

EE-14-00429 PROJECT

PUMP STATION PS-1 LOAD LIST

Date: 08/28/2014																
Rev. F																
Line #	Initial Installation Equip. Description	Start Mechanism	Qty	Rated Unit HP	Rated Unit KW	Total KW	eff	pf	Voltage	Phase	Amps	Connected KVA	Demand Factor	Demand KW	Demand KVA	Annual kWh
1	M-1300 (horizontal pump #1)	VFD	1	6000	4470	4470	90%	85%	4160	3	812	5266	100%	4470	6200	27,446,832
2	M-1400	VFD	1	6000	4470	4470	90%	85%	4160	3	812	5266	100%	4470	6200	27,446,832
3	M-1500	VFD	1	6000	4470	4470	90%	85%	4160	3	812	5266	100%	4470	6200	27,446,832
4	Station Service Panel		1		25	25	90%	100%	4160	1	7	25	100%	25	25	163,900
5	MOV-1001 (24") - STATION VALVE	Line	3.0		12.2	12.2	90%	85%	480	3	17.3	14	100%	12	14	6,356
6	MOV-1002 (30") - STATION PIG RECEIVER V	Line	5.0		16.0	16.0	90%	85%	480	3	23.8	20	100%	17	20	7,396
7	MOV-1003 (24")	Line	3.0		8.5	8.5	90%	85%	480	3	12.0	10	100%	8	10	3,714
8	MOV-1004 (24")	Line	3.0		8.5	8.5	90%	85%	480	3	12.0	10	100%	8	10	3,714
9	T-1200 Tank incoming MOV (24")	Line	3.0		8.5	8.5	90%	85%	480	3	12.0	10	100%	8	10	3,714
10	T-1200 Tank outgoing MOV (24")	Line	3.0		8.5	8.5	90%	85%	480	3	12.0	10	100%	8	10	3,714
11	SURGE RELIEF PUMP	VFD	50.0		37.3	37.3	90%	85%	480	3	68.6	44	100%	37	44	228,724
12	MOV-1211 (24")	Line	3.0		8.5	8.5	90%	85%	480	3	12.0	10	100%	8	10	3,714
13	MOV-2 (24")	Line	3.0		8.5	8.5	90%	85%	480	3	12.0	10	100%	8	10	3,714
14	MOV-1311 (24") - PUMP SUCTION VALVE	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
15	MOV-1312 (24") - PUMP DISCHARGE VALVE	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
16	MOV-1411 (24") - PUMP SUCTION VALVE	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
17	MOV-1412 (24") - PUMP DISCHARGE VALVE	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
18	MOV-1511 (24") - PUMP SUCTION VALVE	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
19	MOV-1512 (24") - PUMP DISCHARGE VALVE	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
20	MOV-0611 (30") - STATION PIG LANCHER V	Line	5.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
21	MOV-0602 (24") - STATION DISCHARGE VAL	Line	3.0		16.9	16.9	90%	85%	480	3	23.9	20	100%	17	20	7,396
22	R-1800	Line	10		7	7	90%	85%	480	3	12	6	100%	7	6	45,745
23	Lube Oil Sys. Heat Exchanger Fan Motor #1	Line	1		1	1	90%	85%	480	3	1	1	100%	1	1	4,574
24	Lube Oil Sys. Aux Lube Pump Motor #1	Line	2		1	1	90%	85%	480	3	2	1	100%	1	1	6,862
25	Lube Oil Sys. Heat Exchanger Fan Motor #2	Line	1		1	1	90%	85%	480	3	1	1	100%	1	1	4,574
26	Lube Oil Sys. Aux Lube Pump Motor #2	Line	2		1	1	90%	85%	480	3	2	1	100%	1	1	6,862
27	Lube Oil Sys. Heat Exchanger Fan Motor #3	Line	1		1	1	90%	85%	480	3	1	1	100%	1	1	4,574
28	Lube Oil Sys. Aux Lube Pump Motor #3	Line	2		1	1	90%	85%	480	3	2	1	100%	1	1	6,862
29	Lube Oil System Immersion Heater #1				3	3	90%	100%	480	3	4	3	100%	3	3	10,360
30	Lube Oil System Immersion Heater #2				3	3	90%	100%	480	3	4	3	100%	3	3	10,360
31	Lube Oil System Immersion Heater #3				3	3	90%	100%	480	3	4	3	100%	3	3	10,360
32	HVAC-1, 2, 4				114.5	114.5	90%	100%	480	3	153	114	100%	114	114	702,001
33	HVAC-3				44.9	44.9	90%	100%	480	3	66	45	100%	45	45	276,296
34	480V to 120V 3ph Transformer - DRA Skid				45	45	90%	100%	480	3	86	45.0	100%	36.0	36.0	220,752
35	480V to 120V 3ph Transformer				30.0	60.0	90%	100%	480	3	80	60.0	100%	60.0	60.0	367,920
36	PLC				0	0	90%	100%	120	1	0	0	100%	0	0	0
37	UPS				0	0	90%	100%	120	1	0	0	100%	0	0	0
38	DC Rectifier/Battery Charger				0	0	90%	100%	120	1	0	0	100%	0	0	0
39	Building Interior & Exterior Lights				0	0	90%	100%	120	1	0	0	100%	0	0	0
40	Building Receptacles				0	0	90%	100%	120	1	0	0	100%	0	0	0
41	Site Flood Lights				0	0	90%	100%	120	1	0	0	100%	0	0	0
42	Pipeline Instrumentation				0	0	90%	100%	120	1	0	0	100%	0	0	0
43	INITIAL INSTALLATION TOTALS					13,902						10,408		13,093	16,390	84,517,948
44	Planned Future Equip. Description	Start Mechanism	Qty	Rated Unit HP	Rated Unit KW	Total KW	eff	pf	Voltage	Phase	Amps	Connected KVA	Demand Factor	Demand KW	Demand KVA	Annual kWh
45	M-01XXX (Can Pump #3)	VFD	1	350	0	0	90%	85%	480	3	0	0	100%	0	0	0
46	Motor Operated Valve	Line	10		59	59	90%	85%	480	3	70	60	100%	60	60	21,900
47	PLANNED FUTURE INSTALLATION TOTALS					59					70	60		60	60	21,900
48	TOTAL BUILT-OUT SITE LOAD REQUIREMENTS					14,042					3,270	16,467		14,033	16,458	84,539,848
49																
50																
51	SITE UTILITY TRANSFORMER SIZE WITH 25% GROWTH:					17,552					4,088	26,584		17,541	26.6	
52	Entered Date															
53	Assumed Date														Monthly kWh	7,043,887