Central State Hospital

Heating Plant Day Operations Report

10/1/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	137.35	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.4	klbs
Total Plant Gas Flow	174.75	kscf
Total Plant Gas Cost	$1,073.10	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,073.10	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	77.0	%

Condensate Transfer Pump #1 Run Time	5.5	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	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	0.7	0.0	0.0	hrs
Steam Flow	137.35	0.00	0.00	0.00	klbs
Gas Flow	171.27	3.48	0.00	0.00	kscf
Natural Gas Cost	$1,051.71	$21.39	$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	$1,051.71	$21.39	$0.00	$0.00	$
Average Steam Cost	$7.66	---	---	---	$/klbs
Efficiency By Losses	81.5	71.5	0.0	0.0	%
Efficiency By I/O	78.5				%

Central State Hospital

Heating Plant Day Operations Report

10/2/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	153.48	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.8	klbs
Total Plant Gas Flow	187.27	kscf
Total Plant Gas Cost	$1,150.00	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,150.00	$
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	22.6	hrs
Condensate Transfer Pump #2 Run Time	1.8	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	0.7	0.0	0.0	hrs
Steam Flow	153.48	0.00	0.00	0.00	klbs
Gas Flow	183.93	3.34	0.00	0.00	kscf
Natural Gas Cost	$1,129.46	$20.53	$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	$1,129.46	$20.53	$0.00	$0.00	$
Average Steam Cost	$7.36	---	---	---	$/klbs
Efficiency By Losses	81.6	71.8	0.0	0.0	%
Efficiency By I/O	81.7				%

Central State Hospital

Heating Plant Day Operations Report

10/3/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	149.19	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.9	klbs
Total Plant Gas Flow	179.63	kscf
Total Plant Gas Cost	$1,103.06	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,103.06	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	81.3	%

Condensate Transfer Pump #1 Run Time	13.0	hrs
Condensate Transfer Pump #2 Run Time	0.5	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	0.6	0.0	0.0	hrs
Steam Flow	149.19	0.00	0.00	0.00	klbs
Gas Flow	176.60	3.03	0.00	0.00	kscf
Natural Gas Cost	$1,084.44	$18.62	$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	$1,084.44	$18.62	$0.00	$0.00	$
Average Steam Cost	$7.27	---	---	---	$/klbs
Efficiency By Losses	81.6	75.4	0.0	0.0	%
Efficiency By I/O	82.7				%

Central State Hospital

Heating Plant Day Operations Report

10/4/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	161.35	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.4	klbs
Total Plant Gas Flow	191.13	kscf
Total Plant Gas Cost	$1,173.70	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,173.70	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	82.7	%

Condensate Transfer Pump #1 Run Time	13.9	hrs
Condensate Transfer Pump #2 Run Time	0.8	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	0.6	0.0	0.0	hrs
Steam Flow	161.35	0.00	0.00	0.00	klbs
Gas Flow	188.16	2.97	0.00	0.00	kscf
Natural Gas Cost	$1,155.44	$18.25	$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	$1,155.44	$18.25	$0.00	$0.00	$
Average Steam Cost	$7.16	---	---	---	$/klbs
Efficiency By Losses	81.6	73.2	0.0	0.0	%
Efficiency By I/O	84.0				%

Central State Hospital

Heating Plant Day Operations Report

10/5/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	157.57	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.1	klbs
Total Plant Gas Flow	187.41	kscf
Total Plant Gas Cost	$1,150.86	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,150.86	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	82.3	%

Condensate Transfer Pump #1 Run Time	7.5	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	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	0.5	0.0	0.0	hrs
Steam Flow	157.57	0.00	0.00	0.00	klbs
Gas Flow	184.65	2.77	0.00	0.00	kscf
Natural Gas Cost	$1,133.89	$16.98	$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	$1,133.89	$16.98	$0.00	$0.00	$
Average Steam Cost	$7.20	---	---	---	$/klbs
Efficiency By Losses	81.6	75.3	0.0	0.0	%
Efficiency By I/O	83.6				%

Central State Hospital

Heating Plant Day Operations Report

10/6/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	161.03	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.3	klbs
Total Plant Gas Flow	192.15	kscf
Total Plant Gas Cost	$1,179.96	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,179.96	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	82.1	%

Condensate Transfer Pump #1 Run Time	8.3	hrs
Condensate Transfer Pump #2 Run Time	0.2	hrs
Condensate Transfer Pump #3 Run Time	20.9	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	0.7	0.0	0.0	hrs
Steam Flow	161.03	0.00	0.00	0.00	klbs
Gas Flow	188.68	3.47	0.00	0.00	kscf
Natural Gas Cost	$1,158.65	$21.31	$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	$1,158.65	$21.31	$0.00	$0.00	$
Average Steam Cost	$7.20	---	---	---	$/klbs
Efficiency By Losses	81.5	72.6	0.0	0.0	%
Efficiency By I/O	83.6				%

Central State Hospital

Heating Plant Day Operations Report

10/7/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	150.93	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.6	klbs
Total Plant Gas Flow	181.42	kscf
Total Plant Gas Cost	$1,114.04	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,114.04	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	81.5	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	7.5	hrs
Condensate Transfer Pump #3 Run Time	0.4	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	0.6	0.0	0.0	hrs
Steam Flow	150.93	0.00	0.00	0.00	klbs
Gas Flow	178.35	3.07	0.00	0.00	kscf
Natural Gas Cost	$1,095.18	$18.86	$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	$1,095.18	$18.86	$0.00	$0.00	$
Average Steam Cost	$7.26	---	---	---	$/klbs
Efficiency By Losses	81.6	70.8	0.0	0.0	%
Efficiency By I/O	82.9				%

Central State Hospital

Heating Plant Day Operations Report

10/8/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	148.40	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	8.1	klbs
Total Plant Gas Flow	178.81	kscf
Total Plant Gas Cost	$1,098.04	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,098.04	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	81.3	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	11.9	hrs
Condensate Transfer Pump #3 Run Time	0.4	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	0.5	0.0	0.0	hrs
Steam Flow	148.40	0.00	0.00	0.00	klbs
Gas Flow	176.05	2.76	0.00	0.00	kscf
Natural Gas Cost	$1,081.10	$16.93	$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	$1,081.10	$16.93	$0.00	$0.00	$
Average Steam Cost	$7.28	---	---	---	$/klbs
Efficiency By Losses	81.6	75.6	0.0	0.0	%
Efficiency By I/O	82.6				%

Central State Hospital

Heating Plant Day Operations Report

10/9/2018
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	8.1	klbs
Total Plant Gas Flow	181.84	kscf
Total Plant Gas Cost	$1,116.61	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,116.61	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	81.3	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	4.3	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.6	0.0	0.0	hrs
Steam Flow	150.94	0.00	0.00	0.00	klbs
Gas Flow	178.82	3.02	0.00	0.00	kscf
Natural Gas Cost	$1,098.08	$18.53	$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	$1,098.08	$18.53	$0.00	$0.00	$
Average Steam Cost	$7.27	---	---	---	$/klbs
Efficiency By Losses	81.5	74.4	0.0	0.0	%
Efficiency By I/O	82.7				%

Central State Hospital

Heating Plant Day Operations Report

10/10/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	163.94	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.7	klbs
Total Plant Gas Flow	194.25	kscf
Total Plant Gas Cost	$1,192.86	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,192.86	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	82.6	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.9	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.6	0.0	0.0	hrs
Steam Flow	163.94	0.00	0.00	0.00	klbs
Gas Flow	191.42	2.83	0.00	0.00	kscf
Natural Gas Cost	$1,175.48	$17.38	$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	$1,175.48	$17.38	$0.00	$0.00	$
Average Steam Cost	$7.17	---	---	---	$/klbs
Efficiency By Losses	81.6	73.8	0.0	0.0	%
Efficiency By I/O	83.9				%

Central State Hospital

Heating Plant Day Operations Report

10/11/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	159.67	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.7	klbs
Total Plant Gas Flow	191.03	kscf
Total Plant Gas Cost	$1,173.08	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,173.08	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	81.9	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	4.8	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.6	0.0	0.0	hrs
Steam Flow	159.67	0.00	0.00	0.00	klbs
Gas Flow	187.99	3.04	0.00	0.00	kscf
Natural Gas Cost	$1,154.39	$18.70	$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	$1,154.39	$18.70	$0.00	$0.00	$
Average Steam Cost	$7.23	---	---	---	$/klbs
Efficiency By Losses	81.6	75.8	0.0	0.0	%
Efficiency By I/O	83.2				%

Central State Hospital

Heating Plant Day Operations Report

10/12/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	176.01	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.1	klbs
Total Plant Gas Flow	208.15	kscf
Total Plant Gas Cost	$1,278.22	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,278.22	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	82.8	%

Condensate Transfer Pump #1 Run Time	12.8	hrs
Condensate Transfer Pump #2 Run Time	12.7	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.5	0.0	0.0	hrs
Steam Flow	175.82	0.19	0.00	0.00	klbs
Gas Flow	204.70	3.45	0.00	0.00	kscf
Natural Gas Cost	$1,257.03	$21.19	$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	$1,257.03	$21.19	$0.00	$0.00	$
Average Steam Cost	$7.15	$114.27	---	---	$/klbs
Efficiency By Losses	81.4	80.0	0.0	0.0	%
Efficiency By I/O	84.1	5.3			%

Central State Hospital

Heating Plant Day Operations Report

10/13/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	4.24	hdd
Total Plant Steam Flow	194.89	klbs
Steam Flow Per Heating Degree Day	45.9	klbs/hdd
Total Condensate Return Water Flow	7.1	klbs
Total Plant Gas Flow	226.50	kscf
Total Plant Gas Cost	$1,390.85	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,390.85	$
Fuel Cost Per Heating Degree Day	$327.69	$/hdd
Plant Average Steam Cost Per Degree Day	$1.68	$/klbs
Total Plant Efficiency By I/O	84.3	%

Condensate Transfer Pump #1 Run Time	0.0	hrs
Condensate Transfer Pump #2 Run Time	23.0	hrs
Condensate Transfer Pump #3 Run Time	4.4	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	0.7	0.0	0.0	hrs
Steam Flow	194.89	0.00	0.00	0.00	klbs
Gas Flow	222.99	3.50	0.00	0.00	kscf
Natural Gas Cost	$1,369.35	$21.51	$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	$1,369.35	$21.51	$0.00	$0.00	$
Average Steam Cost	$7.03	---	---	---	$/klbs
Efficiency By Losses	81.3	74.1	0.0	0.0	%
Efficiency By I/O	85.6				%

Central State Hospital

Heating Plant Day Operations Report

10/14/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	9.54	hdd
Total Plant Steam Flow	199.15	klbs
Steam Flow Per Heating Degree Day	20.9	klbs/hdd
Total Condensate Return Water Flow	7.0	klbs
Total Plant Gas Flow	229.45	kscf
Total Plant Gas Cost	$1,408.96	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,408.96	$
Fuel Cost Per Heating Degree Day	$147.75	$/hdd
Plant Average Steam Cost Per Degree Day	$0.74	$/klbs
Total Plant Efficiency By I/O	85.0	%

Condensate Transfer Pump #1 Run Time	0.0	hrs
Condensate Transfer Pump #2 Run Time	12.5	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	0.7	0.0	0.0	hrs
Steam Flow	199.15	0.00	0.00	0.00	klbs
Gas Flow	225.87	3.57	0.00	0.00	kscf
Natural Gas Cost	$1,387.04	$21.93	$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	$1,387.04	$21.93	$0.00	$0.00	$
Average Steam Cost	$6.96	---	---	---	$/klbs
Efficiency By Losses	81.2	77.4	0.0	0.0	%
Efficiency By I/O	86.3				%

Central State Hospital

Heating Plant Day Operations Report

10/15/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	9.26	hdd
Total Plant Steam Flow	191.13	klbs
Steam Flow Per Heating Degree Day	20.6	klbs/hdd
Total Condensate Return Water Flow	7.3	klbs
Total Plant Gas Flow	220.97	kscf
Total Plant Gas Cost	$1,356.92	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,356.92	$
Fuel Cost Per Heating Degree Day	$146.52	$/hdd
Plant Average Steam Cost Per Degree Day	$0.77	$/klbs
Total Plant Efficiency By I/O	84.7	%

Condensate Transfer Pump #1 Run Time	0.0	hrs
Condensate Transfer Pump #2 Run Time	7.5	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	0.6	0.0	0.0	hrs
Steam Flow	191.13	0.00	0.00	0.00	klbs
Gas Flow	218.00	2.97	0.00	0.00	kscf
Natural Gas Cost	$1,338.66	$18.25	$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	$1,338.66	$18.25	$0.00	$0.00	$
Average Steam Cost	$7.00	---	---	---	$/klbs
Efficiency By Losses	81.4	75.2	0.0	0.0	%
Efficiency By I/O	85.9				%

Central State Hospital

Heating Plant Day Operations Report

10/16/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	195.65	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	7.6	klbs
Total Plant Gas Flow	235.16	kscf
Total Plant Gas Cost	$1,444.08	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,444.08	$
Fuel Cost Per Heating Degree Day	---	$/hdd
Plant Average Steam Cost Per Degree Day	---	$/klbs
Total Plant Efficiency By I/O	81.5	%
Condensate Transfer Pump #1 Run Time	5.2	hrs
Condensate Transfer Pump #2 Run Time	0.6	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	0.5	1.6	0.0	hrs
Steam Flow	195.65	0.00	0.00	0.00	klbs
Gas Flow	222.04	2.74	10.38	0.00	kscf
Natural Gas Cost	$1,363.48	$16.83	$63.76	$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	$1,363.48	$16.83	$63.76	$0.00	$
Average Steam Cost	$6.97	---	---	---	$/klbs
Efficiency By Losses	81.5	76.9	78.5	0.0	%
Efficiency By I/O	86.3				%

Central State Hospital

Heating Plant Day Operations Report

10/17/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	3.39	hdd
Total Plant Steam Flow	207.72	klbs
Steam Flow Per Heating Degree Day	61.3	klbs/hdd
Total Condensate Return Water Flow	7.4	klbs
Total Plant Gas Flow	240.36	kscf
Total Plant Gas Cost	$1,475.97	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,475.97	$
Fuel Cost Per Heating Degree Day	$435.47	$/hdd
Plant Average Steam Cost Per Degree Day	$2.10	$/klbs
Total Plant Efficiency By I/O	84.6	%

Condensate Transfer Pump #1 Run Time	1.3	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	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	0.7	0.8	0.0	hrs
Steam Flow	207.72	0.00	0.00	0.00	klbs
Gas Flow	233.72	3.49	3.15	0.00	kscf
Natural Gas Cost	$1,435.20	$21.44	$19.33	$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	$1,435.20	$21.44	$19.33	$0.00	$
Average Steam Cost	$6.91	---	---	---	$/klbs
Efficiency By Losses	81.4	75.0	76.7	0.0	%
Efficiency By I/O	87.0				%

Central State Hospital

Heating Plant Day Operations Report

10/18/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	4.61	hdd
Total Plant Steam Flow	210.94	klbs
Steam Flow Per Heating Degree Day	45.8	klbs/hdd
Total Condensate Return Water Flow	7.5	klbs
Total Plant Gas Flow	243.68	kscf
Total Plant Gas Cost	$1,496.36	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,496.36	$
Fuel Cost Per Heating Degree Day	$324.91	$/hdd
Plant Average Steam Cost Per Degree Day	$1.54	$/klbs
Total Plant Efficiency By I/O	84.8	%

Condensate Transfer Pump #1 Run Time	0.7	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	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	0.7	1.0	0.0	hrs
Steam Flow	210.94	0.00	0.00	0.00	klbs
Gas Flow	236.45	3.42	3.81	0.00	kscf
Natural Gas Cost	$1,451.96	$21.01	$23.39	$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	$1,451.96	$21.01	$23.39	$0.00	$
Average Steam Cost	$6.88	---	---	---	$/klbs
Efficiency By Losses	81.2	74.9	80.2	0.0	%
Efficiency By I/O	87.4				%

Central State Hospital

Heating Plant Day Operations Report

10/19/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	15.55	hdd
Total Plant Steam Flow	248.80	klbs
Steam Flow Per Heating Degree Day	16.0	klbs/hdd
Total Condensate Return Water Flow	7.4	klbs
Total Plant Gas Flow	277.70	kscf
Total Plant Gas Cost	$1,705.26	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,705.26	$
Fuel Cost Per Heating Degree Day	$109.66	$/hdd
Plant Average Steam Cost Per Degree Day	$0.44	$/klbs
Total Plant Efficiency By I/O	87.7	%

Condensate Transfer Pump #1 Run Time	0.7	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	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	0.8	0.3	0.0	hrs
Steam Flow	248.80	0.00	0.00	0.00	klbs
Gas Flow	272.28	4.13	1.28	0.00	kscf
Natural Gas Cost	$1,672.01	$25.37	$7.88	$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	$1,672.01	$25.37	$7.88	$0.00	$
Average Steam Cost	$6.72	---	---	---	$/klbs
Efficiency By Losses	80.9	72.4	0.0	0.0	%
Efficiency By I/O	89.5				%

Central State Hospital

Heating Plant Day Operations Report

10/20/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	14.90	hdd
Total Plant Steam Flow	239.46	klbs
Steam Flow Per Heating Degree Day	16.1	klbs/hdd
Total Condensate Return Water Flow	7.2	klbs
Total Plant Gas Flow	278.41	kscf
Total Plant Gas Cost	$1,709.67	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,709.67	$
Fuel Cost Per Heating Degree Day	$114.71	$/hdd
Plant Average Steam Cost Per Degree Day	$0.48	$/klbs
Total Plant Efficiency By I/O	84.2	%
Condensate Transfer Pump #1 Run Time	0.5	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	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	1.8	21.9	0.0	0.0	hrs
Steam Flow	24.94	214.52	0.00	0.00	klbs
Gas Flow	26.54	251.87	0.00	0.00	kscf
Natural Gas Cost	$162.99	$1,546.68	$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	$162.99	$1,546.68	$0.00	$0.00	$
Average Steam Cost	$6.54	$7.21	---	---	$/klbs
Efficiency By Losses	0.0	80.7	0.0	0.0	%
Efficiency By I/O	92.0	83.4			%

Central State Hospital

Heating Plant Day Operations Report

10/21/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	7.60	hdd
Total Plant Steam Flow	225.27	klbs
Steam Flow Per Heating Degree Day	29.6	klbs/hdd
Total Condensate Return Water Flow	7.9	klbs
Total Plant Gas Flow	264.22	kscf
Total Plant Gas Cost	$1,622.53	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,622.53	$
Fuel Cost Per Heating Degree Day	$213.54	$/hdd
Plant Average Steam Cost Per Degree Day	$0.95	$/klbs
Total Plant Efficiency By I/O	83.5	%

Condensate Transfer Pump #1 Run Time	23.4	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	0.1	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	0.1	23.5	0.0	0.0	hrs
Steam Flow	0.00	225.27	0.00	0.00	klbs
Gas Flow	0.39	263.84	0.00	0.00	kscf
Natural Gas Cost	$2.39	$1,620.15	$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	$2.39	$1,620.15	$0.00	$0.00	$
Average Steam Cost	---	$7.19	---	---	$/klbs
Efficiency By Losses	83.6	80.6	0.0	0.0	%
Efficiency By I/O		83.6			%

Central State Hospital

Heating Plant Day Operations Report

10/22/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	19.54	hdd
Total Plant Steam Flow	252.38	klbs
Steam Flow Per Heating Degree Day	12.9	klbs/hdd
Total Condensate Return Water Flow	7.3	klbs
Total Plant Gas Flow	294.34	kscf
Total Plant Gas Cost	$1,807.47	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,807.47	$
Fuel Cost Per Heating Degree Day	$92.50	$/hdd
Plant Average Steam Cost Per Degree Day	$0.37	$/klbs
Total Plant Efficiency By I/O	84.0	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.3	23.5	0.0	0.0	hrs
Steam Flow	0.00	252.38	0.00	0.00	klbs
Gas Flow	1.69	292.65	0.00	0.00	kscf
Natural Gas Cost	$10.39	$1,797.08	$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	$10.39	$1,797.08	$0.00	$0.00	$
Average Steam Cost	---	$7.12	---	---	$/klbs
Efficiency By Losses	81.0	80.4	0.0	0.0	%
Efficiency By I/O		84.5			%

Central State Hospital

Heating Plant Day Operations Report

10/23/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	20.81	hdd
Total Plant Steam Flow	283.74	klbs
Steam Flow Per Heating Degree Day	13.6	klbs/hdd
Total Condensate Return Water Flow	6.8	klbs
Total Plant Gas Flow	327.63	kscf
Total Plant Gas Cost	$2,011.92	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,011.92	$
Fuel Cost Per Heating Degree Day	$96.66	$/hdd
Plant Average Steam Cost Per Degree Day	$0.34	$/klbs
Total Plant Efficiency By I/O	84.8	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.3	23.5	0.0	0.0	hrs
Steam Flow	0.00	283.74	0.00	0.00	klbs
Gas Flow	1.65	325.98	0.00	0.00	kscf
Natural Gas Cost	$10.14	$2,001.78	$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	$10.14	$2,001.78	$0.00	$0.00	$
Average Steam Cost	---	$7.05	---	---	$/klbs
Efficiency By Losses	78.1	80.4	0.0	0.0	%
Efficiency By I/O		85.2			%

Central State Hospital

Heating Plant Day Operations Report

10/24/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	11.97	hdd
Total Plant Steam Flow	269.59	klbs
Steam Flow Per Heating Degree Day	22.5	klbs/hdd
Total Condensate Return Water Flow	7.2	klbs
Total Plant Gas Flow	311.71	kscf
Total Plant Gas Cost	$1,914.11	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$1,914.11	$
Fuel Cost Per Heating Degree Day	$159.93	$/hdd
Plant Average Steam Cost Per Degree Day	$0.59	$/klbs
Total Plant Efficiency By I/O	84.7	%

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

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	23.3	0.0	0.0	hrs
Steam Flow	2.25	267.35	0.00	0.00	klbs
Gas Flow	6.93	304.77	0.00	0.00	kscf
Natural Gas Cost	$42.56	$1,871.55	$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	$42.56	$1,871.55	$0.00	$0.00	$
Average Steam Cost	$18.93	$7.00	---	---	$/klbs
Efficiency By Losses	0.0	80.6	0.0	0.0	%
Efficiency By I/O	31.8	85.9			%

Central State Hospital

Heating Plant Day Operations Report

10/25/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	16.60	hdd
Total Plant Steam Flow	291.66	klbs
Steam Flow Per Heating Degree Day	17.6	klbs/hdd
Total Condensate Return Water Flow	6.8	klbs
Total Plant Gas Flow	333.65	kscf
Total Plant Gas Cost	$2,048.84	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,048.84	$
Fuel Cost Per Heating Degree Day	$123.46	$/hdd
Plant Average Steam Cost Per Degree Day	$0.42	$/klbs
Total Plant Efficiency By I/O	85.6	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.1	23.5	0.0	0.0	hrs
Steam Flow	0.00	291.66	0.00	0.00	klbs
Gas Flow	0.33	333.31	0.00	0.00	kscf
Natural Gas Cost	$2.05	$2,046.79	$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	$2.05	$2,046.79	$0.00	$0.00	$
Average Steam Cost	---	$7.02	---	---	$/klbs
Efficiency By Losses	81.9	80.2	0.0	0.0	%
Efficiency By I/O		85.7			%

Central State Hospital

Heating Plant Day Operations Report

10/26/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	20.78	hdd
Total Plant Steam Flow	303.61	klbs
Steam Flow Per Heating Degree Day	14.6	klbs/hdd
Total Condensate Return Water Flow	6.5	klbs
Total Plant Gas Flow	347.66	kscf
Total Plant Gas Cost	$2,134.92	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,134.92	$
Fuel Cost Per Heating Degree Day	$102.71	$/hdd
Plant Average Steam Cost Per Degree Day	$0.34	$/klbs
Total Plant Efficiency By I/O	85.5	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.1	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.3	23.5	0.0	0.0	hrs
Steam Flow	0.00	303.61	0.00	0.00	klbs
Gas Flow	1.43	346.24	0.00	0.00	kscf
Natural Gas Cost	$8.76	$2,126.15	$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	$8.76	$2,126.15	$0.00	$0.00	$
Average Steam Cost	---	$7.00	---	---	$/klbs
Efficiency By Losses	83.5	80.1	0.0	0.0	%
Efficiency By I/O		85.9			%

Central State Hospital

Heating Plant Day Operations Report

10/27/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	19.40	hdd
Total Plant Steam Flow	303.98	klbs
Steam Flow Per Heating Degree Day	15.7	klbs/hdd
Total Condensate Return Water Flow	6.8	klbs
Total Plant Gas Flow	350.01	kscf
Total Plant Gas Cost	$2,149.33	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,149.33	$
Fuel Cost Per Heating Degree Day	$110.80	$/hdd
Plant Average Steam Cost Per Degree Day	$0.36	$/klbs
Total Plant Efficiency By I/O	85.1	%
Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.1	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.3	23.5	0.0	0.0	hrs
Steam Flow	0.00	303.98	0.00	0.00	klbs
Gas Flow	1.66	348.35	0.00	0.00	kscf
Natural Gas Cost	$10.21	$2,139.13	$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	$10.21	$2,139.13	$0.00	$0.00	$
Average Steam Cost	---	$7.04	---	---	$/klbs
Efficiency By Losses	80.4	80.4	0.0	0.0	%
Efficiency By I/O		85.5			%

Central State Hospital

Heating Plant Day Operations Report

10/28/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	11.81	hdd
Total Plant Steam Flow	287.91	klbs
Steam Flow Per Heating Degree Day	24.4	klbs/hdd
Total Condensate Return Water Flow	7.1	klbs
Total Plant Gas Flow	331.29	kscf
Total Plant Gas Cost	$2,034.34	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,034.34	$
Fuel Cost Per Heating Degree Day	$172.30	$/hdd
Plant Average Steam Cost Per Degree Day	$0.60	$/klbs
Total Plant Efficiency By I/O	85.1	%

Condensate Transfer Pump #1 Run Time	1.6	hrs
Condensate Transfer Pump #2 Run Time	21.9	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.3	23.5	0.0	0.0	hrs
Steam Flow	0.00	287.91	0.00	0.00	klbs
Gas Flow	1.65	329.64	0.00	0.00	kscf
Natural Gas Cost	$10.12	$2,024.22	$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	$10.12	$2,024.22	$0.00	$0.00	$
Average Steam Cost	---	$7.03	---	---	$/klbs
Efficiency By Losses	82.5	80.4	0.0	0.0	%
Efficiency By I/O		85.5			%

Central State Hospital

Heating Plant Day Operations Report

10/29/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	13.72	hdd
Total Plant Steam Flow	286.44	klbs
Steam Flow Per Heating Degree Day	20.9	klbs/hdd
Total Condensate Return Water Flow	6.7	klbs
Total Plant Gas Flow	326.18	kscf
Total Plant Gas Cost	$2,002.98	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,002.98	$
Fuel Cost Per Heating Degree Day	$146.03	$/hdd
Plant Average Steam Cost Per Degree Day	$0.51	$/klbs
Total Plant Efficiency By I/O	86.0	%
Condensate Transfer Pump #1 Run Time	0.0	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.3	23.5	0.0	0.0	hrs
Steam Flow	0.00	286.44	0.00	0.00	klbs
Gas Flow	1.64	324.54	0.00	0.00	kscf
Natural Gas Cost	$10.05	$1,992.92	$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	$10.05	$1,992.92	$0.00	$0.00	$
Average Steam Cost	---	$6.96	---	---	$/klbs
Efficiency By Losses	80.9	80.5	0.0	0.0	%
Efficiency By I/O		86.4			%

Central State Hospital

Heating Plant Day Operations Report

10/30/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	12.22	hdd
Total Plant Steam Flow	312.03	klbs
Steam Flow Per Heating Degree Day	25.5	klbs/hdd
Total Condensate Return Water Flow	5.3	klbs
Total Plant Gas Flow	354.08	kscf
Total Plant Gas Cost	$2,174.30	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,174.30	$
Fuel Cost Per Heating Degree Day	$177.86	$/hdd
Plant Average Steam Cost Per Degree Day	$0.57	$/klbs
Total Plant Efficiency By I/O	86.3	%
Condensate Transfer Pump #1 Run Time	0.0	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	0.2	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	0.4	23.5	0.0	0.0	hrs
Steam Flow	0.00	312.03	0.00	0.00	klbs
Gas Flow	1.97	352.10	0.00	0.00	kscf
Natural Gas Cost	$12.12	$2,162.18	$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	$12.12	$2,162.18	$0.00	$0.00	$
Average Steam Cost	---	$6.93	---	---	$/klbs
Efficiency By Losses	81.7	80.1	0.0	0.0	%
Efficiency By I/O		86.8			%

Central State Hospital

Heating Plant Day Operations Report

10/31/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	13.92	hdd
Total Plant Steam Flow	298.85	klbs
Steam Flow Per Heating Degree Day	21.5	klbs/hdd
Total Condensate Return Water Flow	5.4	klbs
Total Plant Gas Flow	340.13	kscf
Total Plant Gas Cost	$2,088.68	$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	$0.00	$
Total Plant Fuel Cost	$2,088.68	$
Fuel Cost Per Heating Degree Day	$150.09	$/hdd
Plant Average Steam Cost Per Degree Day	$0.50	$/klbs
Total Plant Efficiency By I/O	86.0	%
Condensate Transfer Pump #1 Run Time	0.0	hrs
Condensate Transfer Pump #2 Run Time	23.5	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.4	23.5	0.0	0.0	hrs
Steam Flow	0.00	298.85	0.00	0.00	klbs
Gas Flow	1.94	338.20	0.00	0.00	kscf
Natural Gas Cost	$11.90	$2,076.77	$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	$11.90	$2,076.77	$0.00	$0.00	$
Average Steam Cost	---	$6.95	---	---	$/klbs
Efficiency By Losses	71.7	80.1	0.0	0.0	%
Efficiency By I/O		86.5			%