Central State Hospital

Heating Plant Day Operations Report

2/1/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	28.76	hdd
Total Plant Steam Flow	370.49	klbs
Steam Flow Per Heating Degree Day	12.9	klbs/hdd
Total Condensate Return Water Flow	8.1	klbs
Total Plant Gas Flow	466.48	kscf
Total Plant Gas Cost	$2,864.52	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,864.52	$
Fuel Cost Per Heating Degree Day	$99.62	$/hdd
Plant Average Steam Cost Per Degree Day	$0.27	$/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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	23.5	0.7	0.4	hrs
Steam Flow	0.00	370.49	0.00	0.00	klbs
Gas Flow	3.50	457.48	2.93	2.56	kscf
Natural Gas Cost	$21.52	$2,809.27	$17.99	$15.74	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$21.52	$2,809.27	$17.99	$15.74	$
Average Steam Cost	---	$7.58	---	---	$/klbs
Efficiency By Losses	75.9	80.1	78.5	80.5	%
Efficiency By I/O		79.3			%

Central State Hospital

Heating Plant Day Operations Report

2/2/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.69	hdd
Total Plant Steam Flow	349.79	klbs
Steam Flow Per Heating Degree Day	14.8	klbs/hdd
Total Condensate Return Water Flow	8.3	klbs
Total Plant Gas Flow	440.06	kscf
Total Plant Gas Cost	$2,702.32	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,702.32	$
Fuel Cost Per Heating Degree Day	$114.06	$/hdd
Plant Average Steam Cost Per Degree Day	$0.33	$/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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	23.5	0.8	0.4	hrs
Steam Flow	0.00	349.79	0.00	0.00	klbs
Gas Flow	3.77	430.37	3.18	2.74	kscf
Natural Gas Cost	$23.14	$2,642.77	$19.55	$16.85	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$23.14	$2,642.77	$19.55	$16.85	$
Average Steam Cost	---	$7.56	---	---	$/klbs
Efficiency By Losses	73.3	79.9	77.3	72.5	%
Efficiency By I/O		79.6			%

Central State Hospital

Heating Plant Day Operations Report

2/3/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	19.16	hdd
Total Plant Steam Flow	319.38	klbs
Steam Flow Per Heating Degree Day	16.7	klbs/hdd
Total Condensate Return Water Flow	8.7	klbs
Total Plant Gas Flow	404.21	kscf
Total Plant Gas Cost	$2,482.16	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,482.16	$
Fuel Cost Per Heating Degree Day	$129.55	$/hdd
Plant Average Steam Cost Per Degree Day	$0.41	$/klbs
Total Plant Efficiency By I/O	77.4	%
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	0.7	23.5	0.8	0.4	hrs
Steam Flow	0.00	319.38	0.00	0.00	klbs
Gas Flow	3.60	395.12	3.07	2.42	kscf
Natural Gas Cost	$22.10	$2,426.35	$18.83	$14.88	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$22.10	$2,426.35	$18.83	$14.88	$
Average Steam Cost	---	$7.60	---	---	$/klbs
Efficiency By Losses	72.3	79.9	73.1	69.8	%
Efficiency By I/O		79.2			%

Central State Hospital

Heating Plant Day Operations Report

2/4/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	6.06	hdd
Total Plant Steam Flow	292.05	klbs
Steam Flow Per Heating Degree Day	48.2	klbs/hdd
Total Condensate Return Water Flow	8.8	klbs
Total Plant Gas Flow	369.90	kscf
Total Plant Gas Cost	$2,271.46	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,271.46	$
Fuel Cost Per Heating Degree Day	$374.89	$/hdd
Plant Average Steam Cost Per Degree Day	$1.28	$/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	0.7	23.5	0.6	0.3	hrs
Steam Flow	0.00	292.05	0.00	0.00	klbs
Gas Flow	3.39	362.29	2.48	1.75	kscf
Natural Gas Cost	$20.80	$2,224.73	$15.21	$10.72	$
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	$2,224.73	$15.21	$10.72	$
Average Steam Cost	---	$7.62	---	---	$/klbs
Efficiency By Losses	75.5	79.9	79.3	72.3	%
Efficiency By I/O		78.9			%

Central State Hospital

Heating Plant Day Operations Report

2/5/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	3.76	hdd
Total Plant Steam Flow	284.14	klbs
Steam Flow Per Heating Degree Day	75.6	klbs/hdd
Total Condensate Return Water Flow	8.8	klbs
Total Plant Gas Flow	363.11	kscf
Total Plant Gas Cost	$2,229.77	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,229.77	$
Fuel Cost Per Heating Degree Day	$593.04	$/hdd
Plant Average Steam Cost Per Degree Day	$2.09	$/klbs
Total Plant Efficiency By I/O	76.6	%
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	23.5	0.6	0.4	hrs
Steam Flow	0.00	284.14	0.00	0.00	klbs
Gas Flow	3.41	354.85	2.47	2.38	kscf
Natural Gas Cost	$20.95	$2,179.07	$15.16	$14.58	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$20.95	$2,179.07	$15.16	$14.58	$
Average Steam Cost	---	$7.67	---	---	$/klbs
Efficiency By Losses	75.7	79.9	73.4	76.8	%
Efficiency By I/O		78.4			%

Central State Hospital

Heating Plant Day Operations Report

2/6/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	11.68	hdd
Total Plant Steam Flow	322.32	klbs
Steam Flow Per Heating Degree Day	27.6	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	415.27	kscf
Total Plant Gas Cost	$2,550.06	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,550.06	$
Fuel Cost Per Heating Degree Day	$218.26	$/hdd
Plant Average Steam Cost Per Degree Day	$0.68	$/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	0.8	23.5	0.7	0.5	hrs
Steam Flow	0.00	322.32	0.00	0.00	klbs
Gas Flow	4.32	404.50	2.91	3.54	kscf
Natural Gas Cost	$26.56	$2,483.92	$17.87	$21.72	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$26.56	$2,483.92	$17.87	$21.72	$
Average Steam Cost	---	$7.71	---	---	$/klbs
Efficiency By Losses	76.7	79.9	80.9	81.1	%
Efficiency By I/O		78.0			%

Central State Hospital

Heating Plant Day Operations Report

2/7/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	17.22	hdd
Total Plant Steam Flow	344.63	klbs
Steam Flow Per Heating Degree Day	20.0	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	436.01	kscf
Total Plant Gas Cost	$2,677.40	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,677.40	$
Fuel Cost Per Heating Degree Day	$155.46	$/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	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	23.5	0.7	0.4	hrs
Steam Flow	0.00	344.63	0.00	0.00	klbs
Gas Flow	3.23	427.45	2.87	2.46	kscf
Natural Gas Cost	$19.82	$2,624.88	$17.62	$15.08	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$19.82	$2,624.88	$17.62	$15.08	$
Average Steam Cost	---	$7.62	---	---	$/klbs
Efficiency By Losses	76.5	80.1	78.9	79.1	%
Efficiency By I/O		79.0			%

Central State Hospital

Heating Plant Day Operations Report

2/8/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	18.17	hdd
Total Plant Steam Flow	346.88	klbs
Steam Flow Per Heating Degree Day	19.1	klbs/hdd
Total Condensate Return Water Flow	8.7	klbs
Total Plant Gas Flow	470.50	kscf
Total Plant Gas Cost	$2,889.20	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,889.20	$
Fuel Cost Per Heating Degree Day	$158.99	$/hdd
Plant Average Steam Cost Per Degree Day	$0.46	$/klbs
Total Plant Efficiency By I/O	72.2	%
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	1.0	1.4	4.2	19.5	hrs
Steam Flow	0.00	23.04	41.75	282.09	klbs
Gas Flow	5.23	28.73	68.49	368.04	kscf
Natural Gas Cost	$32.13	$176.44	$420.57	$2,260.05	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$32.13	$176.44	$420.57	$2,260.05	$
Average Steam Cost	---	$7.66	$10.07	$8.01	$/klbs
Efficiency By Losses	76.9	0.0	77.2	79.0	%
Efficiency By I/O		78.5	59.7	75.1	%

Central State Hospital

Heating Plant Day Operations Report

2/9/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	28.45	hdd
Total Plant Steam Flow	367.07	klbs
Steam Flow Per Heating Degree Day	12.9	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	452.39	kscf
Total Plant Gas Cost	$2,778.04	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,778.04	$
Fuel Cost Per Heating Degree Day	$97.64	$/hdd
Plant Average Steam Cost Per Degree Day	$0.27	$/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	0.9	0.0	0.8	23.5	hrs
Steam Flow	0.00	0.00	0.00	367.07	klbs
Gas Flow	4.45	0.00	3.25	444.70	kscf
Natural Gas Cost	$27.31	$0.00	$19.94	$2,730.79	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$27.31	$0.00	$19.94	$2,730.79	$
Average Steam Cost	---	---	---	$7.44	$/klbs
Efficiency By Losses	76.9	0.0	77.8	79.1	%
Efficiency By I/O				80.8	%

Central State Hospital

Heating Plant Day Operations Report

2/10/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	26.60	hdd
Total Plant Steam Flow	347.29	klbs
Steam Flow Per Heating Degree Day	13.1	klbs/hdd
Total Condensate Return Water Flow	8.9	klbs
Total Plant Gas Flow	427.08	kscf
Total Plant Gas Cost	$2,622.60	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,622.60	$
Fuel Cost Per Heating Degree Day	$98.60	$/hdd
Plant Average Steam Cost Per Degree Day	$0.28	$/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	0.7	0.0	0.7	23.5	hrs
Steam Flow	0.00	0.00	0.00	347.29	klbs
Gas Flow	3.65	0.00	2.84	420.58	kscf
Natural Gas Cost	$22.44	$0.00	$17.47	$2,582.70	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$22.44	$0.00	$17.47	$2,582.70	$
Average Steam Cost	---	---	---	$7.44	$/klbs
Efficiency By Losses	77.9	0.0	76.1	79.2	%
Efficiency By I/O				80.9	%

Central State Hospital

Heating Plant Day Operations Report

2/11/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	18.85	hdd
Total Plant Steam Flow	330.94	klbs
Steam Flow Per Heating Degree Day	17.6	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	405.89	kscf
Total Plant Gas Cost	$2,492.45	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,492.45	$
Fuel Cost Per Heating Degree Day	$132.25	$/hdd
Plant Average Steam Cost Per Degree Day	$0.40	$/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	0.6	0.0	0.7	23.5	hrs
Steam Flow	0.00	0.00	0.00	330.94	klbs
Gas Flow	3.07	0.00	2.52	400.30	kscf
Natural Gas Cost	$18.82	$0.00	$15.46	$2,458.17	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$18.82	$0.00	$15.46	$2,458.17	$
Average Steam Cost	---	---	---	$7.43	$/klbs
Efficiency By Losses	77.3	0.0	79.6	79.6	%
Efficiency By I/O				81.0	%

Central State Hospital

Heating Plant Day Operations Report

2/12/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	9.88	hdd
Total Plant Steam Flow	326.67	klbs
Steam Flow Per Heating Degree Day	33.1	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	402.61	kscf
Total Plant Gas Cost	$2,472.32	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,472.32	$
Fuel Cost Per Heating Degree Day	$250.28	$/hdd
Plant Average Steam Cost Per Degree Day	$0.77	$/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	0.8	0.0	0.7	23.5	hrs
Steam Flow	0.00	0.00	0.00	326.67	klbs
Gas Flow	4.04	0.00	2.77	395.80	kscf
Natural Gas Cost	$24.81	$0.00	$17.02	$2,430.49	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$24.81	$0.00	$17.02	$2,430.49	$
Average Steam Cost	---	---	---	$7.44	$/klbs
Efficiency By Losses	71.3	0.0	76.9	79.3	%
Efficiency By I/O				80.8	%

Central State Hospital

Heating Plant Day Operations Report

2/13/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	16.51	hdd
Total Plant Steam Flow	356.45	klbs
Steam Flow Per Heating Degree Day	21.6	klbs/hdd
Total Condensate Return Water Flow	8.7	klbs
Total Plant Gas Flow	435.81	kscf
Total Plant Gas Cost	$2,676.21	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,676.21	$
Fuel Cost Per Heating Degree Day	$162.10	$/hdd
Plant Average Steam Cost Per Degree Day	$0.45	$/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	0.7	0.0	0.8	23.5	hrs
Steam Flow	0.00	0.00	0.00	356.45	klbs
Gas Flow	3.80	0.00	3.17	428.84	kscf
Natural Gas Cost	$23.34	$0.00	$19.44	$2,633.43	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$23.34	$0.00	$19.44	$2,633.43	$
Average Steam Cost	---	---	---	$7.39	$/klbs
Efficiency By Losses	76.8	0.0	74.3	79.4	%
Efficiency By I/O				81.4	%

Central State Hospital

Heating Plant Day Operations Report

2/14/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	13.53	hdd
Total Plant Steam Flow	336.63	klbs
Steam Flow Per Heating Degree Day	24.9	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	395.30	kscf
Total Plant Gas Cost	$2,427.43	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,427.43	$
Fuel Cost Per Heating Degree Day	$179.46	$/hdd
Plant Average Steam Cost Per Degree Day	$0.53	$/klbs
Total Plant Efficiency By I/O	83.4	%

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	0.8	0.0	23.3	0.5	hrs
Steam Flow	0.00	0.00	333.79	2.85	klbs
Gas Flow	4.23	0.00	385.58	5.49	kscf
Natural Gas Cost	$26.00	$0.00	$2,367.74	$33.70	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$26.00	$0.00	$2,367.74	$33.70	$
Average Steam Cost	---	---	$7.09	$11.84	$/klbs
Efficiency By Losses	80.1	0.0	82.8	78.1	%
Efficiency By I/O			84.8	50.8	%

Central State Hospital

Heating Plant Day Operations Report

2/15/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	26.70	hdd
Total Plant Steam Flow	382.18	klbs
Steam Flow Per Heating Degree Day	14.3	klbs/hdd
Total Condensate Return Water Flow	8.6	klbs
Total Plant Gas Flow	450.89	kscf
Total Plant Gas Cost	$2,768.79	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,768.79	$
Fuel Cost Per Heating Degree Day	$103.69	$/hdd
Plant Average Steam Cost Per Degree Day	$0.27	$/klbs
Total Plant Efficiency By I/O	83.0	%

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	0.5	hrs
Steam Flow	0.00	0.00	382.18	0.00	klbs
Gas Flow	3.85	0.00	443.68	3.37	kscf
Natural Gas Cost	$23.61	$0.00	$2,724.50	$20.67	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$23.61	$0.00	$2,724.50	$20.67	$
Average Steam Cost	---	---	$7.13	---	$/klbs
Efficiency By Losses	74.5	0.0	82.5	75.5	%
Efficiency By I/O			84.4		%

Central State Hospital

Heating Plant Day Operations Report

2/16/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	34.16	hdd
Total Plant Steam Flow	375.30	klbs
Steam Flow Per Heating Degree Day	11.0	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	442.56	kscf
Total Plant Gas Cost	$2,717.67	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,717.67	$
Fuel Cost Per Heating Degree Day	$79.55	$/hdd
Plant Average Steam Cost Per Degree Day	$0.21	$/klbs
Total Plant Efficiency By I/O	83.0	%

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	0.5	hrs
Steam Flow	0.00	0.00	375.29	0.01	klbs
Gas Flow	3.85	0.00	435.35	3.37	kscf
Natural Gas Cost	$23.63	$0.00	$2,673.35	$20.69	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$23.63	$0.00	$2,673.35	$20.69	$
Average Steam Cost	---	---	$7.12	$2,525.33	$/klbs
Efficiency By Losses	75.7	0.0	82.7	71.9	%
Efficiency By I/O			84.4		%

Central State Hospital

Heating Plant Day Operations Report

2/17/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	25.10	hdd
Total Plant Steam Flow	341.93	klbs
Steam Flow Per Heating Degree Day	13.6	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	402.15	kscf
Total Plant Gas Cost	$2,469.53	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,469.53	$
Fuel Cost Per Heating Degree Day	$98.39	$/hdd
Plant Average Steam Cost Per Degree Day	$0.29	$/klbs
Total Plant Efficiency By I/O	83.3	%

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	0.6	0.0	23.5	0.4	hrs
Steam Flow	0.00	0.00	341.93	0.00	klbs
Gas Flow	3.31	0.00	396.19	2.65	kscf
Natural Gas Cost	$20.33	$0.00	$2,432.93	$16.27	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$20.33	$0.00	$2,432.93	$16.27	$
Average Steam Cost	---	---	$7.12	---	$/klbs
Efficiency By Losses	81.7	0.0	82.9	79.6	%
Efficiency By I/O			84.5		%

Central State Hospital

Heating Plant Day Operations Report

2/18/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	19.33	hdd
Total Plant Steam Flow	334.23	klbs
Steam Flow Per Heating Degree Day	17.3	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	395.44	kscf
Total Plant Gas Cost	$2,428.31	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,428.31	$
Fuel Cost Per Heating Degree Day	$125.62	$/hdd
Plant Average Steam Cost Per Degree Day	$0.38	$/klbs
Total Plant Efficiency By I/O	82.8	%
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	0.7	0.0	23.5	0.4	hrs
Steam Flow	0.00	0.00	334.23	0.00	klbs
Gas Flow	3.84	0.00	388.68	2.92	kscf
Natural Gas Cost	$23.56	$0.00	$2,386.80	$17.94	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$23.56	$0.00	$2,386.80	$17.94	$
Average Steam Cost	---	---	$7.14	---	$/klbs
Efficiency By Losses	78.6	0.0	82.7	78.2	%
Efficiency By I/O			84.2		%

Central State Hospital

Heating Plant Day Operations Report

2/19/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	17.23	hdd
Total Plant Steam Flow	318.97	klbs
Steam Flow Per Heating Degree Day	18.5	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	378.57	kscf
Total Plant Gas Cost	$2,324.73	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,324.73	$
Fuel Cost Per Heating Degree Day	$134.91	$/hdd
Plant Average Steam Cost Per Degree Day	$0.42	$/klbs
Total Plant Efficiency By I/O	82.5	%
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	0.8	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	318.97	0.00	klbs
Gas Flow	3.88	0.00	372.67	2.02	kscf
Natural Gas Cost	$23.84	$0.00	$2,288.50	$12.39	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$23.84	$0.00	$2,288.50	$12.39	$
Average Steam Cost	---	---	$7.17	---	$/klbs
Efficiency By Losses	74.9	0.0	82.9	76.3	%
Efficiency By I/O			83.8		%

Central State Hospital

Heating Plant Day Operations Report

2/20/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.40	hdd
Total Plant Steam Flow	346.07	klbs
Steam Flow Per Heating Degree Day	14.8	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	410.05	kscf
Total Plant Gas Cost	$2,518.04	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,518.04	$
Fuel Cost Per Heating Degree Day	$107.62	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	82.6	%

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	0.9	0.0	23.5	0.6	hrs
Steam Flow	0.00	0.00	346.07	0.00	klbs
Gas Flow	4.63	0.00	401.54	3.89	kscf
Natural Gas Cost	$28.44	$0.00	$2,465.73	$23.87	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$28.44	$0.00	$2,465.73	$23.87	$
Average Steam Cost	---	---	$7.13	---	$/klbs
Efficiency By Losses	74.5	0.0	82.7	78.8	%
Efficiency By I/O			84.4		%

Central State Hospital

Heating Plant Day Operations Report

2/21/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	30.48	hdd
Total Plant Steam Flow	338.07	klbs
Steam Flow Per Heating Degree Day	11.1	klbs/hdd
Total Condensate Return Water Flow	8.9	klbs
Total Plant Gas Flow	443.09	kscf
Total Plant Gas Cost	$2,720.93	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,720.93	$
Fuel Cost Per Heating Degree Day	$89.25	$/hdd
Plant Average Steam Cost Per Degree Day	$0.26	$/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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	8.3	0.0	12.3	5.2	hrs
Steam Flow	87.41	0.00	198.37	52.28	klbs
Gas Flow	125.23	0.00	231.40	86.47	kscf
Natural Gas Cost	$769.02	$0.00	$1,420.94	$530.97	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$769.02	$0.00	$1,420.94	$530.97	$
Average Steam Cost	$8.80	---	$7.16	$10.16	$/klbs
Efficiency By Losses	80.1	0.0	0.0	75.5	%
Efficiency By I/O	68.4		84.0	59.2	%

Central State Hospital

Heating Plant Day Operations Report

2/22/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	35.98	hdd
Total Plant Steam Flow	387.82	klbs
Steam Flow Per Heating Degree Day	10.8	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	469.30	kscf
Total Plant Gas Cost	$2,881.84	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,881.84	$
Fuel Cost Per Heating Degree Day	$80.10	$/hdd
Plant Average Steam Cost Per Degree Day	$0.21	$/klbs
Total Plant Efficiency By I/O	80.9	%

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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	2.3	0.0	21.2	1.0	hrs
Steam Flow	43.59	0.00	335.71	8.51	klbs
Gas Flow	48.77	0.00	404.53	16.00	kscf
Natural Gas Cost	$299.49	$0.00	$2,484.10	$98.26	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$299.49	$0.00	$2,484.10	$98.26	$
Average Steam Cost	$6.87	---	$7.40	$11.55	$/klbs
Efficiency By Losses	0.0	0.0	82.5	72.2	%
Efficiency By I/O	87.5		81.3	52.1	%

Central State Hospital

Heating Plant Day Operations Report

2/23/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	30.17	hdd
Total Plant Steam Flow	348.59	klbs
Steam Flow Per Heating Degree Day	11.6	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	406.77	kscf
Total Plant Gas Cost	$2,497.86	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,497.86	$
Fuel Cost Per Heating Degree Day	$82.79	$/hdd
Plant Average Steam Cost Per Degree Day	$0.24	$/klbs
Total Plant Efficiency By I/O	83.9	%

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	23.5				hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	23.5	0.4	hrs
Steam Flow	0.00	0.00	348.59	0.00	klbs
Gas Flow	0.00	0.00	404.24	2.53	kscf
Natural Gas Cost	$0.00	$0.00	$2,482.31	$15.55	$
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	$0.00	$2,482.31	$15.55	$
Average Steam Cost	---	---	$7.12	---	$/klbs
Efficiency By Losses	0.0	0.0	82.7	78.5	%
Efficiency By I/O			84.4		%

Central State Hospital

Heating Plant Day Operations Report

2/24/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	22.83	hdd
Total Plant Steam Flow	316.71	klbs
Steam Flow Per Heating Degree Day	13.9	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	367.50	kscf
Total Plant Gas Cost	$2,256.75	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,256.75	$
Fuel Cost Per Heating Degree Day	$98.86	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	84.4	%

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	0.0	23.5	0.4	hrs
Steam Flow	0.00	0.00	316.71	0.00	klbs
Gas Flow	0.00	0.00	365.04	2.47	kscf
Natural Gas Cost	$0.00	$0.00	$2,241.59	$15.16	$
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	$2,241.59	$15.16	$
Average Steam Cost	---	---	$7.08	---	$/klbs
Efficiency By Losses	0.0	0.0	82.8	78.7	%
Efficiency By I/O			85.0		%

Central State Hospital

Heating Plant Day Operations Report

2/25/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	21.08	hdd
Total Plant Steam Flow	328.80	klbs
Steam Flow Per Heating Degree Day	15.6	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	384.77	kscf
Total Plant Gas Cost	$2,362.76	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,362.76	$
Fuel Cost Per Heating Degree Day	$112.09	$/hdd
Plant Average Steam Cost Per Degree Day	$0.34	$/klbs
Total Plant Efficiency By I/O	83.7	%

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	0.0	23.5	0.4	hrs
Steam Flow	0.00	0.00	328.80	0.00	klbs
Gas Flow	0.00	0.00	381.90	2.87	kscf
Natural Gas Cost	$0.00	$0.00	$2,345.17	$17.59	$
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	$0.00	$2,345.17	$17.59	$
Average Steam Cost	---	---	$7.13	---	$/klbs
Efficiency By Losses	0.0	0.0	82.9	75.2	%
Efficiency By I/O			84.3		%

Central State Hospital

Heating Plant Day Operations Report

2/26/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	12.28	hdd
Total Plant Steam Flow	309.42	klbs
Steam Flow Per Heating Degree Day	25.2	klbs/hdd
Total Condensate Return Water Flow	8.7	klbs
Total Plant Gas Flow	365.46	kscf
Total Plant Gas Cost	$2,244.21	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,244.21	$
Fuel Cost Per Heating Degree Day	$182.73	$/hdd
Plant Average Steam Cost Per Degree Day	$0.59	$/klbs
Total Plant Efficiency By I/O	82.9	%

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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	17.0	0.0	7.6	0.1	hrs
Steam Flow	204.72	0.00	104.70	0.00	klbs
Gas Flow	240.60	0.00	124.28	0.58	kscf
Natural Gas Cost	$1,477.46	$0.00	$763.17	$3.58	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,477.46	$0.00	$763.17	$3.58	$
Average Steam Cost	$7.22	---	$7.29	---	$/klbs
Efficiency By Losses	81.4	0.0	78.4	0.0	%
Efficiency By I/O	83.3		82.5		%

Central State Hospital

Heating Plant Day Operations Report

2/27/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	12.60	hdd
Total Plant Steam Flow	318.47	klbs
Steam Flow Per Heating Degree Day	25.3	klbs/hdd
Total Condensate Return Water Flow	9.5	klbs
Total Plant Gas Flow	362.86	kscf
Total Plant Gas Cost	$2,228.24	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,228.24	$
Fuel Cost Per Heating Degree Day	$176.91	$/hdd
Plant Average Steam Cost Per Degree Day	$0.56	$/klbs
Total Plant Efficiency By I/O	85.9	%

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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.0	0.9	0.0	hrs
Steam Flow	317.92	0.00	0.55	0.00	klbs
Gas Flow	357.89	0.00	4.97	0.00	kscf
Natural Gas Cost	$2,197.71	$0.00	$30.53	$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	$2,197.71	$0.00	$30.53	$0.00	$
Average Steam Cost	$6.91	---	$55.95	---	$/klbs
Efficiency By Losses	81.3	0.0	76.9	0.0	%
Efficiency By I/O	87.0		10.7		%

Central State Hospital

Heating Plant Day Operations Report

2/28/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	23.13	hdd
Total Plant Steam Flow	363.39	klbs
Steam Flow Per Heating Degree Day	15.7	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	427.02	kscf
Total Plant Gas Cost	$2,622.20	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,622.20	$
Fuel Cost Per Heating Degree Day	$113.36	$/hdd
Plant Average Steam Cost Per Degree Day	$0.31	$/klbs
Total Plant Efficiency By I/O	83.3	%

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	23.4	1.4	2.1	0.0	hrs
Steam Flow	363.06	0.33	0.00	0.00	klbs
Gas Flow	405.81	12.83	8.38	0.00	kscf
Natural Gas Cost	$2,491.96	$78.81	$51.43	$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	$2,491.96	$78.81	$51.43	$0.00	$
Average Steam Cost	$6.86	$236.51	—	—	$/klbs
Efficiency By Losses	81.2	74.3	79.2	0.0	%
Efficiency By I/O	87.6	2.5			%

Central State Hospital

Heating Plant Day Operations Report

2/29/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	26.73	hdd
Total Plant Steam Flow	355.50	klbs
Steam Flow Per Heating Degree Day	13.3	klbs/hdd
Total Condensate Return Water Flow	9.9	klbs
Total Plant Gas Flow	447.67	kscf
Total Plant Gas Cost	$2,749.03	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,749.03	$
Fuel Cost Per Heating Degree Day	$102.84	$/hdd
Plant Average Steam Cost Per Degree Day	$0.29	$/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	23.5	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	1.6	22.4	2.1	0.0	hrs
Steam Flow	21.47	334.02	0.00	0.00	klbs
Gas Flow	25.76	413.50	8.41	0.00	kscf
Natural Gas Cost	$158.17	$2,539.22	$51.64	$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	$158.17	$2,539.22	$51.64	$0.00	$
Average Steam Cost	$7.37	$7.60	---	---	$/klbs
Efficiency By Losses	75.7	79.8	77.0	0.0	%
Efficiency By I/O	81.6	79.1			%