

Central State Hospital
Heating Plant Day Operations Report

4/1/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	15.99	hdd
Total Plant Steam Flow	255.08	klbs
Steam Flow Per Heating Degree Day	16.0	klbs/hdd
Total Condensate Return Water Flow	5.4	klbs
Total Plant Gas Flow	305.73	kscf
Total Plant Gas Cost	\$1,877.44	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,877.44	\$
Fuel Cost Per Heating Degree Day	\$117.43	\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.46	\$/klbs
Total Plant Efficiency By I/O	81.7	%

Condensate Transfer Pump #1 Run Time	23.5	hrs
Condensate Transfer Pump #2 Run Time	0.0	hrs
Condensate Transfer Pump #3 Run Time	12.7	hrs
Boiler Feed Pump #1 Run Time	0.0	hrs
Boiler Feed Pump #2 Run Time	0.0	hrs
Boiler Feed Pump #3 Run Time	23.5	hrs
Boiler Feed Pump #4 Run Time	23.5	hrs
Fuel Oil Pump #1 Run Time	0.0	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	19.2	0.0	23.5	0.0	hrs
Steam Flow	96.09	0.00	158.99	0.00	klbs
Gas Flow	123.92	0.00	181.81	0.00	kscf
Natural Gas Cost	\$760.99	\$0.00	\$1,116.45	\$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	\$760.99	\$0.00	\$1,116.45	\$0.00	\$
Average Steam Cost	\$7.92	—	\$7.02	—	\$/klbs
Efficiency By Losses	0.0	0.0	82.8	0.0	%
Efficiency By I/O	75.9		85.6		%

Central State Hospital
Heating Plant Day Operations Report

4/2/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	8.68				hdd
Total Plant Steam Flow	236.84				klbs
Steam Flow Per Heating Degree Day	27.3				klbs/hdd
Total Condensate Return Water Flow	4.8				klbs
Total Plant Gas Flow	289.45				kscf
Total Plant Gas Cost	\$1,777.47				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,777.47				\$
Fuel Cost Per Heating Degree Day	\$204.75				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.86				\$/klbs
Total Plant Efficiency By I/O	80.1				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	0.0				hrs
Condensate Transfer Pump #3 Run Time	12.6				hrs
Boiler Feed Pump #1 Run Time	0.0				hrs
Boiler Feed Pump #2 Run Time	0.0				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.0	23.5	0.0	hrs
Steam Flow	121.32	0.00	115.53	0.00	klbs
Gas Flow	151.85	0.00	137.60	0.00	kscf
Natural Gas Cost	\$932.50	\$0.00	\$844.96	\$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	\$932.50	\$0.00	\$844.96	\$0.00	\$
Average Steam Cost	\$7.69	—	\$7.31	—	\$/klbs
Efficiency By Losses	0.0	0.0	82.5	0.0	%
Efficiency By I/O	78.2		82.2		%

Central State Hospital
Heating Plant Day Operations Report

4/3/2018
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	12.72			hdd	
Total Plant Steam Flow	263.89			klbs	
Steam Flow Per Heating Degree Day	20.7			klbs/hdd	
Total Condensate Return Water Flow	5.1			klbs	
Total Plant Gas Flow	316.43			kscf	
Total Plant Gas Cost	\$1,943.09			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,943.09			\$	
Fuel Cost Per Heating Degree Day	\$152.77			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.58			\$/klbs	
Total Plant Efficiency By I/O	81.7			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	0.0			hrs	
Condensate Transfer Pump #3 Run Time	17.0			hrs	
Boiler Feed Pump #1 Run Time	0.0			hrs	
Boiler Feed Pump #2 Run Time	0.0			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.0	23.5	0.0	hrs
Steam Flow	121.95	0.00	141.94	0.00	klbs
Gas Flow	151.82	0.00	164.60	0.00	kscf
Natural Gas Cost	\$932.30	\$0.00	\$1,010.79	\$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	\$932.30	\$0.00	\$1,010.79	\$0.00	\$
Average Steam Cost	\$7.65	---	\$7.12	—	\$/klbs
Efficiency By Losses	0.0	0.0	82.7	0.0	%
Efficiency By I/O	78.7		84.4		%

Central State Hospital
Heating Plant Day Operations Report

4/4/2018
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	10.47	hdd			
Total Plant Steam Flow	229.73	klbs			
Steam Flow Per Heating Degree Day	21.9	klbs/hdd			
Total Condensate Return Water Flow	5.5	klbs			
Total Plant Gas Flow	287.81	kscf			
Total Plant Gas Cost	\$1,767.35	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,767.35	\$			
Fuel Cost Per Heating Degree Day	\$168.84	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.73	\$/klbs			
Total Plant Efficiency By I/O	78.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	0.0	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	0.0	hrs			
Boiler Feed Pump #2 Run Time	0.0	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.0	18.1	0.0	hrs
Steam Flow	122.45	0.00	107.27	0.00	klbs
Gas Flow	152.10	0.00	135.71	0.00	kscf
Natural Gas Cost	\$934.00	\$0.00	\$833.35	\$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	\$934.00	\$0.00	\$833.35	\$0.00	\$
Average Steam Cost	\$7.63	—	\$7.77	—	\$/klbs
Efficiency By Losses	0.0	0.0	81.2	0.0	%
Efficiency By I/O	78.8		77.4		%

Central State Hospital
Heating Plant Day Operations Report

4/5/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	3.97				hdd
Total Plant Steam Flow	236.81				klbs
Steam Flow Per Heating Degree Day	59.7				klbs/hdd
Total Condensate Return Water Flow	4.5				klbs
Total Plant Gas Flow	309.90				kscf
Total Plant Gas Cost	\$1,903.02				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,903.02				\$
Fuel Cost Per Heating Degree Day	\$479.48				\$/hdd
Plant Average Steam Cost Per Degree Day	\$2.02				\$/klbs
Total Plant Efficiency By I/O	74.8				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	0.0				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	20.0				hrs
Boiler Feed Pump #2 Run Time	20.0				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	5.3	0.0	17.9	17.7	hrs
Steam Flow	26.42	0.00	126.98	83.41	klbs
Gas Flow	34.21	0.00	164.28	111.41	kscf
Natural Gas Cost	\$210.05	\$0.00	\$1,008.80	\$684.17	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$210.05	\$0.00	\$1,008.80	\$684.17	\$
Average Steam Cost	\$7.95	—	\$7.94	\$8.20	\$/klbs
Efficiency By Losses	0.0	0.0	81.5	81.0	%
Efficiency By I/O	75.6		75.7	73.3	%

Central State Hospital
Heating Plant Day Operations Report

4/6/2018
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	19.32	hdd			
Total Plant Steam Flow	258.72	klbs			
Steam Flow Per Heating Degree Day	13.4	klbs/hdd			
Total Condensate Return Water Flow	3.8	klbs			
Total Plant Gas Flow	303.82	kscf			
Total Plant Gas Cost	\$1,865.67	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,865.67	\$			
Fuel Cost Per Heating Degree Day	\$96.56	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.37	\$/klbs			
Total Plant Efficiency By I/O	83.4	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	17.2	hrs			
Condensate Transfer Pump #3 Run Time	7.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	22.1	0.2	hrs
Steam Flow	0.00	0.00	258.72	0.00	klbs
Gas Flow	0.00	0.00	302.69	1.13	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,858.74	\$6.94	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,858.74	\$6.94	\$
Average Steam Cost	—	---	\$7.18	---	\$/klbs
Efficiency By Losses	0.0	0.0	82.1	77.2	%
Efficiency By I/O			83.7		%

Central State Hospital
Heating Plant Day Operations Report

4/7/2018
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	9.50	hdd			
Total Plant Steam Flow	220.97	klbs			
Steam Flow Per Heating Degree Day	23.3	klbs/hdd			
Total Condensate Return Water Flow	3.5	klbs			
Total Plant Gas Flow	285.83	kscf			
Total Plant Gas Cost	\$1,755.23	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,755.23	\$			
Fuel Cost Per Heating Degree Day	\$184.80	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.84	\$/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	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	3.5	hrs			
Boiler Feed Pump #4 Run Time	3.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	21.2	5.5	hrs
Steam Flow	0.00	0.00	213.54	7.44	klbs
Gas Flow	0.00	0.00	254.21	31.63	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,561.02	\$194.22	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,561.02	\$194.22	\$
Average Steam Cost	---	---	\$7.31	\$26.12	\$/klbs
Efficiency By Losses	0.0	0.0	81.9	77.6	%
Efficiency By I/O			82.3	23.0	%

Central State Hospital
Heating Plant Day Operations Report

4/8/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	35.82				hdd
Total Plant Steam Flow	289.82				klbs
Steam Flow Per Heating Degree Day	8.1				klbs/hdd
Total Condensate Return Water Flow	3.4				klbs
Total Plant Gas Flow	343.84				kscf
Total Plant Gas Cost	\$2,111.41				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,111.41				\$
Fuel Cost Per Heating Degree Day	\$58.95				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.20				\$/klbs
Total Plant Efficiency By I/O	82.5				%
Condensate Transfer Pump #1 Run Time	23.4				hrs
Condensate Transfer Pump #2 Run Time	23.4				hrs
Condensate Transfer Pump #3 Run Time	0.0				hrs
Boiler Feed Pump #1 Run Time	23.4				hrs
Boiler Feed Pump #2 Run Time	23.4				hrs
Boiler Feed Pump #3 Run Time	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	23.0	0.0	hrs
Steam Flow	0.00	0.00	289.82	0.00	klbs
Gas Flow	0.00	0.00	343.84	0.00	kscf
Natural Gas Cost	\$0.00	\$0.00	\$2,111.41	\$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	\$0.00	\$0.00	\$2,111.41	\$0.00	\$
Average Steam Cost	---	---	\$7.29	---	\$/klbs
Efficiency By Losses	0.0	0.0	82.4	0.0	%
Efficiency By I/O			82.5		%

Central State Hospital
Heating Plant Day Operations Report

4/9/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	24.56				hdd
Total Plant Steam Flow	271.36				klbs
Steam Flow Per Heating Degree Day	11.1				klbs/hdd
Total Condensate Return Water Flow	4.0				klbs
Total Plant Gas Flow	326.24				kscf
Total Plant Gas Cost	\$2,003.34				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,003.34				\$
Fuel Cost Per Heating Degree Day	\$81.58				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.30				\$/klbs
Total Plant Efficiency By I/O	81.5				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	22.8	0.0	hrs
Steam Flow	0.00	0.00	271.36	0.00	klbs
Gas Flow	0.00	0.00	326.24	0.00	kscf
Natural Gas Cost	\$0.00	\$0.00	\$2,003.34	\$0.00	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$2,003.34	\$0.00	\$
Average Steam Cost	---	---	\$7.38	---	\$/klbs
Efficiency By Losses	0.0	0.0	82.3	0.0	%
Efficiency By I/O			81.5		%

Central State Hospital
Heating Plant Day Operations Report

4/10/2018
8:01 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	0.00			hdd	
Total Plant Steam Flow	7.36			klbs	
Steam Flow Per Heating Degree Day	---			klbs/hdd	
Total Condensate Return Water Flow	0.1			klbs	
Total Plant Gas Flow	9.61			kscf	
Total Plant Gas Cost	\$59.03			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$59.03			\$	
Fuel Cost Per Heating Degree Day	---			\$/hdd	
Plant Average Steam Cost Per Degree Day	---			\$/klbs	
Total Plant Efficiency By I/O	75.0			%	
Condensate Transfer Pump #1 Run Time	0.5			hrs	
Condensate Transfer Pump #2 Run Time	0.5			hrs	
Condensate Transfer Pump #3 Run Time	0.0			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	0.0			hrs	
Boiler Feed Pump #4 Run Time	0.0			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.5	0.0	0.5	hrs
Steam Flow	0.00	1.68	0.00	5.68	klbs
Gas Flow	0.00	2.60	0.00	7.01	kscf
Natural Gas Cost	\$0.00	\$15.98	\$0.00	\$43.05	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$15.98	\$0.00	\$43.05	\$
Average Steam Cost	---	\$9.52	---	\$7.57	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.4	%
Efficiency By I/O		63.1		79.4	%

Central State Hospital
Heating Plant Day Operations Report

4/11/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	16.61				hdd
Total Plant Steam Flow	229.34				klbs
Steam Flow Per Heating Degree Day	13.8				klbs/hdd
Total Condensate Return Water Flow	3.9				klbs
Total Plant Gas Flow	300.37				kscf
Total Plant Gas Cost	\$1,844.48				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,844.48				\$
Fuel Cost Per Heating Degree Day	\$111.02				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.48				\$/klbs
Total Plant Efficiency By I/O	74.8				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	12.8	0.0	17.8	hrs
Steam Flow	0.00	41.72	0.00	187.62	klbs
Gas Flow	0.00	63.81	0.00	236.55	kscf
Natural Gas Cost	\$0.00	\$391.86	\$0.00	\$1,452.61	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$391.86	\$0.00	\$1,452.61	\$
Average Steam Cost	—	\$9.39	—	\$7.74	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	80.8	%
Efficiency By I/O		64.0		77.7	%

Central State Hospital
Heating Plant Day Operations Report

4/12/2018
8:01 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	6.24	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	0.0	klbs
Total Plant Gas Flow	7.89	kscf
Total Plant Gas Cost	\$48.48	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$48.48	\$
Fuel Cost Per Heating Degree Day	---	\$/hdd
Plant Average Steam Cost Per Degree Day	---	\$/klbs
Total Plant Efficiency By I/O	77.4	%

Condensate Transfer Pump #1 Run Time	0.5	hrs
Condensate Transfer Pump #2 Run Time	0.5	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.0	hrs
Boiler Feed Pump #4 Run Time	0.0	hrs
Fuel Oil Pump #1 Run Time	0.0	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.5	0.5	hrs
Steam Flow	0.00	0.00	3.65	2.59	klbs
Gas Flow	0.00	0.00	4.49	3.40	kscf
Natural Gas Cost	\$0.00	\$0.00	\$27.57	\$20.91	\$
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	\$27.57	\$20.91	\$
Average Steam Cost	---	---	\$7.55	\$8.08	\$/klbs
Efficiency By Losses	0.0	0.0	82.7	80.7	%
Efficiency By I/O			79.7	74.4	%

Central State Hospital
Heating Plant Day Operations Report

4/13/2018
8:01 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	5.94	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	0.2	klbs
Total Plant Gas Flow	7.38	kscf
Total Plant Gas Cost	\$45.31	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$45.31	\$
Fuel Cost Per Heating Degree Day	---	\$/hdd
Plant Average Steam Cost Per Degree Day	---	\$/klbs
Total Plant Efficiency By I/O	78.8	%

Condensate Transfer Pump #1 Run Time	0.5	hrs
Condensate Transfer Pump #2 Run Time	0.5	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.0	hrs
Boiler Feed Pump #4 Run Time	0.0	hrs
Fuel Oil Pump #1 Run Time	0.0	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.5	0.5	hrs
Steam Flow	0.00	0.00	3.28	2.66	klbs
Gas Flow	0.00	0.00	3.96	3.42	kscf
Natural Gas Cost	\$0.00	\$0.00	\$24.34	\$20.98	\$
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	\$24.34	\$20.98	\$
Average Steam Cost	---	---	\$7.42	\$7.88	\$/klbs
Efficiency By Losses	0.0	0.0	82.8	80.8	%
Efficiency By I/O			81.0	76.3	%

Central State Hospital
Heating Plant Day Operations Report

4/14/2018
8:01 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	0.00	hdd
Total Plant Steam Flow	4.62	klbs
Steam Flow Per Heating Degree Day	---	klbs/hdd
Total Condensate Return Water Flow	0.2	klbs
Total Plant Gas Flow	5.69	kscf
Total Plant Gas Cost	\$34.92	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$34.92	\$
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	0.5	hrs
Condensate Transfer Pump #2 Run Time	0.5	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.0	hrs
Boiler Feed Pump #4 Run Time	0.0	hrs
Fuel Oil Pump #1 Run Time	0.0	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.5	0.5	hrs
Steam Flow	0.00	0.00	2.26	2.36	klbs
Gas Flow	0.00	0.00	2.74	2.95	kscf
Natural Gas Cost	\$0.00	\$0.00	\$16.82	\$18.10	\$
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	\$16.82	\$18.10	\$
Average Steam Cost	---	---	\$7.44	\$7.66	\$/klbs
Efficiency By Losses	0.0	0.0	82.8	80.3	%
Efficiency By I/O			80.8	78.5	%

Central State Hospital
Heating Plant Day Operations Report

4/15/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	182.50				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	6.7				klbs
Total Plant Gas Flow	233.91				kscf
Total Plant Gas Cost	\$1,436.40				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,436.40				\$
Fuel Cost Per Heating Degree Day	---				\$/hdd
Plant Average Steam Cost Per Degree Day	---				\$/klbs
Total Plant Efficiency By I/O	76.4				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	23.5	17.2	hrs
Steam Flow	0.00	0.00	109.92	72.58	klbs
Gas Flow	0.00	0.00	131.06	102.85	kscf
Natural Gas Cost	\$0.00	\$0.00	\$804.81	\$631.59	\$
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	\$804.81	\$631.59	\$
Average Steam Cost	---	---	\$7.32	\$8.70	\$/klbs
Efficiency By Losses	0.0	0.0	83.3	80.5	%
Efficiency By I/O			82.1	69.1	%

Central State Hospital
Heating Plant Day Operations Report

4/16/2018
8:01 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	0.00			hdd	
Total Plant Steam Flow	5.43			klbs	
Steam Flow Per Heating Degree Day	---			klbs/hdd	
Total Condensate Return Water Flow	0.2			klbs	
Total Plant Gas Flow	6.45			kscf	
Total Plant Gas Cost	\$39.62			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$39.62			\$	
Fuel Cost Per Heating Degree Day	---			\$/hdd	
Plant Average Steam Cost Per Degree Day	---			\$/klbs	
Total Plant Efficiency By I/O	82.4			%	
Condensate Transfer Pump #1 Run Time	0.5			hrs	
Condensate Transfer Pump #2 Run Time	0.5			hrs	
Condensate Transfer Pump #3 Run Time	0.0			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	0.0			hrs	
Boiler Feed Pump #4 Run Time	0.0			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.5	0.5	hrs
Steam Flow	0.00	0.00	3.05	2.38	klbs
Gas Flow	0.00	0.00	3.52	2.93	kscf
Natural Gas Cost	\$0.00	\$0.00	\$21.60	\$18.02	\$
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	\$21.60	\$18.02	\$
Average Steam Cost	---	---	\$7.08	\$7.58	\$/klbs
Efficiency By Losses	0.0	0.0	83.3	80.7	%
Efficiency By I/O			85.0	79.4	%

Central State Hospital
Heating Plant Day Operations Report

4/18/2018
8:01 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	6.71				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	0.1				klbs
Total Plant Gas Flow	8.22				kscf
Total Plant Gas Cost	\$50.49				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$50.49				\$
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	0.5				hrs
Condensate Transfer Pump #2 Run Time	0.5				hrs
Condensate Transfer Pump #3 Run Time	0.0				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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.5	0.5	hrs
Steam Flow	0.00	0.00	3.67	3.04	klbs
Gas Flow	0.00	0.00	4.39	3.83	kscf
Natural Gas Cost	\$0.00	\$0.00	\$26.97	\$23.52	\$
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	\$26.97	\$23.52	\$
Average Steam Cost	---	---	\$7.35	\$7.74	\$/klbs
Efficiency By Losses	0.0	0.0	82.9	80.7	%
Efficiency By I/O			81.8	77.7	%

Central State Hospital
Heating Plant Day Operations Report

4/19/2018
8:01 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	6.17				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	0.1				klbs
Total Plant Gas Flow	7.83				kscf
Total Plant Gas Cost	\$48.09				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$48.09				\$
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	0.5				hrs
Condensate Transfer Pump #2 Run Time	0.5				hrs
Condensate Transfer Pump #3 Run Time	0.0				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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.0	0.5	hrs
Steam Flow	0.00	0.00	0.00	6.17	klbs
Gas Flow	0.00	0.00	0.00	7.83	kscf
Natural Gas Cost	\$0.00	\$0.00	\$0.00	\$48.09	\$
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	\$0.00	\$48.09	\$
Average Steam Cost	---	---	---	\$7.80	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.5	%
Efficiency By I/O				77.1	%

Central State Hospital
Heating Plant Day Operations Report

4/20/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	8.69				hdd
Total Plant Steam Flow	254.00				klbs
Steam Flow Per Heating Degree Day	29.2				klbs/hdd
Total Condensate Return Water Flow	5.4				klbs
Total Plant Gas Flow	303.43				kscf
Total Plant Gas Cost	\$1,863.28				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,863.28				\$
Fuel Cost Per Heating Degree Day	\$214.40				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.84				\$/klbs
Total Plant Efficiency By I/O	82.0				%
Condensate Transfer Pump #1 Run Time	3.4				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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.0	23.5	hrs
Steam Flow	0.00	0.00	0.00	254.00	klbs
Gas Flow	0.00	0.00	0.00	303.43	kscf
Natural Gas Cost	\$0.00	\$0.00	\$0.00	\$1,863.28	\$
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	\$0.00	\$1,863.28	\$
Average Steam Cost	---	---	---	\$7.34	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.5	%
Efficiency By I/O				82.0	%

Central State Hospital
Heating Plant Day Operations Report

4/21/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	13.16				hdd
Total Plant Steam Flow	270.28				klbs
Steam Flow Per Heating Degree Day	20.5				klbs/hdd
Total Condensate Return Water Flow	6.5				klbs
Total Plant Gas Flow	338.18				kscf
Total Plant Gas Cost	\$2,076.68				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.09				\$
Total Plant Fuel Cost	\$2,076.77				\$
Fuel Cost Per Heating Degree Day	\$157.86				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.58				\$/klbs
Total Plant Efficiency By I/O	78.3				%
Condensate Transfer Pump #1 Run Time	0.0				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	0.0				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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	1.1	1.0	23.2	hrs
Steam Flow	0.00	0.29	0.84	269.16	klbs
Gas Flow	0.00	6.69	5.78	325.71	kscf
Natural Gas Cost	\$0.00	\$41.06	\$35.50	\$2,000.12	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.09	\$
Total Fuel Cost	\$0.00	\$41.06	\$35.50	\$2,000.21	\$
Average Steam Cost	---	\$143.53	\$42.11	\$7.43	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.4	%
Efficiency By I/O		4.2	14.3	80.9	%

Central State Hospital
Heating Plant Day Operations Report

4/22/2018
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	12.60			hdd	
Total Plant Steam Flow	254.00			klbs	
Steam Flow Per Heating Degree Day	20.2			klbs/hdd	
Total Condensate Return Water Flow	5.9			klbs	
Total Plant Gas Flow	306.65			kscf	
Total Plant Gas Cost	\$1,883.06			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,883.06			\$	
Fuel Cost Per Heating Degree Day	\$149.39			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.59			\$/klbs	
Total Plant Efficiency By I/O	81.1			%	
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	0.0			hrs	
Boiler Feed Pump #4 Run Time	0.0			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.0	23.5	hrs
Steam Flow	0.00	0.00	0.00	254.00	klbs
Gas Flow	0.00	0.00	0.00	306.65	kscf
Natural Gas Cost	\$0.00	\$0.00	\$0.00	\$1,883.06	\$
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	\$0.00	\$1,883.06	\$
Average Steam Cost	---	---	---	\$7.41	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.5	%
Efficiency By I/O				81.1	%

Central State Hospital
Heating Plant Day Operations Report

4/23/2018
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	8.82			hdd	
Total Plant Steam Flow	246.49			klbs	
Steam Flow Per Heating Degree Day	27.9			klbs/hdd	
Total Condensate Return Water Flow	5.8			klbs	
Total Plant Gas Flow	296.84			kscf	
Total Plant Gas Cost	\$1,822.84			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,822.84			\$	
Fuel Cost Per Heating Degree Day	\$206.59			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.84			\$/klbs	
Total Plant Efficiency By I/O	81.3			%	
Condensate Transfer Pump #1 Run Time	0.0			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	0.0			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	0.0			hrs	
Boiler Feed Pump #4 Run Time	0.0			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	0.0	23.5	hrs
Steam Flow	0.00	0.00	0.00	246.49	klbs
Gas Flow	0.00	0.00	0.00	296.84	kscf
Natural Gas Cost	\$0.00	\$0.00	\$0.00	\$1,822.84	\$
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	\$0.00	\$1,822.84	\$
Average Steam Cost	---	---	---	\$7.40	\$/klbs
Efficiency By Losses	0.0	0.0	0.0	81.4	%
Efficiency By I/O				81.3	%

Central State Hospital
Heating Plant Day Operations Report

4/24/2018
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	30.76	hdd
Total Plant Steam Flow	240.60	kibs
Steam Flow Per Heating Degree Day	7.8	kibs/hdd
Total Condensate Return Water Flow	6.3	kibs
Total Plant Gas Flow	312.30	kscf
Total Plant Gas Cost	\$1,917.76	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,917.76	\$
Fuel Cost Per Heating Degree Day	\$62.34	\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.26	\$/kibs
Total Plant Efficiency By I/O	75.4	%

Condensate Transfer Pump #1 Run Time	19.0	hrs
Condensate Transfer Pump #2 Run Time	23.3	hrs
Condensate Transfer Pump #3 Run Time	0.0	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	0.0	hrs
Boiler Feed Pump #4 Run Time	0.0	hrs
Fuel Oil Pump #1 Run Time	0.0	hrs
Fuel Oil Pump #2 Run Time	0.0	hrs

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.2	16.1	14.0	hrs
Steam Flow	0.00	0.00	125.76	114.84	kibs
Gas Flow	0.00	0.89	167.30	144.11	kscf
Natural Gas Cost	\$0.00	\$5.45	\$1,027.36	\$884.95	\$
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	\$5.45	\$1,027.36	\$884.95	\$
Average Steam Cost	—	—	\$8.17	\$7.71	\$/kibs
Efficiency By Losses	0.0	0.0	81.8	81.2	%
Efficiency By I/O			73.6	78.0	%

Central State Hospital
Heating Plant Day Operations Report

4/25/2018
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	37.53			hdd	
Total Plant Steam Flow	258.83			klbs	
Steam Flow Per Heating Degree Day	6.9			klbs/hdd	
Total Condensate Return Water Flow	4.8			klbs	
Total Plant Gas Flow	307.13			kscf	
Total Plant Gas Cost	\$1,886.03			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,886.03			\$	
Fuel Cost Per Heating Degree Day	\$50.26			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.19			\$/klbs	
Total Plant Efficiency By I/O	82.5			%	
Condensate Transfer Pump #1 Run Time	23.0			hrs	
Condensate Transfer Pump #2 Run Time	23.2			hrs	
Condensate Transfer Pump #3 Run Time	0.0			hrs	
Boiler Feed Pump #1 Run Time	23.2			hrs	
Boiler Feed Pump #2 Run Time	23.2			hrs	
Boiler Feed Pump #3 Run Time	0.0			hrs	
Boiler Feed Pump #4 Run Time	0.0			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	22.2	1.8	hrs
Steam Flow	0.00	0.00	236.29	22.54	klbs
Gas Flow	0.00	0.00	278.16	28.97	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,708.10	\$177.93	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,708.10	\$177.93	\$
Average Steam Cost	—	—	\$7.23	\$7.89	\$/klbs
Efficiency By Losses	0.0	0.0	82.7	0.0	%
Efficiency By I/O			83.2	76.2	%

Central State Hospital
Heating Plant Day Operations Report

4/26/2018
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	4.03	hdd			
Total Plant Steam Flow	241.89	klbs			
Steam Flow Per Heating Degree Day	60.1	klbs/hdd			
Total Condensate Return Water Flow	5.3	klbs			
Total Plant Gas Flow	290.99	kscf			
Total Plant Gas Cost	\$1,786.89	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,786.89	\$			
Fuel Cost Per Heating Degree Day	\$443.85	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$1.83	\$/klbs			
Total Plant Efficiency By I/O	81.4	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	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	0.0	hrs			
Boiler Feed Pump #4 Run Time	0.0	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	23.5	0.3	hrs
Steam Flow	0.00	0.00	241.89	0.00	klbs
Gas Flow	0.00	0.00	289.29	1.70	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,776.48	\$10.41	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,776.48	\$10.41	\$
Average Steam Cost	---	---	\$7.34	---	\$/klbs
Efficiency By Losses	0.0	0.0	82.6	77.6	%
Efficiency By I/O			81.9		%

Central State Hospital
Heating Plant Day Operations Report

4/27/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.40				hdd
Total Plant Steam Flow	229.63				klbs
Steam Flow Per Heating Degree Day	578.9				klbs/hdd
Total Condensate Return Water Flow	6.3				klbs
Total Plant Gas Flow	276.74				kscf
Total Plant Gas Cost	\$1,699.36				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,699.36				\$
Fuel Cost Per Heating Degree Day	\$4,283.84				\$/hdd
Plant Average Steam Cost Per Degree Day	\$18.66				\$/klbs
Total Plant Efficiency By I/O	81.3				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	22.6	1.4	hrs
Steam Flow	0.00	0.00	218.12	11.51	klbs
Gas Flow	0.00	0.00	259.79	16.95	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,595.29	\$104.07	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,595.29	\$104.07	\$
Average Steam Cost	---	---	\$7.31	\$9.04	\$/klbs
Efficiency By Losses	0.0	0.0	82.6	0.0	%
Efficiency By I/O			82.2	66.5	%

Central State Hospital
Heating Plant Day Operations Report

4/28/2018
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.01				hdd
Total Plant Steam Flow	232.65				klbs
Steam Flow Per Heating Degree Day	32,452.2				klbs/hdd
Total Condensate Return Water Flow	5.9				klbs
Total Plant Gas Flow	266.07				kscf
Total Plant Gas Cost	\$1,633.85				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,633.85				\$
Fuel Cost Per Heating Degree Day	\$227,907.95				\$/hdd
Plant Average Steam Cost Per Degree Day	\$979.63				\$/klbs
Total Plant Efficiency By I/O	85.6				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	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	0.0				hrs
Boiler Feed Pump #4 Run Time	0.0				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	0.0				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	21.5	2.3	hrs
Steam Flow	0.00	0.00	211.87	20.78	klbs
Gas Flow	0.00	0.00	239.22	26.85	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,468.96	\$164.89	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,468.96	\$164.89	\$
Average Steam Cost	---	---	\$6.93	\$7.94	\$/klbs
Efficiency By Losses	0.0	0.0	82.7	0.0	%
Efficiency By I/O			86.7	75.8	%

Central State Hospital
Heating Plant Day Operations Report

4/29/2018
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	0.03			hdd	
Total Plant Steam Flow	220.66			klbs	
Steam Flow Per Heating Degree Day	8,431.8			klbs/hdd	
Total Condensate Return Water Flow	6.8			klbs	
Total Plant Gas Flow	252.30			kscf	
Total Plant Gas Cost	\$1,549.34			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,549.34			\$	
Fuel Cost Per Heating Degree Day	\$59,202.78			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$268.30			\$/klbs	
Total Plant Efficiency By I/O	85.6			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	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	0.0			hrs	
Boiler Feed Pump #4 Run Time	0.0			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	0.0			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	23.5	0.5	hrs
Steam Flow	0.00	0.00	220.66	0.00	klbs
Gas Flow	0.00	0.00	248.69	3.62	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,527.13	\$22.21	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,527.13	\$22.21	\$
Average Steam Cost	—	—	\$6.92	—	\$/klbs
Efficiency By Losses	0.0	0.0	82.7	76.3	%
Efficiency By I/O			86.9		%

Central State Hospital
Heating Plant Day Operations Report

4/30/2018
7:00 AM
Daily Report

Description

Description	Plant	Units			
Heating Degree Days	9.78	hdd			
Total Plant Steam Flow	247.83	klbs			
Steam Flow Per Heating Degree Day	25.3	klbs/hdd			
Total Condensate Return Water Flow	8.3	klbs			
Total Plant Gas Flow	280.99	kscf			
Total Plant Gas Cost	\$1,725.49	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,725.49	\$			
Fuel Cost Per Heating Degree Day	\$176.37	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.71	\$/klbs			
Total Plant Efficiency By I/O	86.4	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	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	0.0	hrs			
Boiler Feed Pump #4 Run Time	0.0	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	0.0	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.0	0.0	23.5	0.6	hrs
Steam Flow	0.00	0.00	247.83	0.00	klbs
Gas Flow	0.00	0.00	277.79	3.20	kscf
Natural Gas Cost	\$0.00	\$0.00	\$1,705.85	\$19.64	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$0.00	\$0.00	\$1,705.85	\$19.64	\$
Average Steam Cost	---	---	\$6.88	—	\$/klbs
Efficiency By Losses	0.0	0.0	82.7	76.7	%
Efficiency By I/O			87.4		%