

Central State Hospital
Heating Plant Day Operations Report

3/1/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	29.62	hdd			
Total Plant Steam Flow	358.09	klbs			
Steam Flow Per Heating Degree Day	12.1	klbs/hdd			
Total Condensate Return Water Flow	10.3	klbs			
Total Plant Gas Flow	448.04	kscf			
Total Plant Gas Cost	\$2,751.33	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,751.33	\$			
Fuel Cost Per Heating Degree Day	\$92.89	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.26	\$/klbs			
Total Plant Efficiency By I/O	78.3	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.7	23.5	1.8	0.0	hrs
Steam Flow	0.00	358.09	0.00	0.00	klbs
Gas Flow	3.71	437.18	7.15	0.00	kscf
Natural Gas Cost	\$22.78	\$2,684.61	\$43.93	\$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	\$22.78	\$2,684.61	\$43.93	\$0.00	\$
Average Steam Cost	---	\$7.50	---	---	\$/klbs
Efficiency By Losses	76.7	79.8	76.7	0.0	%
Efficiency By I/O		80.2			%

Central State Hospital
Heating Plant Day Operations Report

3/2/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	27.71	hdd			
Total Plant Steam Flow	318.67	klbs			
Steam Flow Per Heating Degree Day	11.5	klbs/hdd			
Total Condensate Return Water Flow	10.2	klbs			
Total Plant Gas Flow	404.05	kscf			
Total Plant Gas Cost	\$2,481.20	\$			
Total Plant Oil Flow	0.1	gals			
Total Plant Oil Cost	\$0.22	\$			
Total Plant Fuel Cost	\$2,481.42	\$			
Fuel Cost Per Heating Degree Day	\$89.55	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.28	\$/klbs			
Total Plant Efficiency By I/O	77.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.6	23.5	1.4	0.0	hrs
Steam Flow	0.00	318.67	0.00	0.00	klbs
Gas Flow	3.12	395.48	5.45	0.00	kscf
Natural Gas Cost	\$19.17	\$2,428.57	\$33.45	\$0.00	\$
Oil Flow	0.0	0.1	0.0	0.0	gals
Oil Cost	\$0.00	\$0.22	\$0.00	\$0.00	\$
Total Fuel Cost	\$19.17	\$2,428.80	\$33.45	\$0.00	\$
Average Steam Cost	---	\$7.62	---	—	\$/klbs
Efficiency By Losses	78.0	79.7	78.4	0.0	%
Efficiency By I/O		78.9			%

Central State Hospital
Heating Plant Day Operations Report

3/3/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	14.32	hdd			
Total Plant Steam Flow	296.59	klbs			
Steam Flow Per Heating Degree Day	20.7	klbs/hdd			
Total Condensate Return Water Flow	10.2	klbs			
Total Plant Gas Flow	373.85	kscf			
Total Plant Gas Cost	\$2,295.74	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.09	\$			
Total Plant Fuel Cost	\$2,295.83	\$			
Fuel Cost Per Heating Degree Day	\$160.38	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.54	\$/klbs			
Total Plant Efficiency By I/O	77.7	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.5	23.5	0.9	0.0	hrs
Steam Flow	0.00	296.59	0.00	0.00	klbs
Gas Flow	2.68	367.61	3.56	0.00	kscf
Natural Gas Cost	\$16.44	\$2,257.41	\$21.89	\$0.00	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.09	\$0.00	\$0.00	\$
Total Fuel Cost	\$16.44	\$2,257.51	\$21.89	\$0.00	\$
Average Steam Cost	---	\$7.61	---	---	\$/klbs
Efficiency By Losses	81.7	79.8	80.2	0.0	%
Efficiency By I/O		79.0			%

Central State Hospital
Heating Plant Day Operations Report

3/4/2020
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	9.20			hdd	
Total Plant Steam Flow	266.33			klbs	
Steam Flow Per Heating Degree Day	28.9			klbs/hdd	
Total Condensate Return Water Flow	9.7			klbs	
Total Plant Gas Flow	337.94			kscf	
Total Plant Gas Cost	\$2,075.21			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$2,075.21			\$	
Fuel Cost Per Heating Degree Day	\$225.48			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.85			\$/klbs	
Total Plant Efficiency By I/O	77.2			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	0.6	21.4	0.7	0.0	hrs
Steam Flow	0.00	266.33	0.00	0.00	klbs
Gas Flow	3.08	332.04	2.83	0.00	kscf
Natural Gas Cost	\$18.90	\$2,038.96	\$17.35	\$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	\$18.90	\$2,038.96	\$17.35	\$0.00	\$
Average Steam Cost	---	\$7.66	---	---	\$/klbs
Efficiency By Losses	80.9	79.7	77.0	0.0	%
Efficiency By I/O		78.6			%

Central State Hospital
Heating Plant Day Operations Report

3/5/2020
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	13.04			hdd	
Total Plant Steam Flow	225.06			klbs	
Steam Flow Per Heating Degree Day	17.3			klbs/hdd	
Total Condensate Return Water Flow	9.2			klbs	
Total Plant Gas Flow	274.93			kscf	
Total Plant Gas Cost	\$1,688.25			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,688.25			\$	
Fuel Cost Per Heating Degree Day	\$129.45			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.58			\$/klbs	
Total Plant Efficiency By I/O	80.2			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	16.2	1.4	1.4	1.2	hrs
Steam Flow	217.19	2.90	4.77	0.20	klbs
Gas Flow	236.26	12.58	13.67	12.41	kscf
Natural Gas Cost	\$1,450.80	\$77.25	\$83.97	\$76.23	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,450.80	\$77.25	\$83.97	\$76.23	\$
Average Steam Cost	\$6.68	\$26.62	\$17.61	\$379.32	\$/klbs
Efficiency By Losses	81.2	75.4	76.1	78.5	%
Efficiency By I/O	90.0	22.6	34.1	1.6	%

Central State Hospital
Heating Plant Day Operations Report

3/6/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	16.82				hdd
Total Plant Steam Flow	341.96				klbs
Steam Flow Per Heating Degree Day	20.3				klbs/hdd
Total Condensate Return Water Flow	9.6				klbs
Total Plant Gas Flow	370.41				kscf
Total Plant Gas Cost	\$2,274.57				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,274.57				\$
Fuel Cost Per Heating Degree Day	\$135.20				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.40				\$/klbs
Total Plant Efficiency By I/O	90.4				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.8	0.4	hrs
Steam Flow	341.96	0.00	0.00	0.00	klbs
Gas Flow	359.41	4.81	3.30	2.89	kscf
Natural Gas Cost	\$2,207.02	\$29.56	\$20.26	\$17.73	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,207.02	\$29.56	\$20.26	\$17.73	\$
Average Steam Cost	\$6.45	---	---	---	\$/klbs
Efficiency By Losses	81.3	72.3	76.9	81.7	%
Efficiency By I/O	93.2				%

Central State Hospital
Heating Plant Day Operations Report

3/7/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	16.95				hdd
Total Plant Steam Flow	348.37				klbs
Steam Flow Per Heating Degree Day	20.6				klbs/hdd
Total Condensate Return Water Flow	9.5				klbs
Total Plant Gas Flow	378.51				kscf
Total Plant Gas Cost	\$2,324.36				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.15				\$
Total Plant Fuel Cost	\$2,324.51				\$
Fuel Cost Per Heating Degree Day	\$137.17				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.39				\$/klbs
Total Plant Efficiency By I/O	90.1				%
Condensate Transfer Pump #1 Run Time	23.4				hrs
Condensate Transfer Pump #2 Run Time	23.4				hrs
Condensate Transfer Pump #3 Run Time	23.4				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	23.4				hrs
Boiler Feed Pump #4 Run Time	23.4				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.4				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.4	1.1	0.9	0.5	hrs
Steam Flow	348.37	0.00	0.00	0.00	klbs
Gas Flow	365.93	5.43	3.53	3.62	kscf
Natural Gas Cost	\$2,247.11	\$33.32	\$21.69	\$22.25	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.15	\$
Total Fuel Cost	\$2,247.11	\$33.32	\$21.69	\$22.40	\$
Average Steam Cost	\$6.45	—	—	—	\$/klbs
Efficiency By Losses	81.2	75.5	77.1	77.9	%
Efficiency By I/O	93.2				%

Central State Hospital
Heating Plant Day Operations Report

3/8/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	41.14	hdd			
Total Plant Steam Flow	329.21	klbs			
Steam Flow Per Heating Degree Day	8.0	klbs/hdd			
Total Condensate Return Water Flow	9.0	klbs			
Total Plant Gas Flow	355.37	kscf			
Total Plant Gas Cost	\$2,182.25	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,182.25	\$			
Fuel Cost Per Heating Degree Day	\$53.05	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.16	\$/klbs			
Total Plant Efficiency By I/O	90.7	%			
Condensate Transfer Pump #1 Run Time	22.5	hrs			
Condensate Transfer Pump #2 Run Time	22.5	hrs			
Condensate Transfer Pump #3 Run Time	22.5	hrs			
Boiler Feed Pump #1 Run Time	22.5	hrs			
Boiler Feed Pump #2 Run Time	22.5	hrs			
Boiler Feed Pump #3 Run Time	22.5	hrs			
Boiler Feed Pump #4 Run Time	22.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	22.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	22.5	1.1	0.9	0.4	hrs
Steam Flow	329.21	0.00	0.00	0.00	klbs
Gas Flow	343.84	5.19	3.44	2.90	kscf
Natural Gas Cost	\$2,111.42	\$31.90	\$21.11	\$17.82	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,111.42	\$31.90	\$21.11	\$17.82	\$
Average Steam Cost	\$6.41	---	---	---	\$/klbs
Efficiency By Losses	81.2	75.0	78.0	72.9	%
Efficiency By I/O	93.8				%

Central State Hospital
Heating Plant Day Operations Report

3/9/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	21.47	hdd			
Total Plant Steam Flow	314.84	klbs			
Steam Flow Per Heating Degree Day	14.7	klbs/hdd			
Total Condensate Return Water Flow	9.5	klbs			
Total Plant Gas Flow	342.64	kscf			
Total Plant Gas Cost	\$2,104.08	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.14	\$			
Total Plant Fuel Cost	\$2,104.22	\$			
Fuel Cost Per Heating Degree Day	\$98.01	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.31	\$/klbs			
Total Plant Efficiency By I/O	90.0	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.8	0.4	hrs
Steam Flow	314.84	0.00	0.00	0.00	klbs
Gas Flow	331.79	4.77	3.15	2.93	kscf
Natural Gas Cost	\$2,037.45	\$29.30	\$19.33	\$17.99	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.14	\$
Total Fuel Cost	\$2,037.45	\$29.30	\$19.33	\$18.14	\$
Average Steam Cost	\$6.47	—	—	—	\$/klbs
Efficiency By Losses	81.2	76.5	78.1	81.2	%
Efficiency By I/O	92.9				%

Central State Hospital
Heating Plant Day Operations Report

3/10/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	10.35	hdd			
Total Plant Steam Flow	300.07	klbs			
Steam Flow Per Heating Degree Day	29.0	klbs/hdd			
Total Condensate Return Water Flow	9.5	klbs			
Total Plant Gas Flow	331.15	kscf			
Total Plant Gas Cost	\$2,033.51	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,033.51	\$			
Fuel Cost Per Heating Degree Day	\$196.41	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.65	\$/klbs			
Total Plant Efficiency By I/O	88.7	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.7	0.5	hrs
Steam Flow	300.07	0.00	0.00	0.00	klbs
Gas Flow	320.63	4.54	2.85	3.14	kscf
Natural Gas Cost	\$1,968.90	\$27.88	\$17.47	\$19.26	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,968.90	\$27.88	\$17.47	\$19.26	\$
Average Steam Cost	\$6.56	---	---	---	\$/klbs
Efficiency By Losses	81.2	76.8	72.7	78.3	%
Efficiency By I/O	91.7				%

Central State Hospital
Heating Plant Day Operations Report

3/11/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	3.28	hdd			
Total Plant Steam Flow	284.37	klbs			
Steam Flow Per Heating Degree Day	86.6	klbs/hdd			
Total Condensate Return Water Flow	9.9	klbs			
Total Plant Gas Flow	317.51	kscf			
Total Plant Gas Cost	\$1,949.72	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,949.72	\$			
Fuel Cost Per Heating Degree Day	\$593.55	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$2.09	\$/klbs			
Total Plant Efficiency By I/O	87.7	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.7	0.5	hrs
Steam Flow	284.37	0.00	0.00	0.00	klbs
Gas Flow	306.63	4.54	2.84	3.50	kscf
Natural Gas Cost	\$1,882.94	\$27.89	\$17.42	\$21.47	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,882.94	\$27.89	\$17.42	\$21.47	\$
Average Steam Cost	\$6.62	---	---	---	\$/klbs
Efficiency By Losses	81.2	72.8	79.4	78.3	%
Efficiency By I/O	90.8				%

Central State Hospital
Heating Plant Day Operations Report

3/12/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	3.34	hdd			
Total Plant Steam Flow	286.40	klbs			
Steam Flow Per Heating Degree Day	85.7	klbs/hdd			
Total Condensate Return Water Flow	10.3	klbs			
Total Plant Gas Flow	321.71	kscf			
Total Plant Gas Cost	\$1,975.57	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,975.57	\$			
Fuel Cost Per Heating Degree Day	\$591.16	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$2.06	\$/klbs			
Total Plant Efficiency By I/O	87.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.8	0.5	hrs
Steam Flow	284.54	1.87	0.00	0.00	klbs
Gas Flow	308.19	7.22	3.19	3.11	kscf
Natural Gas Cost	\$1,892.50	\$44.34	\$19.60	\$19.13	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,892.50	\$44.34	\$19.60	\$19.13	\$
Average Steam Cost	\$6.65	\$23.73	---	---	\$/klbs
Efficiency By Losses	81.2	71.1	77.6	79.7	%
Efficiency By I/O	90.4	25.3			%

Central State Hospital
Heating Plant Day Operations Report

3/13/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	8.00	hdd			
Total Plant Steam Flow	298.04	klbs			
Steam Flow Per Heating Degree Day	37.3	klbs/hdd			
Total Condensate Return Water Flow	10.4	klbs			
Total Plant Gas Flow	330.92	kscf			
Total Plant Gas Cost	\$2,032.07	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,032.07	\$			
Fuel Cost Per Heating Degree Day	\$254.10	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.85	\$/klbs			
Total Plant Efficiency By I/O	88.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.7	0.5	hrs
Steam Flow	298.04	0.00	0.00	0.00	klbs
Gas Flow	320.62	4.56	2.63	3.11	kscf
Natural Gas Cost	\$1,968.85	\$28.02	\$16.13	\$19.07	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,968.85	\$28.02	\$16.13	\$19.07	\$
Average Steam Cost	\$6.61	---	---	---	\$/klbs
Efficiency By Losses	81.3	74.8	78.0	79.7	%
Efficiency By I/O	91.0				%

Central State Hospital
Heating Plant Day Operations Report

3/14/2020
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	0.12			hdd	
Total Plant Steam Flow	279.55			klbs	
Steam Flow Per Heating Degree Day	2,307.0			klbs/hdd	
Total Condensate Return Water Flow	10.2			klbs	
Total Plant Gas Flow	312.52			kscf	
Total Plant Gas Cost	\$1,919.09			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$1,919.09			\$	
Fuel Cost Per Heating Degree Day	\$15,837.30			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$56.65			\$/klbs	
Total Plant Efficiency By I/O	87.6			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.8	0.7	0.5	hrs
Steam Flow	279.33	0.23	0.00	0.00	klbs
Gas Flow	301.89	4.76	2.63	3.25	kscf
Natural Gas Cost	\$1,853.80	\$29.23	\$16.13	\$19.93	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,853.80	\$29.23	\$16.13	\$19.93	\$
Average Steam Cost	\$6.64	\$129.17	---	---	\$/klbs
Efficiency By Losses	81.1	75.5	78.7	76.8	%
Efficiency By I/O	90.6	4.7			%

Central State Hospital
Heating Plant Day Operations Report

3/15/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	9.63	hdd			
Total Plant Steam Flow	291.81	klbs			
Steam Flow Per Heating Degree Day	30.3	klbs/hdd			
Total Condensate Return Water Flow	10.2	klbs			
Total Plant Gas Flow	325.12	kscf			
Total Plant Gas Cost	\$1,996.46	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$1,996.46	\$			
Fuel Cost Per Heating Degree Day	\$207.29	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.71	\$/klbs			
Total Plant Efficiency By I/O	87.9	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.7	0.6	hrs
Steam Flow	291.81	0.00	0.00	0.00	klbs
Gas Flow	313.34	4.92	2.92	3.94	kscf
Natural Gas Cost	\$1,924.14	\$30.23	\$17.91	\$24.17	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,924.14	\$30.23	\$17.91	\$24.17	\$
Average Steam Cost	\$6.59	---	---	---	\$/klbs
Efficiency By Losses	81.1	72.8	77.1	76.9	%
Efficiency By I/O	91.2				%

Central State Hospital
Heating Plant Day Operations Report

3/16/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	15.52	hdd			
Total Plant Steam Flow	317.98	klbs			
Steam Flow Per Heating Degree Day	20.5	klbs/hdd			
Total Condensate Return Water Flow	10.3	klbs			
Total Plant Gas Flow	349.05	kscf			
Total Plant Gas Cost	\$2,143.45	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,143.45	\$			
Fuel Cost Per Heating Degree Day	\$138.10	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.43	\$/klbs			
Total Plant Efficiency By I/O	89.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.9	0.6	hrs
Steam Flow	317.98	0.00	0.00	0.00	klbs
Gas Flow	336.12	5.33	3.62	3.98	kscf
Natural Gas Cost	\$2,064.02	\$32.74	\$22.24	\$24.45	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,064.02	\$32.74	\$22.24	\$24.45	\$
Average Steam Cost	\$6.49	—	—	—	\$/klbs
Efficiency By Losses	81.1	74.3	76.7	78.2	%
Efficiency By I/O	92.6				%

Central State Hospital
Heating Plant Day Operations Report

3/17/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	13.93	hdd			
Total Plant Steam Flow	318.76	klbs			
Steam Flow Per Heating Degree Day	22.9	klbs/hdd			
Total Condensate Return Water Flow	10.4	klbs			
Total Plant Gas Flow	349.85	kscf			
Total Plant Gas Cost	\$2,148.37	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,148.37	\$			
Fuel Cost Per Heating Degree Day	\$154.17	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.48	\$/klbs			
Total Plant Efficiency By I/O	89.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.7	0.5	hrs
Steam Flow	318.76	0.00	0.00	0.00	klbs
Gas Flow	338.47	5.27	2.94	3.17	kscf
Natural Gas Cost	\$2,078.47	\$32.35	\$18.06	\$19.49	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,078.47	\$32.35	\$18.06	\$19.49	\$
Average Steam Cost	\$6.52	---	---	---	\$/klbs
Efficiency By Losses	81.2	73.8	78.7	81.8	%
Efficiency By I/O	92.2				%

Central State Hospital
Heating Plant Day Operations Report

3/18/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	9.72	hdd			
Total Plant Steam Flow	296.15	klbs			
Steam Flow Per Heating Degree Day	30.5	klbs/hdd			
Total Condensate Return Water Flow	10.6	klbs			
Total Plant Gas Flow	328.76	kscf			
Total Plant Gas Cost	\$2,018.85	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,018.85	\$			
Fuel Cost Per Heating Degree Day	\$207.77	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.70	\$/klbs			
Total Plant Efficiency By I/O	88.2	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.7	0.5	hrs
Steam Flow	296.15	0.00	0.00	0.00	klbs
Gas Flow	317.55	4.96	2.58	3.67	kscf
Natural Gas Cost	\$1,949.99	\$30.48	\$15.86	\$22.52	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,949.99	\$30.48	\$15.86	\$22.52	\$
Average Steam Cost	\$6.58	—	—	—	\$/klbs
Efficiency By Losses	81.1	74.2	75.1	79.2	%
Efficiency By I/O	91.3				%

Central State Hospital
Heating Plant Day Operations Report

3/19/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	9.57	hdd			
Total Plant Steam Flow	304.42	klbs			
Steam Flow Per Heating Degree Day	31.8	klbs/hdd			
Total Condensate Return Water Flow	10.5	klbs			
Total Plant Gas Flow	336.63	kscf			
Total Plant Gas Cost	\$2,067.16	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,067.16	\$			
Fuel Cost Per Heating Degree Day	\$215.91	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.71	\$/klbs			
Total Plant Efficiency By I/O	88.6	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.8	0.5	hrs
Steam Flow	304.42	0.00	0.00	0.00	klbs
Gas Flow	325.39	5.27	2.93	3.04	kscf
Natural Gas Cost	\$1,998.15	\$32.37	\$17.96	\$18.68	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,998.15	\$32.37	\$17.96	\$18.68	\$
Average Steam Cost	\$6.56	---	---	---	\$/klbs
Efficiency By Losses	81.1	76.2	75.6	78.0	%
Efficiency By I/O	91.6				%

Central State Hospital
Heating Plant Day Operations Report

3/20/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	1.54				hdd
Total Plant Steam Flow	266.28				klbs
Steam Flow Per Heating Degree Day	173.3				klbs/hdd
Total Condensate Return Water Flow	10.6				klbs
Total Plant Gas Flow	300.33				kscf
Total Plant Gas Cost	\$1,844.27				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,844.27				\$
Fuel Cost Per Heating Degree Day	\$1,200.10				\$/hdd
Plant Average Steam Cost Per Degree Day	\$4.51				\$/klbs
Total Plant Efficiency By I/O	86.8				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.9	0.7	0.3	hrs
Steam Flow	266.28	0.00	0.00	0.00	klbs
Gas Flow	291.65	3.99	2.51	2.18	kscf
Natural Gas Cost	\$1,790.98	\$24.50	\$15.42	\$13.37	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,790.98	\$24.50	\$15.42	\$13.37	\$
Average Steam Cost	\$6.73	---	---	---	\$/klbs
Efficiency By Losses	81.2	79.7	75.8	72.0	%
Efficiency By I/O	89.4				%

Central State Hospital
Heating Plant Day Operations Report

3/21/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	249.01				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	9.8				klbs
Total Plant Gas Flow	282.63				kscf
Total Plant Gas Cost	\$1,735.57				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.14				\$
Total Plant Fuel Cost	\$1,735.71				\$
Fuel Cost Per Heating Degree Day	---				\$/hdd
Plant Average Steam Cost Per Degree Day	---				\$/klbs
Total Plant Efficiency By I/O	86.3				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.9	0.7	0.5	hrs
Steam Flow	249.01	0.00	0.00	0.00	klbs
Gas Flow	272.35	4.35	2.56	3.37	kscf
Natural Gas Cost	\$1,672.43	\$26.72	\$15.70	\$20.71	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.14	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,672.43	\$26.86	\$15.70	\$20.71	\$
Average Steam Cost	\$6.72	---	---	---	\$/klbs
Efficiency By Losses	81.2	77.1	75.2	78.1	%
Efficiency By I/O	89.5				%

Central State Hospital
Heating Plant Day Operations Report

3/22/2020
7:00 AM
Daily Report

Description

	Plant	Units
Heating Degree Days	9.30	hdd
Total Plant Steam Flow	285.13	klbs
Steam Flow Per Heating Degree Day	30.7	klbs/hdd
Total Condensate Return Water Flow	9.7	klbs
Total Plant Gas Flow	320.01	kscf
Total Plant Gas Cost	\$1,965.08	\$
Total Plant Oil Flow	0.0	gals
Total Plant Oil Cost	\$0.00	\$
Total Plant Fuel Cost	\$1,965.08	\$
Fuel Cost Per Heating Degree Day	\$211.33	\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.74	\$/klbs
Total Plant Efficiency By I/O	87.3	%

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

	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.9	0.6	hrs
Steam Flow	285.13	0.00	0.00	0.00	klbs
Gas Flow	306.92	5.31	3.70	4.09	kscf
Natural Gas Cost	\$1,884.69	\$32.60	\$22.69	\$25.10	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,884.69	\$32.60	\$22.69	\$25.10	\$
Average Steam Cost	\$6.61	---	---	---	\$/klbs
Efficiency By Losses	81.0	72.2	77.5	81.4	%
Efficiency By I/O	91.0				%

Central State Hospital
Heating Plant Day Operations Report

3/23/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	13.64				hdd
Total Plant Steam Flow	298.15				klbs
Steam Flow Per Heating Degree Day	21.9				klbs/hdd
Total Condensate Return Water Flow	9.6				klbs
Total Plant Gas Flow	332.88				kscf
Total Plant Gas Cost	\$2,044.11				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,044.11				\$
Fuel Cost Per Heating Degree Day	\$149.86				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.50				\$/klbs
Total Plant Efficiency By I/O	87.7				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.2	0.9	0.6	hrs
Steam Flow	298.15	0.00	0.00	0.00	klbs
Gas Flow	319.66	5.50	3.58	4.14	kscf
Natural Gas Cost	\$1,962.98	\$33.78	\$21.96	\$25.40	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,962.98	\$33.78	\$21.96	\$25.40	\$
Average Steam Cost	\$6.58	---	---	---	\$/klbs
Efficiency By Losses	81.0	76.6	78.3	75.5	%
Efficiency By I/O	91.3				%

Central State Hospital
Heating Plant Day Operations Report

3/24/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	21.14	hdd			
Total Plant Steam Flow	346.56	klbs			
Steam Flow Per Heating Degree Day	16.4	klbs/hdd			
Total Condensate Return Water Flow	9.6	klbs			
Total Plant Gas Flow	376.49	kscf			
Total Plant Gas Cost	\$2,311.95	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.15	\$			
Total Plant Fuel Cost	\$2,312.10	\$			
Fuel Cost Per Heating Degree Day	\$109.39	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.32	\$/klbs			
Total Plant Efficiency By I/O	90.1	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.2	0.9	0.4	hrs
Steam Flow	346.56	0.00	0.00	0.00	klbs
Gas Flow	364.85	5.41	3.36	2.87	kscf
Natural Gas Cost	\$2,240.47	\$33.22	\$20.63	\$17.62	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.15	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,240.47	\$33.37	\$20.63	\$17.62	\$
Average Steam Cost	\$6.46	---	---	---	\$/klbs
Efficiency By Losses	81.2	77.0	76.7	71.6	%
Efficiency By I/O	93.0				%

Central State Hospital
Heating Plant Day Operations Report

3/25/2020
7:00 AM
Daily Report

Description

	Plant	Units			
Heating Degree Days	13.76	hdd			
Total Plant Steam Flow	323.78	klbs			
Steam Flow Per Heating Degree Day	23.5	klbs/hdd			
Total Condensate Return Water Flow	9.5	klbs			
Total Plant Gas Flow	356.76	kscf			
Total Plant Gas Cost	\$2,190.78	\$			
Total Plant Oil Flow	0.0	gals			
Total Plant Oil Cost	\$0.00	\$			
Total Plant Fuel Cost	\$2,190.78	\$			
Fuel Cost Per Heating Degree Day	\$159.17	\$/hdd			
Plant Average Steam Cost Per Degree Day	\$0.49	\$/klbs			
Total Plant Efficiency By I/O	88.9	%			
Condensate Transfer Pump #1 Run Time	23.5	hrs			
Condensate Transfer Pump #2 Run Time	23.5	hrs			
Condensate Transfer Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #1 Run Time	23.5	hrs			
Boiler Feed Pump #2 Run Time	23.5	hrs			
Boiler Feed Pump #3 Run Time	23.5	hrs			
Boiler Feed Pump #4 Run Time	23.5	hrs			
Fuel Oil Pump #1 Run Time	0.0	hrs			
Fuel Oil Pump #2 Run Time	23.5	hrs			
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.8	0.7	hrs
Steam Flow	323.78	0.00	0.00	0.00	klbs
Gas Flow	343.73	5.21	3.28	4.54	kscf
Natural Gas Cost	\$2,110.74	\$32.00	\$20.15	\$27.90	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,110.74	\$32.00	\$20.15	\$27.90	\$
Average Steam Cost	\$6.52	---	---	---	\$/klbs
Efficiency By Losses	81.2	72.8	80.6	77.8	%
Efficiency By I/O	92.2				%

Central State Hospital
Heating Plant Day Operations Report

3/26/2020
7:00 AM
Daily Report

Description

	Plant			Units	
Heating Degree Days	19.85			hdd	
Total Plant Steam Flow	350.13			klbs	
Steam Flow Per Heating Degree Day	17.6			klbs/hdd	
Total Condensate Return Water Flow	9.4			klbs	
Total Plant Gas Flow	380.58			kscf	
Total Plant Gas Cost	\$2,337.07			\$	
Total Plant Oil Flow	0.0			gals	
Total Plant Oil Cost	\$0.00			\$	
Total Plant Fuel Cost	\$2,337.07			\$	
Fuel Cost Per Heating Degree Day	\$117.71			\$/hdd	
Plant Average Steam Cost Per Degree Day	\$0.34			\$/klbs	
Total Plant Efficiency By I/O	90.1			%	
Condensate Transfer Pump #1 Run Time	23.5			hrs	
Condensate Transfer Pump #2 Run Time	23.5			hrs	
Condensate Transfer Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #1 Run Time	23.5			hrs	
Boiler Feed Pump #2 Run Time	23.5			hrs	
Boiler Feed Pump #3 Run Time	23.5			hrs	
Boiler Feed Pump #4 Run Time	23.5			hrs	
Fuel Oil Pump #1 Run Time	0.0			hrs	
Fuel Oil Pump #2 Run Time	23.5			hrs	
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	0.9	0.5	hrs
Steam Flow	350.13	0.00	0.00	0.00	klbs
Gas Flow	368.68	5.38	3.33	3.19	kscf
Natural Gas Cost	\$2,263.96	\$33.03	\$20.46	\$19.61	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,263.96	\$33.03	\$20.46	\$19.61	\$
Average Steam Cost	\$6.47	---	---	---	\$/klbs
Efficiency By Losses	81.2	76.4	77.4	79.7	%
Efficiency By I/O	93.0				%

Central State Hospital
Heating Plant Day Operations Report

3/27/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	15.74				hdd
Total Plant Steam Flow	342.26				klbs
Steam Flow Per Heating Degree Day	21.7				klbs/hdd
Total Condensate Return Water Flow	9.6				klbs
Total Plant Gas Flow	373.69				kscf
Total Plant Gas Cost	\$2,294.71				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$2,294.71				\$
Fuel Cost Per Heating Degree Day	\$145.79				\$/hdd
Plant Average Steam Cost Per Degree Day	\$0.43				\$/klbs
Total Plant Efficiency By I/O	89.7				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.8	0.4	hrs
Steam Flow	342.26	0.00	0.00	0.00	klbs
Gas Flow	363.21	4.69	2.93	2.86	kscf
Natural Gas Cost	\$2,230.36	\$28.82	\$18.00	\$17.53	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$2,230.36	\$28.82	\$18.00	\$17.53	\$
Average Steam Cost	\$6.52	---	---	---	\$/klbs
Efficiency By Losses	81.3	72.7	75.9	82.1	%
Efficiency By I/O	92.3				%

Central State Hospital
Heating Plant Day Operations Report

3/28/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	3.35				hdd
Total Plant Steam Flow	283.60				klbs
Steam Flow Per Heating Degree Day	84.6				klbs/hdd
Total Condensate Return Water Flow	9.8				klbs
Total Plant Gas Flow	318.65				kscf
Total Plant Gas Cost	\$1,956.75				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,956.75				\$
Fuel Cost Per Heating Degree Day	\$583.87				\$/hdd
Plant Average Steam Cost Per Degree Day	\$2.06				\$/klbs
Total Plant Efficiency By I/O	87.2				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.8	0.5	hrs
Steam Flow	283.60	0.00	0.00	0.00	klbs
Gas Flow	307.60	4.47	3.10	3.48	kscf
Natural Gas Cost	\$1,888.92	\$27.45	\$19.03	\$21.35	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,888.92	\$27.45	\$19.03	\$21.35	\$
Average Steam Cost	\$6.66	---	---	---	\$/klbs
Efficiency By Losses	81.2	71.9	78.7	76.4	%
Efficiency By I/O	90.3				%

Central State Hospital
Heating Plant Day Operations Report

3/29/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	262.46				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	9.6				klbs
Total Plant Gas Flow	295.71				kscf
Total Plant Gas Cost	\$1,815.87				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,815.87				\$
Fuel Cost Per Heating Degree Day	---				\$/hdd
Plant Average Steam Cost Per Degree Day	---				\$/klbs
Total Plant Efficiency By I/O	86.9				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.0	0.8	0.5	hrs
Steam Flow	262.46	0.00	0.00	0.00	klbs
Gas Flow	284.98	4.46	3.08	3.19	kscf
Natural Gas Cost	\$1,750.01	\$27.37	\$18.92	\$19.56	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,750.01	\$27.37	\$18.92	\$19.56	\$
Average Steam Cost	\$6.67	---	---	---	\$/klbs
Efficiency By Losses	81.2	71.2	80.6	82.1	%
Efficiency By I/O	90.2				%

Central State Hospital
Heating Plant Day Operations Report

3/30/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	249.65				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	9.7				klbs
Total Plant Gas Flow	280.76				kscf
Total Plant Gas Cost	\$1,724.05				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,724.05				\$
Fuel Cost Per Heating Degree Day	---				\$/hdd
Plant Average Steam Cost Per Degree Day	---				\$/klbs
Total Plant Efficiency By I/O	87.1				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	0.9	0.7	0.4	hrs
Steam Flow	249.65	0.00	0.00	0.00	klbs
Gas Flow	271.82	3.98	2.58	2.39	kscf
Natural Gas Cost	\$1,669.16	\$24.41	\$15.81	\$14.66	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,669.16	\$24.41	\$15.81	\$14.66	\$
Average Steam Cost	\$6.69	---	---	---	\$/klbs
Efficiency By Losses	81.2	75.7	73.7	82.3	%
Efficiency By I/O	89.9				%

Central State Hospital
Heating Plant Day Operations Report

3/31/2020
7:00 AM
Daily Report

Description

	Plant				Units
Heating Degree Days	0.00				hdd
Total Plant Steam Flow	272.52				klbs
Steam Flow Per Heating Degree Day	---				klbs/hdd
Total Condensate Return Water Flow	9.9				klbs
Total Plant Gas Flow	308.45				kscf
Total Plant Gas Cost	\$1,894.14				\$
Total Plant Oil Flow	0.0				gals
Total Plant Oil Cost	\$0.00				\$
Total Plant Fuel Cost	\$1,894.14				\$
Fuel Cost Per Heating Degree Day	---				\$/hdd
Plant Average Steam Cost Per Degree Day	---				\$/klbs
Total Plant Efficiency By I/O	86.5				%
Condensate Transfer Pump #1 Run Time	23.5				hrs
Condensate Transfer Pump #2 Run Time	23.5				hrs
Condensate Transfer Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #1 Run Time	23.5				hrs
Boiler Feed Pump #2 Run Time	23.5				hrs
Boiler Feed Pump #3 Run Time	23.5				hrs
Boiler Feed Pump #4 Run Time	23.5				hrs
Fuel Oil Pump #1 Run Time	0.0				hrs
Fuel Oil Pump #2 Run Time	23.5				hrs
	Boiler 1	Boiler 2	Boiler 3	Boiler 4	Units
Run Time	23.5	1.1	1.0	0.7	hrs
Steam Flow	272.52	0.00	0.00	0.00	klbs
Gas Flow	294.77	5.32	3.79	4.58	kscf
Natural Gas Cost	\$1,810.11	\$32.67	\$23.26	\$28.11	\$
Oil Flow	0.0	0.0	0.0	0.0	gals
Oil Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$
Total Fuel Cost	\$1,810.11	\$32.67	\$23.26	\$28.11	\$
Average Steam Cost	\$6.64	---	---	---	\$/klbs
Efficiency By Losses	81.1	75.1	79.7	79.2	%
Efficiency By I/O	90.5				%