total Plant Gas Cost	\$1,749.15	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,749.15	\$			
Fuel Cost Per Heating Degree Day	\$608.12	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$2.69	\$/klbs			
Total Plant Efficiency By I/O	77.6	%			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	225.82	0.00	klbs
Gas Flow	3.98	0.00	274.58	6.28	kscf
Natural Gas Cost	\$24.41	\$0.00	\$1,686.15	\$38.58	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$24.41	\$0.00	\$1,686.15	\$38.58	\$
Average Steam Cost	---	---	\$7.47	---	\$/klbs
Efficiency By Losses	77.4	0.0	83.0	77.3	%
Efficiency By I/O			80.5		%

Central State Hospital
Heating Plant Day Operations Report

10/24/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	9.15	hdd			
Total Plant Steam Flow	232.89	klbs			
Steam Flow Per Heating Degree Day	25.5	klbs/hdd			
Total Condensate Return Water Flow	8.6	klbs			
Total Plant Gas Flow	293.06	kscf			
Total Plant Gas Cost	\$1,799.60	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,799.60	\$			
Fuel Cost Per Heating Degree Day	\$196.75	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.84	\$/klbs			
Total Plant Efficiency By I/O	77.8	%			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.8	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	232.89	0.00	klbs
Gas Flow	4.26	0.00	282.83	5.97	kscf
Natural Gas Cost	\$26.16	\$0.00	\$1,736.80	\$36.64	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$26.16	\$0.00	\$1,736.80	\$36.64	\$
Average Steam Cost	---	---	\$7.46	---	\$/klbs
Efficiency By Losses	79.4	0.0	82.9	74.7	%
Efficiency By I/O			80.6		%

Central State Hospital
Heating Plant Day Operations Report

10/25/2019
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	11.27				hdd
Total Plant Steam Flow	228.97				klbs
Steam Flow Per Heating Degree Day	20.3				klbs/hdd
Total Condensate Return Water Flow	9.0				klbs
Total Plant Gas Flow	286.94				kscf
Total Plant Gas Cost	\$1,762.02				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,762.02				\$
Fuel Cost Per Heating Degree Day	\$156.28				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.68				\$/klbs
Total Plant Efficiency By I/O	78.1				%
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	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.9	hrs
Steam Flow	0.00	0.00	228.97	0.00	klbs
Gas Flow	3.83	0.00	277.38	5.72	kscf
Natural Gas Cost	\$23.53	\$0.00	\$1,703.35	\$35.15	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$23.53	\$0.00	\$1,703.35	\$35.15	\$
Average Steam Cost	---	---	\$7.44	---	\$/klbs
Efficiency By Losses	79.6	0.0	83.0	77.5	%
Efficiency By I/O			80.8		%

Central State Hospital
Heating Plant Day Operations Report

10/26/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	5.83	hdd			
Total Plant Steam Flow	222.99	klbs			
Steam Flow Per Heating Degree Day	38.2	klbs/hdd			
Total Condensate Return Water Flow	8.9	klbs			
Total Plant Gas Flow	279.06	kscf			
Total Plant Gas Cost	\$1,713.66	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,713.66	\$			
Fuel Cost Per Heating Degree Day	\$293.89	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$1.32	\$/klbs			
Total Plant Efficiency By I/O	78.3	%			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.8	hrs
Steam Flow	0.00	0.00	222.99	0.00	klbs
Gas Flow	3.51	0.00	270.24	5.32	kscf
Natural Gas Cost	\$21.53	\$0.00	\$1,659.45	\$32.68	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$21.53	\$0.00	\$1,659.45	\$32.68	\$
Average Steam Cost	---	---	\$7.44	---	\$/klbs
Efficiency By Losses	80.1	0.0	83.1	78.0	%
Efficiency By I/O			80.8		%

Central State Hospital
Heating Plant Day Operations Report

10/27/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	203.96	kibs			
Steam Flow Per Heating Degree Day	---	kibs/hdd			
Total Condensate Return Water Flow	9.0	kibs			
Total Plant Gas Flow	257.06	kscf			
Total Plant Gas Cost	\$1,578.56	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,578.56	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/kibs			
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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.8	hrs
Steam Flow	0.00	0.00	203.96	0.00	kibs
Gas Flow	3.79	0.00	247.63	5.64	kscf
Natural Gas Cost	\$23.30	\$0.00	\$1,520.64	\$34.63	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$23.30	\$0.00	\$1,520.64	\$34.63	\$
Average Steam Cost	---	---	\$7.46	---	\$/kibs
Efficiency By Losses	78.6	0.0	83.1	73.5	%
Efficiency By I/O			80.7		%

Central State Hospital
Heating Plant Day Operations Report

10/28/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	0.00	hdd			
Total Plant Steam Flow	200.31	klbs			
Steam Flow Per Heating Degree Day	---	klbs/hdd			
Total Condensate Return Water Flow	9.1	klbs			
Total Plant Gas Flow	252.62	kscf			
Total Plant Gas Cost	\$1,551.25	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,551.25	\$			
Fuel Cost Per Heating Degree Day	---	\$/hdd			
Plant Average Steam Cost Per Degree Day	---	\$/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	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.8	hrs
Steam Flow	0.00	0.00	200.31	0.00	klbs
Gas Flow	3.72	0.00	243.45	5.44	kscf
Natural Gas Cost	\$22.87	\$0.00	\$1,494.99	\$33.39	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$22.87	\$0.00	\$1,494.99	\$33.39	\$
Average Steam Cost	---	---	\$7.46	---	\$/klbs
Efficiency By Losses	77.1	0.0	83.0	79.0	%
Efficiency By I/O			80.6		%

Central State Hospital
Heating Plant Day Operations Report

10/29/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	4.07	hdd			
Total Plant Steam Flow	223.10	klbs			
Steam Flow Per Heating Degree Day	54.8	klbs/hdd			
Total Condensate Return Water Flow	8.8	klbs			
Total Plant Gas Flow	278.18	kscf			
Total Plant Gas Cost	\$1,708.25	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,708.25	\$			
Fuel Cost Per Heating Degree Day	\$419.37	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$1.88	\$/klbs			
Total Plant Efficiency By I/O	78.5	%			
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	19.4	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	0.0	23.5	0.5	hrs
Steam Flow	0.00	0.00	223.10	0.00	klbs
Gas Flow	3.86	0.00	270.92	3.40	kscf
Natural Gas Cost	\$23.72	\$0.00	\$1,663.66	\$20.88	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$23.72	\$0.00	\$1,663.66	\$20.88	\$
Average Steam Cost	---	---	\$7.46	---	\$/klbs
Efficiency By Losses	76.2	0.0	83.0	0.0	%
Efficiency By I/O			80.6		%

Central State Hospital
Heating Plant Day Operations Report

10/30/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	4.60	hdd			
Total Plant Steam Flow	224.41	klbs			
Steam Flow Per Heating Degree Day	48.8	klbs/hdd			
Total Condensate Return Water Flow	8.8	klbs			
Total Plant Gas Flow	281.71	kscf			
Total Plant Gas Cost	\$1,729.89	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,729.89	\$			
Fuel Cost Per Heating Degree Day	\$376.39	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$1.68	\$/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	0.8	0.0	23.4	0.6	hrs
Steam Flow	0.00	0.00	224.41	0.00	klbs
Gas Flow	4.15	0.00	272.96	4.59	kscf
Natural Gas Cost	\$25.50	\$0.00	\$1,676.18	\$28.21	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$25.50	\$0.00	\$1,676.18	\$28.21	\$
Average Steam Cost	---	---	\$7.47	---	\$/klbs
Efficiency By Losses	74.6	0.0	83.0	82.3	%
Efficiency By I/O			80.5		%

Central State Hospital
Heating Plant Day Operations Report

10/31/2019
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	4.39	hdd			
Total Plant Steam Flow	221.99	klbs			
Steam Flow Per Heating Degree Day	50.6	klbs/hdd			
Total Condensate Return Water Flow	9.4	klbs			
Total Plant Gas Flow	271.61	kscf			
Total Plant Gas Cost	\$1,667.86	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.07	\$			
Total Plant Fuel Cost	\$1,667.93	\$			
Fuel Cost Per Heating Degree Day	\$380.20	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$1.71	\$/klbs			
Total Plant Efficiency By I/O	80.0	%			
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	0.6	0.0	23.5	0.0	hrs
Steam Flow	0.00	0.00	221.99	0.00	klbs
Gas Flow	3.05	0.00	268.56	0.00	kscf
Natural Gas Cost	\$18.71	\$0.00	\$1,649.16	\$0.00	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.07	\$0.00	\$
Total Fuel Cost	\$18.71	\$0.00	\$1,649.22	\$0.00	\$
Average Steam Cost	---	---	\$7.43	---	\$/klbs
Efficiency By Losses	80.0	0.0	83.0	0.0	%
Efficiency By I/O			80.9		%