Central State Hospital

Heating Plant Day Operations Report

3/1/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	17.02	hdd
Total Plant Steam Flow	277.54	klbs
Steam Flow Per Heating Degree Day	16.3	klbs/hdd
Total Condensate Return Water Flow	3.7	klbs
Total Plant Gas Flow	322.04	kscf
Total Plant Gas Cost	$1,977.58	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.14	$
Total Plant Fuel Cost	$1,977.72	$
Fuel Cost Per Heating Degree Day	$116.18	$/hdd
Plant Average Steam Cost Per Degree Day	$0.42	$/klbs
Total Plant Efficiency By I/O	84.4	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	0.0	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	0.5	23.4	hrs
Steam Flow	1.46	0.00	0.00	276.09	klbs
Gas Flow	5.90	0.00	2.67	313.48	kscf
Natural Gas Cost	$36.20	$0.00	$16.40	$1,924.97	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.14	$
Total Fuel Cost	$36.20	$0.00	$16.40	$1,925.12	$
Average Steam Cost	$24.83	---	---	$6.97	$/klbs
Efficiency By Losses	0.0	0.0	79.6	81.8	%
Efficiency By I/O	24.2			86.2	%

Central State Hospital

Heating Plant Day Operations Report

3/2/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	15.35	hdd
Total Plant Steam Flow	280.39	klbs
Steam Flow Per Heating Degree Day	18.3	klbs/hdd
Total Condensate Return Water Flow	4.3	klbs
Total Plant Gas Flow	325.66	kscf
Total Plant Gas Cost	$1,999.81	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.08	$
Total Plant Fuel Cost	$1,999.90	$
Fuel Cost Per Heating Degree Day	$130.28	$/hdd
Plant Average Steam Cost Per Degree Day	$0.46	$/klbs
Total Plant Efficiency By I/O	84.3	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	0.0	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	0.6	23.5	hrs
Steam Flow	0.00	0.00	0.00	280.39	klbs
Gas Flow	5.24	0.00	3.04	317.38	kscf
Natural Gas Cost	$32.15	$0.00	$18.69	$1,948.97	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.08	$
Total Fuel Cost	$32.15	$0.00	$18.69	$1,949.06	$
Average Steam Cost	---	---	---	$6.95	$/klbs
Efficiency By Losses	0.0	0.0	79.4	81.8	%
Efficiency By I/O				86.5	%

Central State Hospital

Heating Plant Day Operations Report

3/3/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	66.73	hdd
Total Plant Steam Flow	325.12	klbs
Steam Flow Per Heating Degree Day	4.9	klbs/hdd
Total Condensate Return Water Flow	3.7	klbs
Total Plant Gas Flow	374.46	kscf
Total Plant Gas Cost	$2,299.49	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,299.49	$
Fuel Cost Per Heating Degree Day	$34.46	$/hdd
Plant Average Steam Cost Per Degree Day	$0.11	$/klbs
Total Plant Efficiency By I/O	85.0	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	0.0	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	1.1	0.0	0.7	23.5	hrs
Steam Flow	2.22	0.00	0.00	322.90	klbs
Gas Flow	7.74	0.00	3.36	363.37	kscf
Natural Gas Cost	$47.51	$0.00	$20.65	$2,231.34	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$47.51	$0.00	$20.65	$2,231.34	$
Average Steam Cost	$21.35	—	—	$6.91	$/klbs
Efficiency By Losses	0.0	0.0	78.6	82.0	%
Efficiency By I/O	28.2			87.0	%

Central State Hospital

Heating Plant Day Operations Report

3/4/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	22.42	hdd
Total Plant Steam Flow	308.89	klbs
Steam Flow Per Heating Degree Day	13.8	klbs/hdd
Total Condensate Return Water Flow	4.1	klbs
Total Plant Gas Flow	353.89	kscf
Total Plant Gas Cost	$2,173.14	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,173.14	$
Fuel Cost Per Heating Degree Day	$96.93	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	85.5	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	0.0	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	0.7	23.5	hrs
Steam Flow	0.00	0.00	0.00	308.89	klbs
Gas Flow	4.39	0.00	3.54	345.96	kscf
Natural Gas Cost	$26.98	$0.00	$21.74	$2,124.43	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$26.98	$0.00	$21.74	$2,124.43	$
Average Steam Cost	---	---	---	$6.88	$/klbs
Efficiency By Losses	0.0	0.0	76.4	82.0	%
Efficiency By I/O				87.4	%

Central State Hospital

Heating Plant Day Operations Report

3/5/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.26	hdd
Total Plant Steam Flow	306.27	klbs
Steam Flow Per Heating Degree Day	13.2	klbs/hdd
Total Condensate Return Water Flow	4.0	klbs
Total Plant Gas Flow	348.15	kscf
Total Plant Gas Cost	$2,137.89	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,137.89	$
Fuel Cost Per Heating Degree Day	$91.93	$/hdd
Plant Average Steam Cost Per Degree Day	$0.30	$/klbs
Total Plant Efficiency By I/O	86.2	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	0.0	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	0.0	23.5	hrs
Steam Flow	0.00	0.00	0.00	306.27	klbs
Gas Flow	4.49	0.00	0.00	343.65	kscf
Natural Gas Cost	$27.60	$0.00	$0.00	$2,110.30	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$27.60	$0.00	$0.00	$2,110.30	$
Average Steam Cost	---	---	---	$6.89	$/klbs
Efficiency By Losses	0.0	0.0	0.0	82.0	%
Efficiency By I/O				87.3	%

Central State Hospital

Heating Plant Day Operations Report

3/6/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	27.42	hdd
Total Plant Steam Flow	332.70	klbs
Steam Flow Per Heating Degree Day	12.1	klbs/hdd
Total Condensate Return Water Flow	3.9	klbs
Total Plant Gas Flow	366.13	kscf
Total Plant Gas Cost	$2,248.30	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,248.30	$
Fuel Cost Per Heating Degree Day	$82.01	$/hdd
Plant Average Steam Cost Per Degree Day	$0.25	$/klbs
Total Plant Efficiency By I/O	89.0	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.3	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	0.0	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	16.9	0.0	0.8	7.2	hrs
Steam Flow	223.90	0.00	0.00	108.80	klbs
Gas Flow	241.02	0.00	4.38	120.73	kscf
Natural Gas Cost	$1,480.06	$0.00	$26.88	$741.36	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,480.06	$0.00	$26.88	$741.36	$
Average Steam Cost	$6.61	---	---	$6.81	$/klbs
Efficiency By Losses	0.0	0.0	76.1	73.4	%
Efficiency By I/O	91.0			88.3	%

Central State Hospital

Heating Plant Day Operations Report

3/7/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	28.93	hdd
Total Plant Steam Flow	332.03	klbs
Steam Flow Per Heating Degree Day	11.5	klbs/hdd
Total Condensate Return Water Flow	3.8	klbs
Total Plant Gas Flow	358.08	kscf
Total Plant Gas Cost	$2,198.86	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,198.86	$
Fuel Cost Per Heating Degree Day	$76.01	$/hdd
Plant Average Steam Cost Per Degree Day	$0.23	$/klbs
Total Plant Efficiency By I/O	90.8	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	3.0	hrs
Boiler Feed Pump #3 Run Time	17.7	hrs
Boiler Feed Pump #4 Run Time	5.8	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	23.5	0.0	0.1	0.6	hrs
Steam Flow	331.98	0.00	0.00	0.05	klbs
Gas Flow	354.10	0.00	0.59	3.39	kscf
Natural Gas Cost	$2,174.43	$0.00	$3.63	$20.80	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$2,174.43	$0.00	$3.63	$20.80	$
Average Steam Cost	$6.55	---	---	$434.80	$/klbs
Efficiency By Losses	0.0	0.0	0.0	78.8	%
Efficiency By I/O	91.8			1.4	%

Central State Hospital

Heating Plant Day Operations Report

3/8/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	21.05	hdd
Total Plant Steam Flow	326.85	klbs
Steam Flow Per Heating Degree Day	15.5	klbs/hdd
Total Condensate Return Water Flow	4.2	klbs
Total Plant Gas Flow	351.61	kscf
Total Plant Gas Cost	$2,159.17	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,159.17	$
Fuel Cost Per Heating Degree Day	$102.57	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	91.0	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	12.2	hrs
Boiler Feed Pump #3 Run Time	0.0	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	23.5	0.0	0.0	0.6	hrs
Steam Flow	326.85	0.00	0.00	0.00	klbs
Gas Flow	348.48	0.00	0.00	3.13	kscf
Natural Gas Cost	$2,139.93	$0.00	$0.00	$19.24	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$2,139.93	$0.00	$0.00	$19.24	$
Average Steam Cost	$6.55	---	---	---	$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.2	%
Efficiency By I/O	91.9				%

Central State Hospital

Heating Plant Day Operations Report

3/9/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	29.85	hdd
Total Plant Steam Flow	337.40	klbs
Steam Flow Per Heating Degree Day	11.3	klbs/hdd
Total Condensate Return Water Flow	4.6	klbs
Total Plant Gas Flow	361.83	kscf
Total Plant Gas Cost	$2,221.90	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,221.90	$
Fuel Cost Per Heating Degree Day	$74.44	$/hdd
Plant Average Steam Cost Per Degree Day	$0.22	$/klbs
Total Plant Efficiency By I/O	91.3	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	12.2	hrs
Boiler Feed Pump #3 Run Time	0.0	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	23.5	0.0	0.0	0.5	hrs
Steam Flow	337.40	0.00	0.00	0.00	klbs
Gas Flow	358.77	0.00	0.00	3.06	kscf
Natural Gas Cost	$2,203.10	$0.00	$0.00	$18.80	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$2,203.10	$0.00	$0.00	$18.80	$
Average Steam Cost	$6.53	---	---	---	$/klbs
Efficiency By Losses	0.0	0.0	0.0	79.2	%
Efficiency By I/O	92.1				%

Central State Hospital

Heating Plant Day Operations Report

3/10/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	29.83	hdd
Total Plant Steam Flow	326.79	klbs
Steam Flow Per Heating Degree Day	11.0	klbs/hdd
Total Condensate Return Water Flow	4.6	klbs
Total Plant Gas Flow	386.94	kscf
Total Plant Gas Cost	$2,376.08	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,376.08	$
Fuel Cost Per Heating Degree Day	$79.66	$/hdd
Plant Average Steam Cost Per Degree Day	$0.24	$/klbs
Total Plant Efficiency By I/O	82.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	21.3	hrs
Boiler Feed Pump #3 Run Time	0.2	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	23.2	0.0	0.0	19.4	hrs
Steam Flow	169.75	0.00	0.00	157.04	klbs
Gas Flow	200.01	0.00	0.00	186.93	kscf
Natural Gas Cost	$1,228.21	$0.00	$0.00	$1,147.87	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,228.21	$0.00	$0.00	$1,147.87	$
Average Steam Cost	$7.24	---	---	$7.31	$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.3	%
Efficiency By I/O	83.1			82.3	%

Central State Hospital

Heating Plant Day Operations Report

3/11/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	25.21	hdd
Total Plant Steam Flow	293.08	klbs
Steam Flow Per Heating Degree Day	11.6	klbs/hdd
Total Condensate Return Water Flow	3.9	klbs
Total Plant Gas Flow	353.78	kscf
Total Plant Gas Cost	$2,172.46	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,172.46	$
Fuel Cost Per Heating Degree Day	$86.17	$/hdd
Plant Average Steam Cost Per Degree Day	$0.29	$/klbs
Total Plant Efficiency By I/O	81.1	%

Condensate Transfer Pump #1 Run Time	22.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	22.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	22.5	hrs
Boiler Feed Pump #3 Run Time	0.0	hrs
Boiler Feed Pump #4 Run Time	22.5	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	22.5	0.0	0.0	22.5	hrs
Steam Flow	121.19	0.00	0.00	171.88	klbs
Gas Flow	151.33	0.00	0.00	202.45	kscf
Natural Gas Cost	$929.28	$0.00	$0.00	$1,243.19	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$929.28	$0.00	$0.00	$1,243.19	$
Average Steam Cost	$7.67	---	---	$7.23	$/klbs
Efficiency By Losses	79.6	0.0	0.0	81.3	%
Efficiency By I/O	78.4			83.1	%

Central State Hospital

Heating Plant Day Operations Report

3/12/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.97	hdd
Total Plant Steam Flow	311.04	klbs
Steam Flow Per Heating Degree Day	13.0	klbs/hdd
Total Condensate Return Water Flow	4.3	klbs
Total Plant Gas Flow	385.92	kscf
Total Plant Gas Cost	$2,369.81	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,369.81	$
Fuel Cost Per Heating Degree Day	$98.88	$/hdd
Plant Average Steam Cost Per Degree Day	$0.32	$/klbs
Total Plant Efficiency By I/O	78.9	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	18.8	hrs
Boiler Feed Pump #4 Run Time	4.9	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	23.5	0.0	0.0	23.5	hrs
Steam Flow	126.13	0.00	0.00	184.90	klbs
Gas Flow	161.39	0.00	0.00	224.52	kscf
Natural Gas Cost	$991.08	$0.00	$0.00	$1,378.73	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$991.08	$0.00	$0.00	$1,378.73	$
Average Steam Cost	$7.86	---	---	$7.46	$/klbs
Efficiency By Losses	77.9	0.0	0.0	81.2	%
Efficiency By I/O	76.5			80.7	%

Central State Hospital

Heating Plant Day Operations Report

3/13/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	30.63	hdd
Total Plant Steam Flow	359.93	klbs
Steam Flow Per Heating Degree Day	11.8	klbs/hdd
Total Condensate Return Water Flow	4.3	klbs
Total Plant Gas Flow	454.28	kscf
Total Plant Gas Cost	$2,789.60	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,789.60	$
Fuel Cost Per Heating Degree Day	$91.08	$/hdd
Plant Average Steam Cost Per Degree Day	$0.25	$/klbs
Total Plant Efficiency By I/O	77.6	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	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	0.0	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	23.3	0.0	19.8	21.8	hrs
Steam Flow	145.25	0.00	96.55	118.12	klbs
Gas Flow	180.33	0.00	124.92	149.03	kscf
Natural Gas Cost	$1,107.34	$0.00	$767.09	$915.18	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,107.34	$0.00	$767.09	$915.18	$
Average Steam Cost	$7.62	—	$7.94	$7.75	$/klbs
Efficiency By Losses	0.0	0.0	82.7	81.1	%
Efficiency By I/O	78.9		75.7	77.6	%

Central State Hospital

Heating Plant Day Operations Report

3/14/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	28.26	hdd
Total Plant Steam Flow	340.87	klbs
Steam Flow Per Heating Degree Day	12.1	klbs/hdd
Total Condensate Return Water Flow	6.0	klbs
Total Plant Gas Flow	413.73	kscf
Total Plant Gas Cost	$2,540.62	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,540.62	$
Fuel Cost Per Heating Degree Day	$89.90	$/hdd
Plant Average Steam Cost Per Degree Day	$0.26	$/klbs
Total Plant Efficiency By I/O	80.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	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	0.0	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	8.3	0.0	23.5	23.5	hrs
Steam Flow	42.63	0.00	165.45	132.79	klbs
Gas Flow	55.96	0.00	192.46	165.31	kscf
Natural Gas Cost	$343.65	$0.00	$1,181.83	$1,015.14	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$343.65	$0.00	$1,181.83	$1,015.14	$
Average Steam Cost	$8.06	---	$7.14	$7.64	$/klbs
Efficiency By Losses	0.0	0.0	82.8	81.1	%
Efficiency By I/O	74.6		84.2	78.7	%

Central State Hospital

Heating Plant Day Operations Report

3/15/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	30.90	hdd
Total Plant Steam Flow	350.21	klbs
Steam Flow Per Heating Degree Day	11.3	klbs/hdd
Total Condensate Return Water Flow	4.5	klbs
Total Plant Gas Flow	419.41	kscf
Total Plant Gas Cost	$2,575.48	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,575.48	$
Fuel Cost Per Heating Degree Day	$83.34	$/hdd
Plant Average Steam Cost Per Degree Day	$0.24	$/klbs
Total Plant Efficiency By I/O	81.8	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	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	0.0	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	0.0	0.0	23.5	23.5	hrs
Steam Flow	0.00	0.00	189.97	160.24	klbs
Gas Flow	0.00	0.00	221.07	198.34	kscf
Natural Gas Cost	$0.00	$0.00	$1,357.53	$1,217.96	$
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	$0.00	$1,357.53	$1,217.96	$
Average Steam Cost	—	—	$7.15	$7.60	$/klbs
Efficiency By Losses	0.0	0.0	82.8	81.1	%
Efficiency By I/O			84.2	79.1	%

Central State Hospital

Heating Plant Day Operations Report

3/16/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	22.23	hdd
Total Plant Steam Flow	315.15	klbs
Steam Flow Per Heating Degree Day	14.2	klbs/hdd
Total Condensate Return Water Flow	4.8	klbs
Total Plant Gas Flow	392.88	kscf
Total Plant Gas Cost	$2,412.56	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,412.56	$
Fuel Cost Per Heating Degree Day	$108.53	$/hdd
Plant Average Steam Cost Per Degree Day	$0.34	$/klbs
Total Plant Efficiency By I/O	78.6	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.6	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	4.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	19.1	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	0.0	0.6	23.5	23.5	hrs
Steam Flow	0.00	0.00	169.55	145.60	klbs
Gas Flow	0.00	3.94	204.40	184.53	kscf
Natural Gas Cost	$0.00	$24.22	$1,255.17	$1,133.17	$
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	$24.22	$1,255.17	$1,133.17	$
Average Steam Cost	---	---	$7.40	$7.78	$/klbs
Efficiency By Losses	0.0	0.0	82.7	80.9	%
Efficiency By I/O			81.2	77.3	%

Central State Hospital

Heating Plant Day Operations Report

3/17/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.55	hdd
Total Plant Steam Flow	302.46	klbs
Steam Flow Per Heating Degree Day	12.8	klbs/hdd
Total Condensate Return Water Flow	4.6	klbs
Total Plant Gas Flow	389.68	kscf
Total Plant Gas Cost	$2,392.90	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,392.90	$
Fuel Cost Per Heating Degree Day	$101.61	$/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	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.7	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	20.0	0.0	23.5	4.4	hrs
Steam Flow	96.17	0.00	178.21	28.08	klbs
Gas Flow	137.01	0.00	216.77	35.89	kscf
Natural Gas Cost	$841.37	$0.00	$1,331.15	$220.38	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$841.37	$0.00	$1,331.15	$220.38	$
Average Steam Cost	$8.75	---	$7.47	$7.85	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	68.7		80.5	76.6	%

Central State Hospital

Heating Plant Day Operations Report

3/18/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	25.28	hdd
Total Plant Steam Flow	287.34	klbs
Steam Flow Per Heating Degree Day	11.4	klbs/hdd
Total Condensate Return Water Flow	5.2	klbs
Total Plant Gas Flow	365.84	kscf
Total Plant Gas Cost	$2,246.55	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,246.55	$
Fuel Cost Per Heating Degree Day	$88.87	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	76.9	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.8	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	118.50	0.00	168.85	0.00	klbs
Gas Flow	160.02	0.00	205.82	0.00	kscf
Natural Gas Cost	$982.67	$0.00	$1,263.88	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$982.67	$0.00	$1,263.88	$0.00	$
Average Steam Cost	$8.29	---	$7.49	---	$/klbs
Efficiency By Losses	0.0	0.0	82.7	0.0	%
Efficiency By I/O	72.5		80.3		%

Central State Hospital

Heating Plant Day Operations Report

3/19/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	17.34	hdd
Total Plant Steam Flow	274.97	klbs
Steam Flow Per Heating Degree Day	15.9	klbs/hdd
Total Condensate Return Water Flow	5.1	klbs
Total Plant Gas Flow	347.93	kscf
Total Plant Gas Cost	$2,136.55	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,136.55	$
Fuel Cost Per Heating Degree Day	$123.24	$/hdd
Plant Average Steam Cost Per Degree Day	$0.45	$/klbs
Total Plant Efficiency By I/O	77.4	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.6	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	116.22	0.00	158.75	0.00	klbs
Gas Flow	158.02	0.00	189.91	0.00	kscf
Natural Gas Cost	$970.38	$0.00	$1,166.17	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$970.38	$0.00	$1,166.17	$0.00	$
Average Steam Cost	$8.35	---	$7.35	---	$/klbs
Efficiency By Losses	0.0	0.0	82.7	0.0	%
Efficiency By I/O	72.0		81.9		%

Central State Hospital

Heating Plant Day Operations Report

3/20/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	15.18	hdd
Total Plant Steam Flow	272.25	klbs
Steam Flow Per Heating Degree Day	17.9	klbs/hdd
Total Condensate Return Water Flow	5.3	klbs
Total Plant Gas Flow	352.09	kscf
Total Plant Gas Cost	$2,162.08	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,162.08	$
Fuel Cost Per Heating Degree Day	$142.43	$/hdd
Plant Average Steam Cost Per Degree Day	$0.52	$/klbs
Total Plant Efficiency By I/O	75.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	18.7	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	111.74	0.00	160.51	0.00	klbs
Gas Flow	157.64	0.00	194.44	0.00	kscf
Natural Gas Cost	$968.05	$0.00	$1,194.03	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$968.05	$0.00	$1,194.03	$0.00	$
Average Steam Cost	$8.66	---	$7.44	---	$/klbs
Efficiency By Losses	0.0	0.0	82.6	0.0	%
Efficiency By I/O	69.4		80.8		%

Central State Hospital

Heating Plant Day Operations Report

3/21/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.90	hdd
Total Plant Steam Flow	327.32	klbs
Steam Flow Per Heating Degree Day	13.7	klbs/hdd
Total Condensate Return Water Flow	4.9	klbs
Total Plant Gas Flow	419.34	kscf
Total Plant Gas Cost	$2,575.05	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,575.05	$
Fuel Cost Per Heating Degree Day	$107.74	$/hdd
Plant Average Steam Cost Per Degree Day	$0.33	$/klbs
Total Plant Efficiency By I/O	76.4	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	111.11	0.00	216.22	0.00	klbs
Gas Flow	159.74	0.00	259.60	0.00	kscf
Natural Gas Cost	$980.92	$0.00	$1,594.13	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$980.92	$0.00	$1,594.13	$0.00	$
Average Steam Cost	$8.83	—	$7.37	—	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	68.1		81.6		%

Central State Hospital

Heating Plant Day Operations Report

3/22/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	33.12	hdd
Total Plant Steam Flow	349.32	klbs
Steam Flow Per Heating Degree Day	10.5	klbs/hdd
Total Condensate Return Water Flow	4.9	klbs
Total Plant Gas Flow	437.63	kscf
Total Plant Gas Cost	$2,687.38	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,687.38	$
Fuel Cost Per Heating Degree Day	$81.15	$/hdd
Plant Average Steam Cost Per Degree Day	$0.23	$/klbs
Total Plant Efficiency By I/O	78.2	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	118.41	0.00	230.92	0.00	klbs
Gas Flow	162.50	0.00	275.13	0.00	kscf
Natural Gas Cost	$997.88	$0.00	$1,689.50	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$997.88	$0.00	$1,689.50	$0.00	$
Average Steam Cost	$8.43	---	$7.32	—	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	71.4		82.2		%

Central State Hospital

Heating Plant Day Operations Report

3/23/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	24.57	hdd
Total Plant Steam Flow	323.21	klbs
Steam Flow Per Heating Degree Day	13.2	klbs/hdd
Total Condensate Return Water Flow	4.8	klbs
Total Plant Gas Flow	406.01	kscf
Total Plant Gas Cost	$2,493.23	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,493.23	$
Fuel Cost Per Heating Degree Day	$101.49	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	78.0	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	118.95	0.00	204.26	0.00	klbs
Gas Flow	161.06	0.00	244.95	0.00	kscf
Natural Gas Cost	$989.05	$0.00	$1,504.18	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$989.05	$0.00	$1,504.18	$0.00	$
Average Steam Cost	$8.31	---	$7.36	---	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	72.3		81.7		%

Central State Hospital

Heating Plant Day Operations Report

3/24/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	25.13	hdd
Total Plant Steam Flow	316.99	klbs
Steam Flow Per Heating Degree Day	12.6	klbs/hdd
Total Condensate Return Water Flow	5.1	klbs
Total Plant Gas Flow	403.82	kscf
Total Plant Gas Cost	$2,479.74	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,479.74	$
Fuel Cost Per Heating Degree Day	$98.69	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	76.9	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	22.7	0.0	23.5	0.0	hrs
Steam Flow	110.49	0.00	206.50	0.00	klbs
Gas Flow	154.83	0.00	248.98	0.00	kscf
Natural Gas Cost	$950.80	$0.00	$1,528.94	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$950.80	$0.00	$1,528.94	$0.00	$
Average Steam Cost	$8.61	---	$7.40	---	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	69.9		81.2		%

Central State Hospital

Heating Plant Day Operations Report

3/25/2018
7:01 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	69.80	hdd
Total Plant Steam Flow	309.38	klbs
Steam Flow Per Heating Degree Day	4.4	klbs/hdd
Total Condensate Return Water Flow	5.4	klbs
Total Plant Gas Flow	379.49	kscf
Total Plant Gas Cost	$2,330.34	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,330.34	$
Fuel Cost Per Heating Degree Day	$33.38	$/hdd
Plant Average Steam Cost Per Degree Day	$0.11	$/klbs
Total Plant Efficiency By I/O	79.8	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	10.1	0.0	23.5	0.0	hrs
Steam Flow	45.87	0.00	263.51	0.00	klbs
Gas Flow	68.15	0.00	311.34	0.00	kscf
Natural Gas Cost	$418.50	$0.00	$1,911.84	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$418.50	$0.00	$1,911.84	$0.00	$
Average Steam Cost	$9.12	—	$7.26	—	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	65.9		82.9		%

Central State Hospital

Heating Plant Day Operations Report

3/26/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	22.12	hdd
Total Plant Steam Flow	316.48	klbs
Steam Flow Per Heating Degree Day	14.3	klbs/hdd
Total Condensate Return Water Flow	5.5	klbs
Total Plant Gas Flow	394.36	kscf
Total Plant Gas Cost	$2,421.69	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,421.69	$
Fuel Cost Per Heating Degree Day	$109.46	$/hdd
Plant Average Steam Cost Per Degree Day	$0.35	$/klbs
Total Plant Efficiency By I/O	78.6	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	20.3	0.0	23.5	0.0	hrs
Steam Flow	103.30	0.00	213.18	0.00	klbs
Gas Flow	138.88	0.00	255.48	0.00	kscf
Natural Gas Cost	$852.85	$0.00	$1,568.83	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$852.85	$0.00	$1,568.83	$0.00	$
Average Steam Cost	$8.26	---	$7.36	---	$/klbs
Efficiency By Losses	0.0	0.0	82.4	0.0	%
Efficiency By I/O	72.8		81.7		%

Central State Hospital

Heating Plant Day Operations Report

3/27/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	24.78	hdd
Total Plant Steam Flow	333.61	klbs
Steam Flow Per Heating Degree Day	13.5	klbs/hdd
Total Condensate Return Water Flow	4.8	klbs
Total Plant Gas Flow	417.69	kscf
Total Plant Gas Cost	$2,564.91	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,564.91	$
Fuel Cost Per Heating Degree Day	$103.49	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	78.2	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	18.2	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	123.85	0.00	209.75	0.00	klbs
Gas Flow	163.21	0.00	254.47	0.00	kscf
Natural Gas Cost	$1,002.26	$0.00	$1,562.65	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,002.26	$0.00	$1,562.65	$0.00	$
Average Steam Cost	$8.09	—	$7.45	—	$/klbs
Efficiency By Losses	0.0	0.0	82.3	0.0	%
Efficiency By I/O	74.3		80.7		%

Central State Hospital

Heating Plant Day Operations Report

3/28/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	27.97	hdd
Total Plant Steam Flow	327.32	klbs
Steam Flow Per Heating Degree Day	11.7	klbs/hdd
Total Condensate Return Water Flow	4.3	klbs
Total Plant Gas Flow	407.40	kscf
Total Plant Gas Cost	$2,501.74	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,501.74	$
Fuel Cost Per Heating Degree Day	$89.45	$/hdd
Plant Average Steam Cost Per Degree Day	$0.27	$/klbs
Total Plant Efficiency By I/O	78.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.6	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	123.71	0.00	203.61	0.00	klbs
Gas Flow	162.12	0.00	245.28	0.00	kscf
Natural Gas Cost	$995.53	$0.00	$1,506.22	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$995.53	$0.00	$1,506.22	$0.00	$
Average Steam Cost	$8.05	—	$7.40	—	$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	74.7		81.3		%

Central State Hospital

Heating Plant Day Operations Report

3/29/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	9.55	hdd
Total Plant Steam Flow	265.21	klbs
Steam Flow Per Heating Degree Day	27.8	klbs/hdd
Total Condensate Return Water Flow	5.4	klbs
Total Plant Gas Flow	325.80	kscf
Total Plant Gas Cost	$2,000.64	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,000.64	$
Fuel Cost Per Heating Degree Day	$209.58	$/hdd
Plant Average Steam Cost Per Degree Day	$0.79	$/klbs
Total Plant Efficiency By I/O	79.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.8	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	23.5	0.0	23.5	0.0	hrs
Steam Flow	123.68	0.00	141.53	0.00	klbs
Gas Flow	156.55	0.00	169.24	0.00	kscf
Natural Gas Cost	$961.36	$0.00	$1,039.27	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$961.36	$0.00	$1,039.27	$0.00	$
Average Steam Cost	$7.77	---	$7.34	---	$/klbs
Efficiency By Losses	0.0	0.0	82.8	0.0	%
Efficiency By I/O	77.4		81.9		%

Central State Hospital

Heating Plant Day Operations Report

3/30/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	225.79	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	5.1	klbs
Total Plant Gas Flow	258.08	kscf
Total Plant Gas Cost	$1,584.80	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,584.80	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	85.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.6	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	7.2	0.0	23.5	0.0	hrs
Steam Flow	37.32	0.00	188.47	0.00	klbs
Gas Flow	46.99	0.00	211.09	0.00	kscf
Natural Gas Cost	$288.53	$0.00	$1,296.27	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$288.53	$0.00	$1,296.27	$0.00	$
Average Steam Cost	$7.73	---	$6.88	---	$/klbs
Efficiency By Losses	0.0	0.0	83.0	0.0	%
Efficiency By I/O	77.8		87.4		%

Central State Hospital

Heating Plant Day Operations Report

3/31/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	3.39	hdd
Total Plant Steam Flow	248.43	klbs
Steam Flow Per Heating Degree Day	73.3	klbs/hdd
Total Condensate Return Water Flow	5.0	klbs
Total Plant Gas Flow	274.15	kscf
Total Plant Gas Cost	$1,683.46	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,683.46	$
Fuel Cost Per Heating Degree Day	$496.69	$/hdd
Plant Average Steam Cost Per Degree Day	$2.00	$/klbs
Total Plant Efficiency By I/O	88.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.7	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	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	0.0	0.0	23.5	0.0	hrs
Steam Flow	0.00	0.00	248.43	0.00	klbs
Gas Flow	0.00	0.00	274.15	0.00	kscf
Natural Gas Cost	$0.00	$0.00	$1,683.46	$0.00	$
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	$0.00	$1,683.46	$0.00	$
Average Steam Cost	---	---	$6.78	---	$/klbs
Efficiency By Losses	0.0	0.0	82.6	0.0	%
Efficiency By I/O			88.7		%