Central State Hospital

Heating Plant Day Operations Report

8/1/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	129.25	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	165.54	kscf
Total Plant Gas Cost	$1,016.53	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,016.53	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	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	0.0	21.9	hrs
Steam Flow	0.00	0.00	0.00	129.25	klbs
Gas Flow	3.06	0.00	0.00	162.48	kscf
Natural Gas Cost	$18.78	$0.00	$0.00	$997.76	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$18.78	$0.00	$0.00	$997.76	$
Average Steam Cost	---	---	---	$7.72	$/klbs
Efficiency By Losses	77.4	0.0	0.0	82.3	%
Efficiency By I/O				77.9	%

Central State Hospital

Heating Plant Day Operations Report

8/2/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	130.01	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	170.47	kscf
Total Plant Gas Cost	$1,046.80	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,046.80	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	23.5	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.5	0.0	1.1	21.7	hrs
Steam Flow	0.00	0.00	0.00	130.01	klbs
Gas Flow	2.65	0.00	4.01	163.81	kscf
Natural Gas Cost	$16.27	$0.00	$24.64	$1,005.89	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$16.27	$0.00	$24.64	$1,005.89	$
Average Steam Cost	---	---	---	$7.74	$/klbs
Efficiency By Losses	82.4	0.0	79.7	81.6	%
Efficiency By I/O				77.7	%

Central State Hospital

Heating Plant Day Operations Report

8/3/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	138.14	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	175.41	kscf
Total Plant Gas Cost	$1,077.17	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,077.17	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	77.1	%

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	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	0.7	22.4	hrs
Steam Flow	0.00	0.00	0.00	138.14	klbs
Gas Flow	3.24	0.00	2.33	169.84	kscf
Natural Gas Cost	$19.91	$0.00	$14.28	$1,042.97	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$19.91	$0.00	$14.28	$1,042.97	$
Average Steam Cost	---	---	---	$7.55	$/klbs
Efficiency By Losses	83.5	0.0	81.8	81.8	%
Efficiency By I/O				79.7	%

Central State Hospital

Heating Plant Day Operations Report

8/4/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	128.48	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	166.14	kscf
Total Plant Gas Cost	$1,020.23	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,020.23	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	75.7	%

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	0.5	0.0	0.6	22.0	hrs
Steam Flow	0.00	0.00	0.00	128.48	klbs
Gas Flow	2.72	0.00	1.96	161.46	kscf
Natural Gas Cost	$16.73	$0.00	$12.03	$991.48	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$16.73	$0.00	$12.03	$991.48	$
Average Steam Cost	---	---	---	$7.72	$/klbs
Efficiency By Losses	77.1	0.0	76.6	81.7	%
Efficiency By I/O				77.9	%

Central State Hospital

Heating Plant Day Operations Report

8/5/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	130.19	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	168.30	kscf
Total Plant Gas Cost	$1,033.47	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,033.47	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	75.8	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	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	0.7	22.2	hrs
Steam Flow	0.00	0.00	0.00	130.19	klbs
Gas Flow	3.15	0.00	2.32	162.82	kscf
Natural Gas Cost	$19.37	$0.00	$14.24	$999.86	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$19.37	$0.00	$14.24	$999.86	$
Average Steam Cost	---	---	---	$7.68	$/klbs
Efficiency By Losses	82.8	0.0	77.3	81.8	%
Efficiency By I/O				78.3	%

Central State Hospital

Heating Plant Day Operations Report

8/6/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	147.01	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	182.05	kscf
Total Plant Gas Cost	$1,117.92	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,117.92	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.1	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	22.9	0.0	0.5	0.6	hrs
Steam Flow	142.99	0.00	0.00	4.01	klbs
Gas Flow	174.45	0.00	2.46	5.14	kscf
Natural Gas Cost	$1,071.27	$0.00	$15.09	$31.56	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,071.27	$0.00	$15.09	$31.56	$
Average Steam Cost	$7.49	---	---	$7.86	$/klbs
Efficiency By Losses	81.7	0.0	78.7	0.0	%
Efficiency By I/O	80.3			76.5	%

Central State Hospital

Heating Plant Day Operations Report

8/7/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	140.63	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	176.33	kscf
Total Plant Gas Cost	$1,082.79	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,082.79	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	23.5	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	0.6	0.3	hrs
Steam Flow	140.63	0.00	0.00	0.00	klbs
Gas Flow	172.31	0.00	2.26	1.76	kscf
Natural Gas Cost	$1,058.10	$0.00	$13.87	$10.82	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,058.10	$0.00	$13.87	$10.82	$
Average Steam Cost	$7.52	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	74.9	75.1	%
Efficiency By I/O	79.9				%

Central State Hospital

Heating Plant Day Operations Report

8/8/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	137.16	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	171.75	kscf
Total Plant Gas Cost	$1,054.70	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,054.70	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.2	%

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	23.5	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	0.6	0.3	hrs
Steam Flow	137.16	0.00	0.00	0.00	klbs
Gas Flow	167.58	0.00	2.28	1.90	kscf
Natural Gas Cost	$1,029.05	$0.00	$13.99	$11.66	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,029.05	$0.00	$13.99	$11.66	$
Average Steam Cost	$7.50	---	---	---	$/klbs
Efficiency By Losses	81.9	0.0	74.3	82.4	%
Efficiency By I/O	80.2				%

Central State Hospital

Heating Plant Day Operations Report

8/9/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	141.74	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	175.38	kscf
Total Plant Gas Cost	$1,076.94	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,076.94	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.1	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	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	0.6	0.3	hrs
Steam Flow	141.74	0.00	0.00	0.00	klbs
Gas Flow	171.46	0.00	2.30	1.62	kscf
Natural Gas Cost	$1,052.88	$0.00	$14.09	$9.97	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,052.88	$0.00	$14.09	$9.97	$
Average Steam Cost	$7.43	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	79.2	76.1	%
Efficiency By I/O	81.0				%

Central State Hospital

Heating Plant Day Operations Report

8/10/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	141.86	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	175.50	kscf
Total Plant Gas Cost	$1,077.68	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,077.68	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.2	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	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	0.7	0.3	hrs
Steam Flow	141.86	0.00	0.00	0.00	klbs
Gas Flow	171.44	0.00	2.31	1.75	kscf
Natural Gas Cost	$1,052.76	$0.00	$14.19	$10.74	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,052.76	$0.00	$14.19	$10.74	$
Average Steam Cost	$7.42	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	74.1	82.5	%
Efficiency By I/O	81.0				%

Central State Hospital

Heating Plant Day Operations Report

8/11/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	137.26	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	171.98	kscf
Total Plant Gas Cost	$1,056.08	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,056.08	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.2	%
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	23.5	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	0.6	0.3	hrs
Steam Flow	137.26	0.00	0.00	0.00	klbs
Gas Flow	167.45	0.00	2.31	2.22	kscf
Natural Gas Cost	$1,028.27	$0.00	$14.20	$13.61	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,028.27	$0.00	$14.20	$13.61	$
Average Steam Cost	$7.49	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	74.0	76.5	%
Efficiency By I/O	80.3				%

Central State Hospital

Heating Plant Day Operations Report

8/12/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	137.24	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	171.42	kscf
Total Plant Gas Cost	$1,052.65	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,052.65	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.4	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	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	0.7	0.3	hrs
Steam Flow	137.24	0.00	0.00	0.00	klbs
Gas Flow	167.28	0.00	2.36	1.78	kscf
Natural Gas Cost	$1,027.23	$0.00	$14.48	$10.93	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,027.23	$0.00	$14.48	$10.93	$
Average Steam Cost	$7.49	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	75.8	78.3	%
Efficiency By I/O	80.3				%

Central State Hospital

Heating Plant Day Operations Report

8/13/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	142.84	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	176.25	kscf
Total Plant Gas Cost	$1,082.31	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,082.31	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.4	%
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	23.5	0.0	0.7	0.1	hrs
Steam Flow	142.84	0.00	0.00	0.00	klbs
Gas Flow	173.21	0.00	2.59	0.45	kscf
Natural Gas Cost	$1,063.64	$0.00	$15.91	$2.77	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.00	$
Total Fuel Cost	$1,063.64	$0.00	$15.91	$2.77	$
Average Steam Cost	$7.45	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	80.5	0.0	%
Efficiency By I/O	80.8				%

Central State Hospital

Heating Plant Day Operations Report

8/14/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	141.05	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	174.09	kscf
Total Plant Gas Cost	$1,069.02	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,069.02	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.3	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	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	0.6	0.0	hrs
Steam Flow	141.05	0.00	0.00	0.00	klbs
Gas Flow	171.94	0.00	2.15	0.00	kscf
Natural Gas Cost	$1,055.83	$0.00	$13.19	$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	$1,055.83	$0.00	$13.19	$0.00	$
Average Steam Cost	$7.49	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	79.4	0.0	%
Efficiency By I/O	80.3				%

Central State Hospital

Heating Plant Day Operations Report

8/15/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	140.26	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.4	klbs
Total Plant Gas Flow	173.45	kscf
Total Plant Gas Cost	$1,065.09	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,065.09	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.2	%

		Units
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	23.5	0.0	0.6	0.0	hrs
Steam Flow	140.26	0.00	0.00	0.00	klbs
Gas Flow	171.27	0.00	2.18	0.00	kscf
Natural Gas Cost	$1,051.73	$0.00	$13.36	$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	$1,051.73	$0.00	$13.36	$0.00	$
Average Steam Cost	$7.50	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	73.8	0.0	%
Efficiency By I/O	80.2				%

Central State Hospital

Heating Plant Day Operations Report

8/16/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	142.45	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	174.73	kscf
Total Plant Gas Cost	$1,072.95	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,072.95	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	23.5	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	0.7	0.0	hrs
Steam Flow	142.45	0.00	0.00	0.00	klbs
Gas Flow	172.33	0.00	2.40	0.00	kscf
Natural Gas Cost	$1,058.21	$0.00	$14.74	$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	$1,058.21	$0.00	$14.74	$0.00	$
Average Steam Cost	$7.43	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	75.8	0.0	%
Efficiency By I/O	81.0				%

Central State Hospital

Heating Plant Day Operations Report

8/17/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	142.73	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	176.13	kscf
Total Plant Gas Cost	$1,081.59	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,081.59	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.4	%

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	23.5	0.0	0.7	0.0	hrs
Steam Flow	142.73	0.00	0.00	0.00	klbs
Gas Flow	173.76	0.00	2.37	0.00	kscf
Natural Gas Cost	$1,067.04	$0.00	$14.56	$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	$1,067.04	$0.00	$14.56	$0.00	$
Average Steam Cost	$7.48	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	77.4	0.0	%
Efficiency By I/O	80.4				%

Central State Hospital

Heating Plant Day Operations Report

8/18/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	134.98	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	168.26	kscf
Total Plant Gas Cost	$1,033.21	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,033.21	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.6	%

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	23.5	0.0	0.7	0.0	hrs
Steam Flow	134.98	0.00	0.00	0.00	klbs
Gas Flow	165.62	0.00	2.63	0.00	kscf
Natural Gas Cost	$1,017.05	$0.00	$16.17	$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	$1,017.05	$0.00	$16.17	$0.00	$
Average Steam Cost	$7.53	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	76.2	0.0	%
Efficiency By I/O	79.8				%

Central State Hospital

Heating Plant Day Operations Report

8/19/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	133.22	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	166.66	kscf
Total Plant Gas Cost	$1,023.41	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,023.41	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.3	%

		Units
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	23.5	0.0	0.7	0.0	hrs
Steam Flow	133.22	0.00	0.00	0.00	klbs
Gas Flow	164.26	0.00	2.40	0.00	kscf
Natural Gas Cost	$1,008.69	$0.00	$14.72	$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	$1,008.69	$0.00	$14.72	$0.00	$
Average Steam Cost	$7.57	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	74.7	0.0	%
Efficiency By I/O	79.4				%

Central State Hospital

Heating Plant Day Operations Report

8/20/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	141.44	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	173.95	kscf
Total Plant Gas Cost	$1,068.16	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,068.16	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	23.5	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	0.6	0.0	hrs
Steam Flow	141.44	0.00	0.00	0.00	klbs
Gas Flow	171.70	0.00	2.24	0.00	kscf
Natural Gas Cost	$1,054.38	$0.00	$13.78	$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	$1,054.38	$0.00	$13.78	$0.00	$
Average Steam Cost	$7.45	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	73.8	0.0	%
Efficiency By I/O	80.7				%

Central State Hospital

Heating Plant Day Operations Report

8/21/2019
7:01 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	140.98	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.3	klbs
Total Plant Gas Flow	172.85	kscf
Total Plant Gas Cost	$1,061.42	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.04	$
Total Plant Fuel Cost	$1,061.46	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.9	%
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	23.5	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	0.7	0.0	hrs
Steam Flow	140.98	0.00	0.00	0.00	klbs
Gas Flow	170.27	0.00	2.58	0.00	kscf
Natural Gas Cost	$1,045.57	$0.00	$15.85	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.04	$
Total Fuel Cost	$1,045.57	$0.00	$15.85	$0.04	$
Average Steam Cost	$7.42	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	76.1	0.0	%
Efficiency By I/O	81.1				%

Central State Hospital

Heating Plant Day Operations Report

8/22/2019
8:01 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	3.16	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	0.2	klbs
Total Plant Gas Flow	3.95	kscf
Total Plant Gas Cost	$24.24	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$24.24	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.4	%
Condensate Transfer Pump #1 Run Time	0.5	hrs
Condensate Transfer Pump #2 Run Time	0.5	hrs
Condensate Transfer Pump #3 Run Time	0.5	hrs
Boiler Feed Pump #1 Run Time	0.5	hrs
Boiler Feed Pump #2 Run Time	0.5	hrs
Boiler Feed Pump #3 Run Time	0.5	hrs
Boiler Feed Pump #4 Run Time	0.5	hrs
Fuel Oil Pump #1 Run Time	0.5	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.5	0.0	0.0	0.0	hrs
Steam Flow	3.16	0.00	0.00	0.00	klbs
Gas Flow	3.95	0.00	0.00	0.00	kscf
Natural Gas Cost	$24.24	$0.00	$0.00	$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	$24.24	$0.00	$0.00	$0.00	$
Average Steam Cost	$7.68	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	76.5	0.0	%
Efficiency By I/O	78.4				%

Central State Hospital

Heating Plant Day Operations Report

8/23/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	139.95	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.2	klbs
Total Plant Gas Flow	173.81	kscf
Total Plant Gas Cost	$1,067.31	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.08	$
Total Plant Fuel Cost	$1,067.39	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	78.9	%

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	23.5	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	0.8	0.0	hrs
Steam Flow	139.95	0.00	0.00	0.00	klbs
Gas Flow	171.01	0.00	2.80	0.00	kscf
Natural Gas Cost	$1,050.11	$0.00	$17.20	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.08	$
Total Fuel Cost	$1,050.11	$0.00	$17.20	$0.08	$
Average Steam Cost	$7.50	---	---	---	$/klbs
Efficiency By Losses	81.8	0.0	76.5	0.0	%
Efficiency By I/O	80.1				%

Central State Hospital

Heating Plant Day Operations Report

8/24/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	145.37	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	178.51	kscf
Total Plant Gas Cost	$1,096.21	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,096.21	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.7	%

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	23.5	0.0	0.9	0.0	hrs
Steam Flow	145.37	0.00	0.00	0.00	klbs
Gas Flow	175.35	0.00	3.16	0.00	kscf
Natural Gas Cost	$1,076.80	$0.00	$19.41	$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	$1,076.80	$0.00	$19.41	$0.00	$
Average Steam Cost	$7.41	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	76.6	0.0	%
Efficiency By I/O	81.2				%

Central State Hospital

Heating Plant Day Operations Report

8/25/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	142.43	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	175.97	kscf
Total Plant Gas Cost	$1,080.56	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,080.56	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.3	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	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	0.9	0.0	hrs
Steam Flow	142.43	0.00	0.00	0.00	klbs
Gas Flow	172.89	0.00	3.07	0.00	kscf
Natural Gas Cost	$1,061.70	$0.00	$18.86	$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	$1,061.70	$0.00	$18.86	$0.00	$
Average Steam Cost	$7.45	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	77.4	0.0	%
Efficiency By I/O	80.7				%

Central State Hospital

Heating Plant Day Operations Report

8/26/2019
7.00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	143.65	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.1	klbs
Total Plant Gas Flow	177.50	kscf
Total Plant Gas Cost	$1,089.96	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,089.96	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	79.3	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	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	1.0	0.0	hrs
Steam Flow	143.65	0.00	0.00	0.00	klbs
Gas Flow	173.91	0.00	3.59	0.00	kscf
Natural Gas Cost	$1,067.93	$0.00	$22.03	$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	$1,067.93	$0.00	$22.03	$0.00	$
Average Steam Cost	$7.43	---	---	---	$/klbs
Efficiency By Losses	81.6	0.0	76.7	0.0	%
Efficiency By I/O	80.9				%

Central State Hospital

Heating Plant Day Operations Report

8/27/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	152.86	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.9	klbs
Total Plant Gas Flow	186.44	kscf
Total Plant Gas Cost	$1,144.90	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,144.90	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	80.3	%

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	23.5	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	0.9	0.0	hrs
Steam Flow	152.86	0.00	0.00	0.00	klbs
Gas Flow	183.31	0.00	3.13	0.00	kscf
Natural Gas Cost	$1,125.65	$0.00	$19.25	$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	$1,125.65	$0.00	$19.25	$0.00	$
Average Steam Cost	$7.36	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	76.1	0.0	%
Efficiency By I/O	81.7				%

Central State Hospital

Heating Plant Day Operations Report

8/28/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	21.53	hdd
Total Plant Steam Flow	123.07	klbs
Steam Flow Per Heating Degree Day	5.7	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	174.42	kscf
Total Plant Gas Cost	$1,071.09	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,071.09	$
Fuel Cost Per Heating Degree Day	$49.75	$/hdd
Plant Average Steam Cost Per Degree Day	$0.40	$/klbs
Total Plant Efficiency By I/O	69.1	%

Condensate Transfer Pump #1 Run Time	23.3	hrs
Condensate Transfer Pump #2 Run Time	23.3	hrs
Condensate Transfer Pump #3 Run Time	23.3	hrs
Boiler Feed Pump #1 Run Time	23.3	hrs
Boiler Feed Pump #2 Run Time	23.3	hrs
Boiler Feed Pump #3 Run Time	23.3	hrs
Boiler Feed Pump #4 Run Time	23.3	hrs
Fuel Oil Pump #1 Run Time	23.3	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	15.2	0.0	4.6	0.0	hrs
Steam Flow	99.13	0.00	23.95	0.00	klbs
Gas Flow	119.03	0.00	55.40	0.00	kscf
Natural Gas Cost	$730.92	$0.00	$340.18	$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	$730.92	$0.00	$340.18	$0.00	$
Average Steam Cost	$7.37	---	$14.20	---	$/klbs
Efficiency By Losses	0.0	0.0	77.8	0.0	%
Efficiency By I/O	81.6		42.3		%

Central State Hospital

Heating Plant Day Operations Report

8/29/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	22.01	hdd
Total Plant Steam Flow	141.40	klbs
Steam Flow Per Heating Degree Day	6.4	klbs/hdd
Total Condensate Return Water Flow	8.7	klbs
Total Plant Gas Flow	181.53	kscf
Total Plant Gas Cost	$1,114.76	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,114.76	$
Fuel Cost Per Heating Degree Day	$50.64	$/hdd
Plant Average Steam Cost Per Degree Day	$0.36	$/klbs
Total Plant Efficiency By I/O	76.3	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #1 Run Time	23.5	hrs
Boiler Feed Pump #2 Run Time	23.5	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	23.5	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	21.6	0.0	1.6	0.0	hrs
Steam Flow	132.97	0.00	8.44	0.00	klbs
Gas Flow	164.93	0.00	16.61	0.00	kscf
Natural Gas Cost	$1,012.78	$0.00	$101.99	$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	$1,012.78	$0.00	$101.99	$0.00	$
Average Steam Cost	$7.62	---	$12.09	---	$/klbs
Efficiency By Losses	81.7	0.0	80.6	0.0	%
Efficiency By I/O	79.0		49.8		%

Central State Hospital

Heating Plant Day Operations Report

8/30/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	150.94	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.9	klbs
Total Plant Gas Flow	184.61	kscf
Total Plant Gas Cost	$1,133.62	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.15	$
Total Plant Fuel Cost	$1,133.77	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	23.5				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	0.7	0.0	hrs
Steam Flow	150.94	0.00	0.00	0.00	klbs
Gas Flow	182.18	0.00	2.43	0.00	kscf
Natural Gas Cost	$1,118.71	$0.00	$14.91	$0.00	$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	$0.00	$0.00	$0.00	$0.15	$
Total Fuel Cost	$1,118.71	$0.00	$14.91	$0.15	$
Average Steam Cost	$7.41	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	78.9	0.0	%
Efficiency By I/O	81.1				%

Central State Hospital

Heating Plant Day Operations Report

8/31/2019
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	147.92	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	9.0	klbs
Total Plant Gas Flow	180.78	kscf
Total Plant Gas Cost	$1,110.10	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,110.10	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/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	23.5	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	0.7	0.0	hrs
Steam Flow	147.92	0.00	0.00	0.00	klbs
Gas Flow	178.37	0.00	2.40	0.00	kscf
Natural Gas Cost	$1,095.35	$0.00	$14.74	$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	$1,095.35	$0.00	$14.74	$0.00	$
Average Steam Cost	$7.41	---	---	---	$/klbs
Efficiency By Losses	81.7	0.0	82.1	0.0	%
Efficiency By I/O	81.2				%