Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
Pine Grove 1		ABC	SRC-Pine G	7.50Y	125.0	0.00	0.00	506.24	0	10803	3610	95	0.00	0.0	0.000	0.000	0	0	0	1169
PL.62451	Pine Grove 1	ABC	336 MCM AC	7.50Y	125.0	0.00	0.00	285.67	55	6077	2095	95	0.09	0.0	0.001	0.001	0	0	0	579
PL.53022	PL.62451	ABC	336 MCM AC	7.50Y	125.0	0.01	0.01	285.67	55	6076	2095	95	0.24	0.0	0.005	0.004	0	0	0	579
---------- Feeder No. 4 (Maple Grove F4) Beginning with Device PD.8071 ----------																				
PD.8071	PL.53022	ABC	400VWE	7.50Y	125.0	0.00	0.01	285.67	0	6076	2095	95	0.00	0.0	0.005	0.004	0	0	0	579
PL.54148	PD.8071	ABC	336 MCM AC	7.48Y	124.7	0.26	0.27	285.67	55	6076	2095	95	7.83	0.1	0.119	0.114	15	4	2	579
PL.54189	PL.54148	ABC	336 MCM AC	7.47Y	124.5	0.19	0.46	280.44	54	5955	2043	95	5.54	0.1	0.203	0.084	13	4	1	567
PL.54190	PL.54189	ABC	336 MCM AC	7.47Y	124.4	0.10	0.56	279.83	54	5937	2027	95	3.09	0.1	0.250	0.047	0	0	0	566
PL.42473	PL.54190	A	#2 ACSR	7.47Y	124.4	0.00	0.56	1.50	1	11	3	96	0.00	0.0	0.255	0.006	0	0	0	1
PD.6649	PL.42473	A	50QA	7.47Y	124.4	0.00	0.56	1.50	3	11	3	96	0.00	0.0	0.255	0.006	0	0	0	1
PL.42781	PD.6649	A	#2 ACSR	7.47Y	124.4	0.00	0.56	1.50	1	11	3	96	0.00	0.0	0.265	0.009	11	3	1	1
PL.42782	PL.54190	A	6 A (CWC)	7.47Y	124.4	0.00	0.56	9.41	7	67	20	96	0.00	0.0	0.255	0.006	0	0	0	8
PD.6775	PL.42782	A	50QA	7.47Y	124.4	0.00	0.56	9.41	19	67	20	96	0.00	0.0	0.255	0.006	0	0	0	8
PL.42783	PD.6775	A	6 A (CWC)	7.47Y	124.4	0.01	0.57	9.41	7	67	20	96	0.00	0.0	0.269	0.013	13	4	2	8
PL.43190	PL.42783	A	6 A (CWC)	7.46Y	124.4	0.02	0.59	7.65	5	55	16	96	0.01	0.0	0.328	0.059	12	4	1	6
PL.43191	PL.43190	A	6 A (CWC)	7.46Y	124.4	0.00	0.59	1.82	1	13	4	96	0.00	0.0	0.334	0.006	0	0	0	2
PD.6685	PL.43191	A	50QA	7.46Y	124.4	0.00	0.59	1.82	4	13	4	96	0.00	0.0	0.334	0.006	0	0	0	2
PL.43192	PD.6685	A	6 A (CWC)	7.46Y	124.4	0.00	0.59	1.82	1	13	4	96	0.00	0.0	0.395	0.061	13	4	2	2
PL.43193	PL.43190	A	6 A (CWC)	7.46Y	124.4	0.01	0.60	4.13	3	30	9	96	0.00	0.0	0.407	0.078	11	3	1	3
PL.43194	PL.43193	A	6 A (CWC)	7.46Y	124.4	0.00	0.60	2.56	2	18	5	96	0.00	0.0	0.449	0.042	5	2	1	2
PL.64075	PL.43194	A	#1/0 ACSR	7.46Y	124.4	0.00	0.61	1.79	1	13	4	96	0.00	0.0	0.519	0.070	13	4	1	1
PL.43195	PL.54190	ABC	336 MCM AC	7.45Y	124.2	0.20	0.76	276.20	53	5855	1997	95	5.73	0.1	0.339	0.089	6	2	1	557
PL.54081	PL.43195	ABC	336 MCM AC	7.44Y	124.1	0.17	0.93	275.90	53	5843	1981	95	4.97	0.1	0.416	0.077	0	0	0	556
PL.54083	PL.54081	A	1/0 AL URD	7.44Y	124.1	0.00	0.93	0.96	1	7	2	96	0.00	0.0	0.560	0.144	7	2	3	3
PL.54082	PL.54081	ABC	336 MCM AC	7.44Y	124.0	0.07	0.99	275.58	53	5831	1968	95	1.94	0.0	0.447	0.030	0	0	0	553
PL.41586	PL.54082	ABC	336 MCM AC	7.43Y	123.8	0.21	1.20	270.46	52	5720	1931	95	5.98	0.1	0.544	0.097	0	0	0	538
PL.42803	PL.41586	A	#2 ACSR	7.43Y	123.8	0.00	1.20	3.02	2	22	6	96	0.00	0.0	0.549	0.006	0	0	0	2
PD.6651	PL.42803	A	50QA	7.43Y	123.8	0.00	1.20	3.02	6	22	6	96	0.00	0.0	0.549	0.006	0	0	0	2
PL.42804	PD.6651	A	#2 ACSR	7.43Y	123.8	0.00	1.20	3.02	2	22	6	96	0.00	0.0	0.560	0.011	0	0	0	2
PL.42266	PL.42804	A	#2 ACSR	7.43Y	123.8	0.00	1.20	3.02	2	22	6	96	0.00	0.0	0.574	0.014	0	0	0	2

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54092	PL.42266	A	#2 ACSR	7.43Y	123.8	0.01	1.21	3.02	2	22	6	96	0.00	0.0	0.681	0.106	0	0	0	2
PL.60853	PL.54092	A	#2 ACSR	7.43Y	123.8	0.00	1.22	3.02	2	22	6	96	0.00	0.0	0.706	0.025	11	3	1	2
PL.60854	PL.60853	A	#2 ACSR	7.43Y	123.8	0.00	1.22	1.41	1	10	3	96	0.00	0.0	0.871	0.165	10	3	1	1
PL.60855	PL.60853	A	#2 ACSR	7.43Y	123.8	0.00	1.22	0.00	0	0	0	100	0.00	0.0	0.735	0.029	0	0	0	0
PL.42805	PL.41586	ABC	336 MCM AC	7.40Y	123.4	0.39	1.59	269.46	52	5692	1911	95	11.07	0.2	0.725	0.181	0	0	0	536
PL.42806	PL.42805	C	#4 ACSR	7.40Y	123.4	0.00	1.59	2.28	2	16	5	95	0.00	0.0	0.730	0.006	0	0	0	2
PD.6652	PL.42806	C	75QA	7.40Y	123.4	0.00	1.59	2.28	3	16	5	95	0.00	0.0	0.730	0.006	0	0	0	2
PL.42807	PD.6652	C	#4 ACSR	7.40Y	123.4	0.01	1.60	2.28	2	16	5	95	0.00	0.0	0.826	0.095	6	2	1	2
PL.42808	PL.42807	C	#4 ACSR	7.40Y	123.4	0.00	1.60	1.39	1	10	3	96	0.00	0.0	0.868	0.042	10	3	1	1
PL.42809	PL.42805	ABC	336 MCM AC	7.38Y	123.0	0.42	2.01	268.70	52	5665	1880	95	12.05	0.2	0.923	0.198	0	0	0	534
PL.42810	PL.42809	ABC	336 MCM AC	7.37Y	122.8	0.19	2.19	268.70	52	5653	1852	95	5.38	0.1	1.011	0.089	0	0	0	534
PL.41570	PL.42810	C	#4 ACSR	7.37Y	122.8	0.03	2.22	4.86	4	34	10	96	0.00	0.0	1.253	0.242	34	10	1	1
PL.42811	PL.42810	ABC	336 MCM AC	7.36Y	122.6	0.17	2.36	266.64	51	5604	1827	95	4.81	0.1	1.092	0.081	13	4	1	532
PL.42812	PL.42811	ABC	336 MCM AC	7.35Y	122.5	0.10	2.46	266.04	51	5586	1812	95	2.79	0.0	1.139	0.047	0	0	0	531
PL.42814	PL.42812	ABC	336 MCM AC	7.33Y	122.1	0.40	2.86	205.75	40	4308	1429	95	8.84	0.2	1.387	0.249	16	5	1	379
PL.41041	PL.42814	C	#2 ACSR	7.33Y	122.1	0.00	2.86	1.76	1	12	4	95	0.00	0.0	1.409	0.022	12	4	1	1
PL.42815	PL.42814	ABC	336 MCM AC	7.32Y	122.0	0.10	2.96	204.39	39	4270	1399	95	2.19	0.1	1.450	0.062	16	5	5	377
PL.42813	PL.42815	ABC	336 MCM AC	7.32Y	122.0	0.06	3.02	203.65	39	4252	1390	95	1.32	0.0	1.487	0.038	18	5	2	372
PL.42816	PL.42813	ABC	336 MCM AC	7.31Y	121.9	0.09	3.10	202.82	39	4233	1382	95	1.87	0.0	1.542	0.054	32	9	3	370
PL.42817	PL.42816	C	#4 ACSR	7.31Y	121.9	0.00	3.11	3.69	3	26	8	96	0.00	0.0	1.547	0.006	0	0	0	3
PD.6756	PL.42817	C	60QA	7.31Y	121.9	0.00	3.11	3.69	6	26	8	96	0.00	0.0	1.547	0.006	0	0	0	3
PL.54359	PD.6756	C	#4 ACSR	7.31Y	121.9	0.00	3.11	3.69	3	26	8	96	0.00	0.0	1.604	0.057	26	8	3	3
PL.54360	PL.54359	C	#4 ACSR	7.31Y	121.9	0.00	3.11	0.00	0	0	0	100	0.00	0.0	1.682	0.077	0	0	0	0
PL.42818	PL.42816	ABC	336 MCM AC	7.31Y	121.8	0.10	3.20	200.07	39	4174	1360	95	2.14	0.1	1.605	0.064	21	6	3	364
PL.42819	PL.42818	ABC	336 MCM AC	7.30Y	121.7	0.08	3.29	198.73	38	4143	1347	95	1.79	0.0	1.659	0.054	10	3	1	358
PL.42822	PL.42819	A	#1/0 ACSR	7.30Y	121.7	0.00	3.29	19.45	8	136	40	96	0.00	0.0	1.665	0.006	0	0	0	10
PD.6620	PL.42822	A	60QA	7.30Y	121.7	0.00	3.29	19.45	32	136	40	96	0.00	0.0	1.665	0.006	0	0	0	10
PL.54354	PD.6620	A	#1/0 ACSR	7.30Y	121.7	0.01	3.30	19.45	8	136	40	96	0.01	0.0	1.699	0.034	20	6	2	10
PL.54353	PL.54354	A	#4 ACSR	7.30Y	121.7	0.00	3.30	0.00	0	0	0	100	0.00	0.0	1.720	0.022	0	0	1	1
PL.54356	PL.54353	A	#4 ACSR	7.30Y	121.7	0.00	3.30	0.00	0	0	0	100	0.00	0.0	1.797	0.077	0	0	0	0
PL.54355	PL.54354	A	#1/0 ACSR	7.30Y	121.7	0.02	3.33	16.56	7	116	34	96	0.02	0.0	1.770	0.071	24	7	1	7

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Balanced Voltage Drop Report
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Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54352	PL.54355	A	#4 ACSR	7.30Y	121.7	0.01	3.34	8.23	6	58	17	96	0.01	0.0	1.808	0.038	0	0	0	4
PL.54357	PL.54352	A	#4 ACSR	7.30Y	121.7	0.01	3.35	3.62	3	25	7	96	0.00	0.0	1.879	0.071	25	7	2	2
PL.54358	PL.54352	A	#2 ACSR	7.30Y	121.7	0.00	3.34	4.61	3	32	9	96	0.00	0.0	1.824	0.017	32	9	2	2
PL.42776	PL.54355	A	#1/0 ACSR	7.30Y	121.7	0.00	3.33	4.92	2	34	10	96	0.00	0.0	1.797	0.027	34	10	2	2
PL.42777	PL.42819	ABC	336 MCM AC	7.30Y	121.7	0.05	3.34	191.76	37	3995	1300	95	1.07	0.0	1.694	0.035	0	0	1	347
PL.64456	PL.42777	A	#2 ACSR	7.30Y	121.7	0.00	3.34	1.31	1	9	3	95	0.00	0.0	1.700	0.006	0	0	0	1
PD.9542	PL.64456	A	40QA	7.30Y	121.7	0.00	3.34	1.31	3	9	3	95	0.00	0.0	1.700	0.006	0	0	0	1
PL.64457	PD.9542	A	#2 ACSR	7.30Y	121.7	0.00	3.34	1.31	1	9	3	95	0.00	0.0	1.751	0.051	9	3	1	1
PL.42778	PL.42777	B	#2 ACSR	7.30Y	121.7	0.00	3.34	1.59	1	11	3	96	0.00	0.0	1.700	0.006	0	0	0	1
PD.6514	PL.42778	B	40QA	7.30Y	121.7	0.00	3.34	1.59	4	11	3	96	0.00	0.0	1.700	0.006	0	0	0	1
PL.42779	PD.6514	B	#2 ACSR	7.30Y	121.7	0.00	3.34	1.59	1	11	3	96	0.00	0.0	1.739	0.039	11	3	1	1
PL.64454	PL.42777	ABC	336 MCM AC	7.30Y	121.7	0.00	3.34	190.79	37	3973	1292	95	0.00	0.0	1.694	0.000	0	0	0	344
PL.64455	PL.64454	ABC	336 MCM AC	7.29Y	121.5	0.21	3.55	190.79	37	3973	1292	95	4.23	0.1	1.833	0.138	15	4	1	344
PL.52989	PL.64455	ABC	336 MCM AC	7.28Y	121.3	0.11	3.65	187.60	36	3902	1262	95	2.19	0.1	1.907	0.074	25	7	3	334
PL.53391	PL.52989	ABC	336 MCM AC	7.28Y	121.3	0.09	3.74	184.54	36	3836	1238	95	1.75	0.0	1.968	0.061	0	0	0	327
PL.53392	PL.53391	C	6 A (CWC)	7.28Y	121.3	0.00	3.74	2.71	2	19	6	95	0.00	0.0	1.973	0.006	0	0	0	1
PD.6599	PL.53392	C	40QA	7.28Y	121.3	0.00	3.74	2.71	7	19	6	95	0.00	0.0	1.973	0.006	0	0	0	1
PL.52992	PD.6599	C	6 A (CWC)	7.28Y	121.3	0.00	3.75	2.71	2	19	6	95	0.00	0.0	2.002	0.029	19	6	1	1
PL.53394	PL.53391	ABC	336 MCM AC	7.27Y	121.2	0.08	3.82	183.64	35	3815	1229	95	1.54	0.0	2.022	0.055	33	10	1	326
PL.53396	PL.53394	A	#1/0 ACSR	7.27Y	121.2	0.00	3.82	11.67	5	81	24	96	0.00	0.0	2.025	0.003	0	0	0	6
PD.8097	PL.53396	A	40QA	7.27Y	121.2	0.00	3.82	11.67	29	81	24	96	0.00	0.0	2.025	0.003	0	0	0	6
PL.53397	PD.8097	A	#1/0 ACSR	7.27Y	121.2	0.01	3.84	11.67	5	81	24	96	0.01	0.0	2.087	0.062	21	6	2	6
PL.53395	PL.53397	A	#1/0 ACSR	7.27Y	121.2	0.00	3.84	8.69	4	61	18	96	0.00	0.0	2.114	0.027	28	8	2	4
PL.53393	PL.53395	A	#1/0 ACSR	7.27Y	121.2	0.00	3.84	4.72	2	33	10	96	0.00	0.0	2.151	0.037	19	5	1	2
PL.53400	PL.53393	A	#1/0 ACSR	7.27Y	121.2	0.00	3.84	2.05	1	14	4	96	0.00	0.0	2.178	0.027	14	4	1	1
PL.63741	PL.53400	A	#1/0 ACSR	7.27Y	121.2	0.00	3.84	0.00	0	0	0	100	0.00	0.0	2.178	0.000	0	0	0	0
PL.63742	PL.63741	A	#1/0 ACSR	7.27Y	121.2	0.00	3.84	0.00	0	0	0	100	0.00	0.0	2.206	0.028	0	0	0	0
PL.53399	PL.53394	ABC	336 MCM AC	7.27Y	121.1	0.07	3.89	178.19	34	3699	1192	95	1.33	0.0	2.072	0.050	25	7	2	319
PL.53402	PL.53399	ABC	336 MCM AC	7.26Y	121.1	0.06	3.95	177.02	34	3674	1182	95	1.07	0.0	2.113	0.041	13	4	1	317
PL.53404	PL.53402	C	#1/0 ACSR	7.26Y	121.1	0.00	3.95	0.00	0	0	0	100	0.00	0.0	2.126	0.013	0	0	0	0
PL.53403	PL.53402	B	#1/0 ACSR	7.26Y	121.1	0.00	3.95	6.70	3	47	14	96	0.00	0.0	2.116	0.003	0	0	0	5

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Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PD.8098	PL.53403	B	20QA	7.26Y	121.1	0.00	3.95	6.70	33	47	14	96	0.00	0.0	2.116	0.003	0	0	0	5
PL.57747	PD.8098	B	#1/0 ACSR	7.26Y	121.0	0.01	3.95	6.70	3	47	14	96	0.00	0.0	2.175	0.059	22	6	3	5
PL.57746	PL.57747	B	#1/0 ACSR	7.26Y	121.0	0.00	3.95	3.56	2	25	7	96	0.00	0.0	2.201	0.026	25	7	2	2
PL.53401	PL.53402	ABC	336 MCM AC	7.26Y	121.0	0.06	4.00	174.19	34	3613	1162	95	1.04	0.0	2.154	0.041	21	6	2	311
PL.53398	PL.53401	ABC	336 MCM AC	7.26Y	121.0	0.03	4.04	173.19	33	3591	1153	95	0.64	0.0	2.179	0.025	12	3	1	309
PL.52991	PL.53398	ABC	336 MCM AC	7.25Y	120.9	0.05	4.08	172.61	33	3579	1148	95	0.90	0.0	2.215	0.036	0	0	0	308
PL.60891	PL.52991	ABC	336 MCM AC	7.25Y	120.9	0.04	4.12	166.79	32	3456	1111	95	0.73	0.0	2.246	0.031	0	0	0	297
PL.60893	PL.60891	C	#1/0 ACSR	7.25Y	120.9	0.00	4.12	2.10	1	15	4	97	0.00	0.0	2.269	0.022	15	4	1	1
PL.60892	PL.60891	ABC	336 MCM AC	7.25Y	120.8	0.07	4.20	166.09	32	3441	1105	95	1.28	0.0	2.301	0.055	15	4	1	296
PL.57574	PL.60892	ABC	336 MCM AC	7.25Y	120.8	0.01	4.20	165.38	32	3425	1097	95	0.09	0.0	2.305	0.004	0	0	0	295
PD.8512-A	PL.57574	ABC	Closed	7.25Y	120.8	0.00	4.20	165.38	0	3425	1097	95	0.00	0.0	2.305	0.004	0	0	0	295
PD.8512-B	PD.8512-A	ABC	Closed	7.25Y	120.8	0.00	4.20	165.38	0	3425	1097	95	0.00	0.0	2.305	0.004	0	0	0	295
PL.59027	PD.8512-B	ABC	336 MCM AC	7.25Y	120.8	0.04	4.24	165.38	32	3425	1097	95	0.63	0.0	2.333	0.027	9	3	1	295
PL.59261	PL.59027	ABC	336 MCM AC	7.24Y	120.7	0.11	4.35	162.53	31	3364	1078	95	1.94	0.1	2.420	0.087	0	0	0	290
PD.8754-A	PL.59261	ABC	Closed	7.24Y	120.7	0.00	4.35	162.53	0	3363	1074	95	0.00	0.0	2.420	0.087	0	0	0	290
PD.8754-B	PD.8754-A	ABC	Closed	7.24Y	120.7	0.00	4.35	162.53	0	3363	1074	95	0.00	0.0	2.420	0.087	0	0	0	290
PL.59030	PD.8754-B	ABC	336 MCM AC	7.22Y	120.4	0.25	4.60	162.53	31	3363	1074	95	4.47	0.1	2.621	0.201	0	0	0	290
PL.59026	PL.59030	ABC	336 MCM AC	7.22Y	120.3	0.08	4.68	157.00	30	3243	1030	95	1.36	0.0	2.686	0.065	0	0	0	276
PL.53318	PL.59026	ABC	336 MCM AC	7.22Y	120.3	0.04	4.72	152.03	29	3138	996	95	0.66	0.0	2.720	0.034	0	0	0	268
PL.53382	PL.53318	ABC	336 MCM AC	7.21Y	120.2	0.08	4.80	152.03	29	3137	995	95	1.31	0.0	2.787	0.067	0	0	0	268
PL.53322	PL.53382	ABC	336 MCM AC	7.21Y	120.2	0.03	4.83	152.03	29	3136	992	95	0.48	0.0	2.812	0.024	0	0	0	268
PL.53324	PL.53322	ABC	1/0 AL URD	7.21Y	120.2	0.00	4.83	12.52	7	260	76	96	0.00	0.0	2.814	0.003	0	0	0	21
PD.8095	PL.53324	ABC	40QA	7.21Y	120.2	0.00	4.83	12.52	31	260	76	96	0.00	0.0	2.814	0.003	0	0	0	21
PL.53334	PD.8095	ABC	1/0 AL URD	7.21Y	120.2	0.00	4.83	12.52	7	260	76	96	0.00	0.0	2.820	0.006	0	0	0	21
PL.53335	PL.53334	B	1/0 AL URD	7.20Y	120.1	0.09	4.92	22.55	13	156	46	96	0.12	0.1	2.948	0.128	0	0	0	14
PL.53336	PL.53335	B	1/0 AL URD	7.20Y	120.0	0.03	4.95	22.55	13	156	46	96	0.04	0.0	2.998	0.050	14	4	1	14
PL.53337	PL.53336	B	1/0 AL URD	7.20Y	120.0	0.03	4.98	20.54	12	142	41	96	0.03	0.0	3.040	0.042	7	2	2	13
PL.53338	PL.53337	B	1/0 AL URD	7.20Y	120.0	0.02	5.00	19.48	11	135	39	96	0.02	0.0	3.076	0.036	22	6	4	11
PL.53339	PL.53338	B	1/0 AL URD	7.20Y	120.0	0.02	5.02	16.32	10	113	33	96	0.02	0.0	3.118	0.041	13	4	1	7
PL.53340	PL.53339	B	1/0 AL URD	7.20Y	120.0	0.02	5.04	14.49	9	100	29	96	0.01	0.0	3.160	0.042	35	10	3	6
PL.53341	PL.53340	B	1/0 AL URD	7.20Y	120.0	0.01	5.04	9.38	6	65	19	96	0.00	0.0	3.194	0.034	44	13	2	3

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.53342	PL.53341	B	1/0 AL URD	7.20Y	120.0	0.00	5.05	3.08	2	21	6	96	0.00	0.0	3.231	0.037	21	6	1	1
PL.53346	PL.53342	B	1/0 AL URD	7.20Y	120.0	0.00	5.05	0.00	0	0	0	100	0.00	0.0	3.253	0.022	0	0	0	0
PL.53348	PL.53346	B	1/0 AL URD	7.20Y	120.0	0.00	5.05	0.00	0	0	0	100	0.00	0.0	3.257	0.004	0	0	0	0
PL.53343	PL.53334	ABC	1/0 AL URD	7.21Y	120.2	0.01	4.84	5.01	3	104	30	96	0.01	0.0	2.894	0.073	0	0	0	7
PL.53344	PL.53343	ABC	1/0 AL URD	7.21Y	120.2	0.01	4.85	5.01	3	104	30	96	0.01	0.0	2.985	0.092	0	0	0	7
PL.53347	PL.53344	ABC	1/0 AL URD	7.21Y	120.1	0.00	4.85	5.01	3	104	30	96	0.00	0.0	3.023	0.038	0	0	0	7
PL.53349	PL.53347	A	1/0 AL URD	7.21Y	120.1	0.01	4.86	15.02	9	104	30	96	0.01	0.0	3.055	0.032	17	5	1	7
PL.53350	PL.53349	A	1/0 AL URD	7.21Y	120.1	0.01	4.88	12.50	7	87	25	96	0.01	0.0	3.089	0.034	31	9	2	6
PL.53351	PL.53350	A	1/0 AL URD	7.21Y	120.1	0.01	4.89	7.96	5	55	16	96	0.01	0.0	3.139	0.050	0	0	0	4
PL.60896	PL.53351	A	1/0 AL URD	7.21Y	120.1	0.00	4.89	7.96	5	55	16	96	0.00	0.0	3.151	0.011	30	9	2	4
PL.60897	PL.60896	A	1/0 AL URD	7.21Y	120.1	0.00	4.89	3.69	2	26	7	97	0.00	0.0	3.193	0.043	17	5	1	2
PL.64370	PL.60897	A	1/0 AL URD	7.21Y	120.1	0.00	4.89	1.21	1	8	2	97	0.00	0.0	3.230	0.036	8	2	1	1
PL.64371	PL.64370	A	1/0 AL URD	7.21Y	120.1	0.00	4.89	0.00	0	0	0	100	0.00	0.0	3.248	0.018	0	0	0	0
PL.53345	PL.53347	ABC	1/0 AL URD	7.21Y	120.1	0.00	4.85	0.00	0	0	0	100	0.00	0.0	3.049	0.026	0	0	0	0
PL.53323	PL.53322	ABC	336 MCM AC	7.21Y	120.1	0.03	4.85	139.50	27	2876	915	95	0.38	0.0	2.835	0.023	0	0	0	247
PL.53315	PL.53323	ABC	336 MCM AC	7.21Y	120.1	0.04	4.90	139.50	27	2875	914	95	0.65	0.0	2.875	0.040	26	8	2	247
PL.53314	PL.53315	ABC	#3/0 ACSR	7.20Y	120.0	0.15	5.05	136.91	46	2821	897	95	2.66	0.1	2.960	0.085	22	6	3	243
PL.53390	PL.53314	ABC	#3/0 ACSR	7.19Y	119.9	0.07	5.11	135.87	45	2796	887	95	1.20	0.0	2.998	0.039	0	0	0	240
PL.53686	PL.53390	ABC	#3/0 ACSR	7.19Y	119.8	0.12	5.24	135.28	45	2783	881	95	2.14	0.1	3.068	0.070	32	9	3	239
PL.53685	PL.53686	ABC	#3/0 ACSR	7.18Y	119.7	0.09	5.33	133.13	44	2736	865	95	1.63	0.1	3.123	0.055	0	0	0	235
PL.43454	PL.53685	ABC	#3/0 ACSR	7.17Y	119.5	0.14	5.47	129.95	43	2669	844	95	2.36	0.1	3.206	0.083	0	0	0	227
PL.57598	PL.43454	ABC	#4 ACSR	7.17Y	119.5	0.04	5.51	13.49	10	261	126	90	0.09	0.0	3.279	0.073	0	0	0	1
PL.57599	PL.57598	ABC	#4 ACSR	7.17Y	119.5	0.00	5.51	13.49	10	261	126	90	0.00	0.0	3.291	0.012	261	126	1	1
PL.43455	PL.43454	ABC	#3/0 ACSR	7.16Y	119.4	0.12	5.59	116.62	39	2405	714	96	1.82	0.1	3.286	0.080	0	0	0	226
PL.43456	PL.43455	ABC	#3/0 ACSR	7.16Y	119.3	0.14	5.73	116.05	39	2392	708	96	2.09	0.1	3.378	0.092	0	0	0	223
PL.42748	PL.43456	C	6 A (CWC)	7.16Y	119.3	0.00	5.73	14.80	11	102	30	96	0.00	0.0	3.384	0.006	0	0	0	6
PD.6423	PL.42748	C	50QA	7.16Y	119.3	0.00	5.73	14.80	30	102	30	96	0.00	0.0	3.384	0.006	0	0	0	6
PL.60848	PD.6423	C	#1/0 ACSR	7.16Y	119.3	0.01	5.74	14.80	6	102	30	96	0.01	0.0	3.411	0.028	24	7	1	6
PL.60849	PL.60848	C	#1/0 ACSR	7.16Y	119.3	0.01	5.75	11.31	5	78	23	96	0.00	0.0	3.437	0.026	0	0	0	5
PL.64825	PL.60849	C	#1/0 ACSR	7.15Y	119.2	0.00	5.75	11.31	5	78	23	96	0.00	0.0	3.456	0.019	14	4	1	5
PL.64827	PL.64825	C	6 A (CWC)	7.15Y	119.2	0.04	5.79	3.76	3	26	8	96	0.01	0.0	3.693	0.237	0	0	0	2

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.64828	PL.64827	C	6 A (CWC)	7.15Y	119.2	0.00	5.80	3.76	3	26	8	96	0.00	0.0	3.721	0.028	11	3	1	2
PL.64824	PL.64828	C	6 A (CWC)	7.15Y	119.2	0.01	5.80	2.19	2	15	4	97	0.00	0.0	3.772	0.051	0	0	0	1
PL.42750	PL.64824	C	6 A (CWC)	7.15Y	119.2	0.00	5.80	2.19	2	15	4	97	0.00	0.0	3.801	0.029	15	4	1	1
PL.42121	PL.64824	C	#4 ACSR	7.15Y	119.2	0.00	5.80	0.00	0	0	0	100	0.00	0.0	3.808	0.036	0	0	0	0
PL.64829	PL.64827	C	#1/0 ACSR	7.15Y	119.2	0.00	5.79	0.00	0	0	0	100	0.00	0.0	3.740	0.047	0	0	0	0
PL.64826	PL.64825	C	#4 ACSR	7.15Y	119.2	0.00	5.75	5.56	4	38	11	96	0.00	0.0	3.456	0.000	0	0	0	2
PL.63737	PL.64826	C	#4 ACSR	7.15Y	119.2	0.02	5.77	5.56	4	38	11	96	0.00	0.0	3.551	0.095	16	5	1	2
PL.42749	PL.63737	C	#4 ACSR	7.15Y	119.2	0.01	5.78	3.25	2	22	7	95	0.00	0.0	3.634	0.083	22	7	1	1
PL.41777	PL.43456	ABC	336 MCM AC	7.16Y	119.3	0.01	5.74	36.59	7	754	221	96	0.06	0.0	3.428	0.050	0	0	0	68
PL.52139	PL.41777	ABC	336 MCM AC	7.16Y	119.3	0.00	5.74	36.59	7	754	221	96	0.00	0.0	3.429	0.001	0	0	0	68
PD.8018	PL.52139	ABC	70L	7.16Y	119.3	0.00	5.74	36.59	52	754	221	96	0.00	0.0	3.429	0.001	0	0	0	68
PL.52140	PD.8018	ABC	336 MCM AC	7.15Y	119.2	0.01	5.75	36.59	7	754	221	96	0.04	0.0	3.467	0.038	0	0	0	68
PL.52141	PL.52140	ABC	336 MCM AC	7.15Y	119.2	0.01	5.77	36.59	7	754	221	96	0.05	0.0	3.513	0.047	0	0	0	68
PL.52394	PL.52141	ABC	336 MCM AC	7.15Y	119.2	0.00	5.77	36.59	7	754	221	96	0.02	0.0	3.531	0.018	9	3	1	68
PL.52413	PL.52394	ABC	336 MCM AC	7.15Y	119.2	0.01	5.78	36.13	7	744	218	96	0.05	0.0	3.572	0.041	0	0	0	67
PL.52414	PL.52413	ABC	336 MCM AC	7.15Y	119.2	0.03	5.81	19.53	4	402	118	96	0.07	0.0	3.795	0.223	0	0	0	34
PL.52395	PL.52414	ABC	336 MCM AC	7.15Y	119.1	0.05	5.86	19.53	4	402	118	96	0.10	0.0	4.117	0.322	0	0	0	34
PL.52379	PL.52395	ABC	336 MCM AC	7.15Y	119.1	0.02	5.88	19.53	4	402	118	96	0.03	0.0	4.226	0.109	0	0	0	34
PL.52380	PL.52379	ABC	336 MCM AC	7.15Y	119.1	0.00	5.88	19.53	4	402	118	96	0.01	0.0	4.258	0.032	0	0	0	34
PL.54323	PL.52380	A	6 A (CWC)	7.15Y	119.1	0.00	5.88	7.32	5	50	15	96	0.00	0.0	4.258	0.000	0	0	0	4
PD.8131	PL.54323	A	30T	7.15Y	119.1	0.00	5.88	7.32	0	50	15	96	0.00	0.0	4.258	0.000	0	0	0	4
PL.54324	PD.8131	A	6 A (CWC)	7.15Y	119.1	0.02	5.90	7.32	5	50	15	96	0.01	0.0	4.322	0.064	0	0	0	4
PL.54325	PL.54324	A	6 A (CWC)	7.14Y	119.1	0.02	5.93	7.32	5	50	15	96	0.01	0.0	4.423	0.101	27	8	1	4
PL.54322	PL.54325	A	1/0 AL URD	7.14Y	119.1	0.00	5.93	3.43	2	23	7	96	0.00	0.0	4.428	0.006	0	0	0	3
PD.6586	PL.54322	A	25QA	7.14Y	119.1	0.00	5.93	3.43	14	23	7	96	0.00	0.0	4.428	0.006	0	0	0	3
PL.41384	PD.6586	A	1/0 AL URD	7.14Y	119.1	0.01	5.94	3.43	2	23	7	96	0.00	0.0	4.530	0.101	2	1	1	3
PL.57698	PL.41384	A	1/0 AL URD	7.14Y	119.0	0.02	5.96	3.11	2	21	6	96	0.00	0.0	4.785	0.255	6	2	1	2
PL.57699	PL.57698	A	1/0 AL URD	7.14Y	119.0	0.00	5.96	2.19	1	15	4	97	0.00	0.0	4.785	0.000	15	4	1	1
PL.52381	PL.52380	ABC	336 MCM AC	7.15Y	119.1	0.01	5.89	17.09	3	352	103	96	0.02	0.0	4.336	0.079	0	0	0	30
PL.52382	PL.52381	ABC	336 MCM AC	7.15Y	119.1	0.00	5.90	17.09	3	352	103	96	0.01	0.0	4.365	0.028	3	1	1	30
PL.52383	PL.52382	ABC	336 MCM AC	7.15Y	119.1	0.00	5.90	16.95	3	349	102	96	0.01	0.0	4.390	0.025	14	4	1	29

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Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.52392	PL.52383	ABC	336 MCM AC	7.15Y	119.1	0.01	5.91	16.26	3	335	98	96	0.02	0.0	4.488	0.099	0	0	0	28
PL.52393	PL.52392	A	6 A (CWC)	7.15Y	119.1	0.00	5.91	9.51	7	65	19	96	0.00	0.0	4.490	0.001	0	0	0	8
PD.8019	PL.52393	A	25T	7.15Y	119.1	0.00	5.91	9.51	0	65	19	96	0.00	0.0	4.490	0.001	0	0	0	8
PL.52385	PD.8019	A	6 A (CWC)	7.14Y	119.1	0.04	5.95	9.51	7	65	19	96	0.02	0.0	4.578	0.089	4	1	1	8
PL.52384	PL.52385	A	6 A (CWC)	7.14Y	119.0	0.06	6.01	8.94	6	61	18	96	0.03	0.0	4.722	0.144	0	0	0	7
PL.42219	PL.52384	A	6 A (CWC)	7.14Y	118.9	0.06	6.07	7.96	6	55	16	96	0.03	0.0	4.896	0.174	0	0	0	6
PL.42220	PL.42219	A	6 A (CWC)	7.13Y	118.9	0.06	6.13	5.29	4	36	11	96	0.02	0.0	5.139	0.243	0	0	0	4
PL.41708	PL.42220	A	6 A (CWC)	7.13Y	118.9	0.00	6.13	0.00	0	0	0	100	0.00	0.0	5.254	0.116	0	0	0	0
PL.42851	PL.42220	A	#1/0 ACSR	7.13Y	118.9	0.00	6.13	5.29	2	36	11	96	0.00	0.0	5.175	0.036	16	5	1	4
PL.42852	PL.42851	A	#1/0 ACSR	7.13Y	118.9	0.01	6.14	2.90	1	20	6	96	0.00	0.0	5.290	0.115	0	0	0	3
PL.42853	PL.42852	A	#1/0 ACSR	7.13Y	118.8	0.02	6.16	2.90	1	20	6	96	0.00	0.0	5.541	0.251	3	1	1	3
PL.42854	PL.42853	A	#1/0 ACSR	7.13Y	118.8	0.01	6.16	2.42	1	17	5	96	0.00	0.0	5.645	0.105	0	0	0	2
PL.42855	PL.42854	A	#1/0 ACSR	7.13Y	118.8	0.01	6.18	1.94	1	13	4	96	0.00	0.0	5.972	0.327	0	0	0	1
PL.41540	PL.42855	A	#1/0 ACSR	7.13Y	118.8	0.00	6.18	0.00	0	0	0	100	0.00	0.0	6.200	0.228	0	0	0	0
PL.42856	PL.42855	A	#1/0 ACSR	7.13Y	118.8	0.01	6.18	1.94	1	13	4	96	0.00	0.0	6.105	0.134	0	0	0	1
PL.41737	PL.42856	A	#4 ACSR	7.13Y	118.8	0.01	6.19	1.94	1	13	4	96	0.00	0.0	6.287	0.181	13	4	1	1
PL.42857	PL.42856	A	#1/0 ACSR	7.13Y	118.8	0.00	6.18	0.00	0	0	0	100	0.00	0.0	6.251	0.145	0	0	0	0
PL.41846	PL.42854	A	#4 ACSR	7.13Y	118.8	0.00	6.16	0.48	0	3	1	95	0.00	0.0	5.689	0.044	3	1	1	1
PL.41849	PL.42219	A	#4 ACSR	7.13Y	118.9	0.02	6.09	2.67	2	18	5	96	0.00	0.0	5.232	0.336	18	5	2	2
PL.41743	PL.52384	A	#4 ACSR	7.14Y	119.0	0.00	6.01	0.97	1	7	2	96	0.00	0.0	4.823	0.101	7	2	1	1
PL.52390	PL.52392	ABC	336 MCM AC	7.14Y	119.1	0.01	5.92	13.09	3	269	79	96	0.01	0.0	4.574	0.085	0	0	0	20
PL.52391	PL.52390	ABC	336 MCM AC	7.14Y	119.1	0.01	5.93	13.09	3	269	79	96	0.02	0.0	4.709	0.135	0	0	0	20
PL.52386	PL.52391	ABC	336 MCM AC	7.14Y	119.1	0.01	5.94	13.09	3	269	79	96	0.01	0.0	4.792	0.082	0	0	0	20
PL.52388	PL.52386	A	6 A (CWC)	7.14Y	119.1	0.00	5.94	0.00	0	0	0	100	0.00	0.0	4.793	0.001	0	0	0	0
PD.8020	PL.52388	A	10QA	7.14Y	119.1	0.00	5.94	0.00	0	0	0	100	0.00	0.0	4.793	0.001	0	0	0	0
PL.52389	PD.8020	A	6 A (CWC)	7.14Y	119.1	0.00	5.94	0.00	0	0	0	100	0.00	0.0	5.187	0.395	0	0	0	0
PL.52387	PL.52389	A	#1/0 ACSR	7.14Y	119.1	0.00	5.94	0.00	0	0	0	100	0.00	0.0	5.193	0.006	0	0	0	0
PL.52412	PL.52386	ABC	336 MCM AC	7.14Y	119.0	0.01	5.95	13.09	3	269	79	96	0.01	0.0	4.878	0.087	0	0	0	20
PL.61658	PL.52412	ABC	1/0 AL URD	7.14Y	119.0	0.00	5.95	12.36	7	254	74	96	0.01	0.0	4.888	0.010	0	0	0	18
PL.62307	PL.61658	C	1/0 AL URD	7.14Y	119.0	0.00	5.95	0.00	0	0	0	100	0.00	0.0	4.889	0.000	0	0	0	0
PL.62299	PL.61658	ABC	1/0 AL URD	7.14Y	119.0	0.04	5.99	12.36	7	254	74	96	0.09	0.0	5.055	0.167	0	0	0	18

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.62297	PL.62299	A	1/0 AL URD	7.14Y	119.0	0.02	6.01	15.05	9	103	30	96	0.01	0.0	5.089	0.034	11	3	1	7
PL.61646	PL.62297	A	1/0 AL URD	7.14Y	119.0	0.02	6.03	13.44	8	92	27	96	0.02	0.0	5.153	0.063	13	4	1	6
PL.63500	PL.61646	A	1/0 AL URD	7.14Y	118.9	0.02	6.05	11.56	7	79	23	96	0.01	0.0	5.227	0.074	39	12	2	5
PL.63498	PL.63500	A	1/0 AL URD	7.14Y	118.9	0.01	6.07	5.80	3	40	12	96	0.00	0.0	5.311	0.085	23	7	1	3
PL.63502	PL.63498	A	1/0 AL URD	7.14Y	118.9	0.00	6.07	2.44	1	17	5	96	0.00	0.0	5.361	0.050	17	5	2	2
PL.61489	PL.63502	A	1/0 AL URD	7.14Y	118.9	0.00	6.07	0.00	0	0	0	100	0.00	0.0	5.448	0.087	0	0	0	0
PL.61645	PL.61489	A	1/0 AL URD	7.14Y	118.9	0.00	6.07	0.00	0	0	0	100	0.00	0.0	5.576	0.128	0	0	0	0
PL.62300	PL.62299	B	1/0 AL URD	7.14Y	119.0	0.00	6.00	2.76	2	19	6	95	0.00	0.0	5.079	0.023	9	3	1	2
PL.62298	PL.62300	B	1/0 AL URD	7.14Y	119.0	0.00	6.00	1.41	1	10	3	96	0.00	0.0	5.183	0.104	0	0	0	1
PL.61491	PL.62298	B	1/0 AL URD	7.14Y	119.0	0.00	6.00	1.41	1	10	3	96	0.00	0.0	5.236	0.054	0	0	0	1
PL.63507	PL.61491	B	1/0 AL URD	7.14Y	119.0	0.00	6.00	1.41	1	10	3	96	0.00	0.0	5.286	0.050	0	0	0	1
PL.63508	PL.63507	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	1.41	1	10	3	96	0.00	0.0	5.379	0.093	0	0	0	1
PL.61647	PL.63508	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	1.41	1	10	3	96	0.00	0.0	5.437	0.058	0	0	0	1
PL.61648	PL.61647	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	1.41	1	10	3	96	0.00	0.0	5.481	0.044	0	0	0	1
PL.61649	PL.61648	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	1.41	1	10	3	96	0.00	0.0	5.499	0.019	0	0	0	1
PL.61650	PL.61649	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	1.41	1	10	3	96	0.00	0.0	5.565	0.065	0	0	0	1
PL.61651	PL.61650	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	1.41	1	10	3	96	0.00	0.0	5.601	0.036	10	3	1	1
PL.61652	PL.61651	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	0.00	0	0	0	100	0.00	0.0	5.693	0.092	0	0	0	0
PL.62301	PL.61652	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	0.00	0	0	0	100	0.00	0.0	5.741	0.048	0	0	0	0
PL.62302	PL.62301	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	0.00	0	0	0	100	0.00	0.0	5.794	0.053	0	0	0	0
PL.63509	PL.62302	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	0.00	0	0	0	100	0.00	0.0	5.847	0.053	0	0	0	0
PL.63510	PL.63509	B	1/0 AL URD	7.14Y	119.0	0.00	6.02	0.00	0	0	0	100	0.00	0.0	5.849	0.002	0	0	0	0
PL.61656	PL.61649	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.559	0.060	0	0	0	0
PL.61657	PL.61656	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.629	0.069	0	0	0	0
PL.61655	PL.61657	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.675	0.046	0	0	0	0
PL.61654	PL.61655	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.749	0.074	0	0	0	0
PL.61653	PL.61654	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.820	0.072	0	0	0	0
PL.62304	PL.61653	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.852	0.031	0	0	0	0
PL.62303	PL.62304	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.922	0.070	0	0	0	0
PL.62305	PL.62303	B	1/0 AL URD	7.14Y	119.0	0.00	6.01	0.00	0	0	0	100	0.00	0.0	5.955	0.033	0	0	0	0
PL.62306	PL.62299	C	1/0 AL URD	7.14Y	119.0	0.00	5.99	0.00	0	0	0	100	0.00	0.0	5.236	0.181	0	0	0	0

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.63501	PL.62299	A	1/0 AL URD	7.14Y	119.0	0.04	6.03	19.28	11	132	39	96	0.04	0.0	5.121	0.066	31	9	2	9
PL.63503	PL.63501	A	1/0 AL URD	7.14Y	118.9	0.04	6.07	14.74	9	101	29	96	0.03	0.0	5.223	0.102	31	9	2	7
PL.63504	PL.63503	A	1/0 AL URD	7.13Y	118.9	0.03	6.10	10.16	6	70	20	96	0.01	0.0	5.327	0.104	24	7	1	5
PL.63495	PL.63504	A	1/0 AL URD	7.13Y	118.9	0.04	6.13	6.61	4	45	13	96	0.01	0.0	5.496	0.169	0	0	0	4
PL.63496	PL.63495	A	1/0 AL URD	7.13Y	118.9	0.01	6.14	6.61	4	45	13	96	0.00	0.0	5.558	0.062	0	0	1	4
PL.63497	PL.63496	A	1/0 AL URD	7.13Y	118.8	0.01	6.15	6.56	4	45	13	96	0.00	0.0	5.600	0.042	0	0	0	3
PL.61644	PL.63497	A	1/0 AL URD	7.13Y	118.8	0.02	6.17	6.56	4	45	13	96	0.01	0.0	5.698	0.098	0	0	0	3
PL.61643	PL.61644	A	1/0 AL URD	7.13Y	118.8	0.01	6.18	6.56	4	45	13	96	0.00	0.0	5.748	0.050	0	0	0	3
PL.63494	PL.61643	A	1/0 AL URD	7.13Y	118.8	0.01	6.19	6.56	4	45	13	96	0.00	0.0	5.789	0.040	0	0	0	3
PL.63493	PL.63494	A	1/0 AL URD	7.13Y	118.8	0.01	6.20	6.56	4	45	13	96	0.00	0.0	5.850	0.062	0	0	0	3
PL.61642	PL.63493	A	1/0 AL URD	7.13Y	118.8	0.01	6.22	6.56	4	45	13	96	0.00	0.0	5.901	0.051	0	0	0	3
PL.61490	PL.61642	A	1/0 AL URD	7.13Y	118.8	0.01	6.23	6.56	4	45	13	96	0.00	0.0	5.963	0.062	0	0	0	3
PL.63506	PL.61490	A	1/0 AL URD	7.13Y	118.8	0.00	6.23	5.05	3	35	10	96	0.00	0.0	5.996	0.033	35	10	2	2
PL.63505	PL.61490	A	1/0 AL URD	7.13Y	118.8	0.00	6.23	1.51	1	10	3	96	0.00	0.0	6.059	0.096	10	3	1	1
PL.63499	PL.63505	A	1/0 AL URD	7.13Y	118.8	0.00	6.23	0.00	0	0	0	100	0.00	0.0	6.062	0.003	0	0	0	0
PL.64831	PL.52412	ABC	336 MCM AC	7.14Y	119.0	0.00	5.95	0.73	0	15	4	97	0.00	0.0	4.890	0.011	0	0	0	2
PL.64832	PL.64831	ABC	336 MCM AC	7.14Y	119.0	0.00	5.95	0.73	0	15	4	97	0.00	0.0	4.890	0.000	0	0	1	2
PL.64833	PL.64832	C	1/0 AL URD	7.14Y	119.0	0.01	5.96	2.18	1	15	4	97	0.00	0.0	4.967	0.077	0	0	0	1
PL.64834	PL.64833	C	1/0 AL URD	7.14Y	119.0	0.00	5.96	2.18	1	15	4	97	0.00	0.0	4.982	0.015	0	0	0	1
PL.64835	PL.64834	C	1/0 AL URD	7.14Y	119.0	0.00	5.96	2.18	1	15	4	97	0.00	0.0	5.017	0.036	0	0	0	1
PL.72564	PL.64835	C	1/0 AL URD	7.14Y	119.0	0.00	5.96	2.18	1	15	4	97	0.00	0.0	5.138	0.121	15	4	1	1
PL.52418	PL.52413	ABC	1/0 AL URD	7.15Y	119.2	0.00	5.78	16.60	10	342	100	96	0.00	0.0	3.575	0.003	0	0	0	33
PD.8021	PL.52418	ABC	60QA	7.15Y	119.2	0.00	5.78	16.60	28	342	100	96	0.00	0.0	3.575	0.003	0	0	0	33
PL.52419	PD.8021	ABC	1/0 AL URD	7.15Y	119.2	0.00	5.79	16.60	10	342	100	96	0.01	0.0	3.584	0.009	0	0	0	33
PL.52416	PL.52419	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	4.81	3	33	10	96	0.00	0.0	3.633	0.049	22	6	2	3
PL.52397	PL.52416	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	1.67	1	11	3	96	0.00	0.0	3.659	0.026	11	3	1	1
PL.52398	PL.52397	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	0.00	0	0	0	100	0.00	0.0	3.746	0.087	0	0	0	0
PL.52399	PL.52398	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	0.00	0	0	0	100	0.00	0.0	3.778	0.032	0	0	0	0
PL.52400	PL.52399	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	0.00	0	0	0	100	0.00	0.0	3.824	0.046	0	0	0	0
PL.52401	PL.52400	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	0.00	0	0	0	100	0.00	0.0	3.839	0.015	0	0	0	0
PL.52402	PL.52401	B	1/0 AL URD	7.15Y	119.2	0.00	5.79	0.00	0	0	0	100	0.00	0.0	3.907	0.068	0	0	0	0

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.52415	PL.52419	C	1/0 AL URD	7.15Y	119.2	0.00	5.79	2.63	2	18	5	96	0.00	0.0	3.627	0.044	18	5	2	2
PL.52417	PL.52419	A	1/0 AL URD	7.15Y	119.1	0.12	5.90	42.36	25	291	85	96	0.27	0.1	3.677	0.093	26	7	3	28
PL.52396	PL.52417	A	1/0 AL URD	7.14Y	119.0	0.06	5.97	38.62	23	265	77	96	0.14	0.1	3.729	0.052	0	0	0	25
PL.52403	PL.52396	A	1/0 AL URD	7.14Y	118.9	0.10	6.07	38.62	23	265	77	96	0.22	0.1	3.813	0.084	0	0	0	25
PL.52404	PL.52403	A	1/0 AL URD	7.13Y	118.9	0.04	6.11	38.62	23	265	77	96	0.09	0.0	3.847	0.034	0	0	0	25
PL.52406	PL.52404	A	1/0 AL URD	7.13Y	118.9	0.00	6.11	6.99	4	48	14	96	0.00	0.0	3.869	0.022	7	2	1	7
PL.63749	PL.52406	A	1/0 AL URD	7.13Y	118.9	0.01	6.12	5.90	3	40	12	96	0.00	0.0	3.919	0.049	15	4	2	6
PL.64372	PL.63749	A	1/0 AL URD	7.13Y	118.9	0.01	6.13	3.76	2	26	8	96	0.00	0.0	3.971	0.052	9	3	2	4
PL.64821	PL.64372	A	1/0 AL URD	7.13Y	118.9	0.01	6.13	2.44	1	17	5	96	0.00	0.0	4.048	0.077	0	0	0	2
PL.64822	PL.64821	A	1/0 AL URD	7.13Y	118.9	0.00	6.13	2.44	1	17	5	96	0.00	0.0	4.048	0.000	17	5	2	2
PL.64823	PL.64821	A	1/0 AL URD	7.13Y	118.9	0.00	6.13	0.00	0	0	0	100	0.00	0.0	4.158	0.110	0	0	0	0
PL.52409	PL.52404	A	1/0 AL URD	7.13Y	118.9	0.04	6.15	31.63	19	217	63	96	0.06	0.0	3.884	0.037	0	0	0	18
PL.52411	PL.52409	A	1/0 AL URD	7.13Y	118.9	0.00	6.15	0.00	0	0	0	100	0.00	0.0	3.887	0.003	0	0	0	0
PL.52408	PL.52409	A	6 A (CWC)	7.13Y	118.8	0.06	6.21	27.53	20	188	55	96	0.09	0.0	3.938	0.054	31	9	2	17
PL.63511	PL.52408	A	6 A (CWC)	7.12Y	118.7	0.06	6.27	22.95	16	157	46	96	0.08	0.0	4.001	0.063	13	4	2	15
PL.63735	PL.63511	A	6 A (CWC)	7.12Y	118.7	0.00	6.27	21.03	15	144	42	96	0.00	0.0	4.001	0.000	0	0	0	13
PL.63736	PL.63735	A	6 A (CWC)	7.12Y	118.7	0.04	6.31	21.03	15	144	42	96	0.04	0.0	4.040	0.040	14	4	1	13
PL.54339	PL.63736	A	#4 ACSR	7.12Y	118.7	0.03	6.34	14.84	11	101	30	96	0.02	0.0	4.097	0.056	26	8	2	10
PL.42849	PL.54339	A	#4 ACSR	7.12Y	118.6	0.01	6.35	3.23	2	22	6	96	0.00	0.0	4.184	0.088	8	2	1	3
PL.42850	PL.42849	A	#4 ACSR	7.12Y	118.6	0.00	6.35	2.01	2	14	4	96	0.00	0.0	4.241	0.057	14	4	2	2
PL.42848	PL.54339	A	#4 ACSR	7.12Y	118.7	0.01	6.35	4.05	3	28	8	96	0.00	0.0	4.164	0.068	16	5	2	3
PL.52405	PL.42848	A	#4 ACSR	7.12Y	118.6	0.00	6.35	1.64	1	11	3	96	0.00	0.0	4.227	0.063	11	3	1	1
PL.66153	PL.52405	A	#1/0 ACSR	7.12Y	118.6	0.00	6.35	0.00	0	0	0	100	0.00	0.0	4.243	0.016	0	0	0	0
PL.54335	PL.54339	A	#4 ACSR	7.12Y	118.7	0.01	6.35	3.72	3	25	7	96	0.00	0.0	4.183	0.086	25	7	2	2
PL.54338	PL.63736	A	#4 ACSR	7.12Y	118.7	0.01	6.32	4.11	3	28	8	96	0.00	0.0	4.080	0.040	0	0	0	2
PL.54336	PL.54338	A	#4 ACSR	7.12Y	118.7	0.00	6.32	1.66	1	11	3	96	0.00	0.0	4.116	0.036	11	3	1	1
PL.54337	PL.54338	A	#4 ACSR	7.12Y	118.7	0.00	6.32	2.44	2	17	5	96	0.00	0.0	4.119	0.039	17	5	1	1
PL.52407	PL.52409	A	#4 ACSR	7.13Y	118.8	0.00	6.15	4.09	3	28	8	96	0.00	0.0	3.931	0.047	28	8	1	1
PL.52410	PL.52404	A	1/0 AL URD	7.13Y	118.9	0.00	6.11	0.00	0	0	0	100	0.00	0.0	3.882	0.035	0	0	0	0
PL.41541	PL.43456	ABC	#3/0 ACSR	7.15Y	119.2	0.07	5.80	74.53	25	1534	454	96	0.70	0.0	3.455	0.077	37	11	3	149
PL.41275	PL.41541	ABC	#3/0 ACSR	7.15Y	119.1	0.06	5.86	71.37	24	1469	434	96	0.56	0.0	3.520	0.066	2	0	3	143

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.41276	PL.41275	A	#4 ACSR	7.15Y	119.1	0.00	5.86	5.11	4	35	10	96	0.00	0.0	3.526	0.006	0	0	0	4
PD.6424	PL.41276	A	60QA	7.15Y	119.1	0.00	5.86	5.11	9	35	10	96	0.00	0.0	3.526	0.006	0	0	0	4
PL.41840	PD.6424	A	#4 ACSR	7.15Y	119.1	0.01	5.87	5.11	4	35	10	96	0.00	0.0	3.561	0.035	4	1	1	4
PL.41841	PL.41840	A	#4 ACSR	7.15Y	119.1	0.01	5.88	4.57	4	31	9	96	0.00	0.0	3.704	0.143	31	9	3	3
PL.41842	PL.41275	ABC	#3/0 ACSR	7.14Y	119.1	0.09	5.95	69.59	23	1431	422	96	0.79	0.1	3.618	0.098	17	5	2	136
REG73	PL.41842	ABC	114.3 KVA	7.52Y	125.3	-6.27	-0.32	68.74	46	1413	416	96	percent Boost= 5.00 Tap= 8.0							134
PL.41843	REG73	ABC	#3/0 ACSR	7.52Y	125.3	0.05	-0.27	65.30	22	1413	416	96	0.46	0.0	3.682	0.064	0	0	0	134
PL.42859	PL.41843	ABC	#3/0 ACSR	7.51Y	125.2	0.06	-0.21	64.69	22	1399	411	96	0.50	0.0	3.754	0.072	14	4	1	133
PL.42860	PL.42859	ABC	#3/0 ACSR	7.51Y	125.1	0.08	-0.13	62.33	21	1348	396	96	0.66	0.0	3.855	0.101	0	0	0	129
PL.43464	PL.42860	ABC	#3/0 ACSR	7.51Y	125.1	0.03	-0.10	23.15	8	500	147	96	0.09	0.0	3.960	0.105	13	4	1	66
PL.43465	PL.43464	ABC	#3/0 ACSR	7.50Y	125.1	0.03	-0.07	22.56	8	487	143	96	0.08	0.0	4.049	0.089	0	0	0	65
PL.43466	PL.43465	C	6 A (CWC)	7.50Y	125.1	0.00	-0.07	2.03	1	15	4	97	0.00	0.0	4.055	0.006	0	0	0	1
PD.6704	PL.43466	C	20T	7.50Y	125.1	0.00	-0.07	2.03	0	15	4	97	0.00	0.0	4.055	0.006	0	0	0	1
PL.53436	PD.6704	C	6 A (CWC)	7.50Y	125.1	0.00	-0.07	2.03	1	15	4	97	0.00	0.0	4.088	0.034	15	4	1	1
PL.43463	PL.43465	ABC	#3/0 ACSR	7.50Y	125.1	0.01	-0.06	21.88	7	473	139	96	0.03	0.0	4.089	0.040	0	0	0	64
PL.43467	PL.43463	ABC	#3/0 ACSR	7.50Y	125.1	0.00	-0.06	21.88	7	473	139	96	0.00	0.0	4.095	0.006	0	0	0	64
PL.43047	PL.43467	ABC	#3/0 ACSR	7.50Y	125.0	0.02	-0.04	21.88	7	472	139	96	0.05	0.0	4.161	0.066	0	0	0	64
PL.43048	PL.43047	C	6 A (CWC)	7.50Y	125.0	0.00	-0.04	3.97	3	29	8	96	0.00	0.0	4.167	0.006	0	0	0	2
PD.6490	PL.43048	C	60QA	7.50Y	125.0	0.00	-0.04	3.97	7	29	8	96	0.00	0.0	4.167	0.006	0	0	0	2
PL.43049	PD.6490	C	6 A (CWC)	7.50Y	125.0	0.00	-0.03	3.97	3	29	8	96	0.00	0.0	4.209	0.042	29	8	2	2
PL.43050	PL.43047	ABC	#3/0 ACSR	7.50Y	125.0	0.04	0.00	20.55	7	444	131	96	0.12	0.0	4.324	0.163	0	0	0	62
PL.43051	PL.43050	ABC	#3/0 ACSR	7.50Y	124.9	0.05	0.06	20.24	7	437	128	96	0.14	0.0	4.528	0.205	0	0	0	60
PL.59262	PL.43051	ABC	#3/0 ACSR	7.50Y	124.9	0.00	0.06	0.19	0	4	1	97	0.00	0.0	4.619	0.090	4	1	1	1
PL.59263	PL.59262	ABC	#3/0 ACSR	7.50Y	124.9	0.00	0.06	0.00	0	0	0	100	0.00	0.0	4.639	0.021	0	0	0	0
PD.8755-A	PL.59263	ABC	Open	7.50Y	124.9	0.00	0.06	0.00	0	0	0	100	0.00	0.0	4.639	0.021	0	0	0	0
PL.41568	PL.43051	ABC	#3/0 ACSR	7.50Y	124.9	0.00	0.06	20.05	7	433	127	96	0.01	0.0	4.539	0.011	0	0	0	59
PL.43054	PL.41568	ABC	#3/0 ACSR	7.50Y	124.9	0.00	0.06	20.05	7	433	127	96	0.00	0.0	4.545	0.006	0	0	0	59
PD.6796	PL.43054	ABC	70L	7.50Y	124.9	0.00	0.06	20.05	29	433	127	96	0.00	0.0	4.545	0.006	0	0	0	59
PL.43055	PD.6796	ABC	#3/0 ACSR	7.49Y	124.9	0.04	0.10	20.05	7	433	127	96	0.11	0.0	4.713	0.169	0	0	0	59
PL.43056	PL.43055	C	6 A (CWC)	7.49Y	124.9	0.00	0.10	1.65	1	12	3	97	0.00	0.0	4.719	0.006	0	0	0	1
PD.6491	PL.43056	C	50QA	7.49Y	124.9	0.00	0.10	1.65	3	12	3	97	0.00	0.0	4.719	0.006	0	0	0	1

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54332	PD.6491	C	6 A (CWC)	7.49Y	124.9	0.00	0.11	1.65	1	12	3	97	0.00	0.0	4.761	0.042	12	3	1	1
PL.54333	PL.43055	C	#4 ACSR	7.49Y	124.9	0.01	0.12	8.34	6	60	18	96	0.01	0.0	4.754	0.041	7	2	1	7
PL.54334	PL.54333	C	#4 ACSR	7.49Y	124.9	0.02	0.14	7.31	6	53	15	96	0.01	0.0	4.831	0.077	21	6	2	6
PL.54346	PL.54334	C	#4 ACSR	7.49Y	124.9	0.01	0.15	1.98	2	14	4	96	0.00	0.0	4.947	0.115	0	0	0	2
PL.54347	PL.54346	C	#4 ACSR	7.49Y	124.8	0.00	0.15	1.98	2	14	4	96	0.00	0.0	4.995	0.048	4	1	1	2
PL.43057	PL.54347	C	#4 ACSR	7.49Y	124.8	0.00	0.16	1.47	1	11	3	96	0.00	0.0	5.068	0.073	0	0	0	1
PL.55796	PL.43057	C	#1/0 ACSR	7.49Y	124.8	0.00	0.16	1.47	1	11	3	96	0.00	0.0	5.096	0.028	11	3	1	1
PL.41569	PL.54334	C	#1/0 ACSR	7.49Y	124.9	0.00	0.14	2.35	1	17	5	96	0.00	0.0	4.872	0.040	8	2	1	2
PL.54331	PL.41569	C	#1/0 ACSR	7.49Y	124.9	0.00	0.14	1.28	1	9	3	95	0.00	0.0	4.890	0.019	9	3	1	1
PL.43058	PL.43055	ABC	#3/0 ACSR	7.49Y	124.9	0.02	0.13	16.72	6	361	106	96	0.05	0.0	4.819	0.106	0	0	0	51
PL.41685	PL.43058	A	#2 ACSR	7.49Y	124.9	0.00	0.13	1.64	1	12	3	97	0.00	0.0	4.876	0.057	12	3	1	1
PL.43059	PL.43058	ABC	#3/0 ACSR	7.49Y	124.9	0.02	0.15	16.17	5	349	102	96	0.05	0.0	4.925	0.106	13	4	1	50
PL.43060	PL.43059	ABC	#3/0 ACSR	7.49Y	124.8	0.02	0.17	15.56	5	336	98	96	0.05	0.0	5.038	0.113	2	1	1	49
PL.43061	PL.43060	A	6 A (CWC)	7.49Y	124.8	0.01	0.18	28.84	21	207	61	96	0.01	0.0	5.044	0.006	0	0	0	30
PD.6798	PL.43061	A	50L	7.49Y	124.8	0.00	0.18	28.84	58	207	61	96	0.00	0.0	5.044	0.006	0	0	0	30
PL.43063	PD.6798	A	6 A (CWC)	7.49Y	124.8	0.06	0.24	28.84	21	207	61	96	0.10	0.0	5.091	0.047	0	0	0	30
PL.41866	PL.43063	A	6 A (CWC)	7.49Y	124.8	0.01	0.25	3.24	2	23	7	96	0.00	0.0	5.177	0.086	23	7	2	2
PL.43064	PL.43063	A	6 A (CWC)	7.45Y	124.2	0.52	0.76	25.61	18	184	54	96	0.70	0.4	5.546	0.455	7	2	1	28
PL.43065	PL.43064	A	6 A (CWC)	7.45Y	124.1	0.10	0.87	24.59	18	176	51	96	0.13	0.1	5.643	0.097	16	5	1	27
PL.42987	PL.43065	A	6 A (CWC)	7.45Y	124.1	0.02	0.89	12.44	9	89	26	96	0.01	0.0	5.684	0.041	3	1	1	20
PL.42988	PL.42987	A	6 A (CWC)	7.44Y	124.0	0.07	0.97	11.98	9	86	25	96	0.05	0.1	5.817	0.133	0	0	0	19
PL.42862	PL.42988	A	6 A (CWC)	7.44Y	124.0	0.01	0.98	7.57	5	54	16	96	0.00	0.0	5.852	0.035	27	8	2	14
PL.55616	PL.42862	A	6 A (CWC)	7.44Y	124.0	0.01	0.98	3.86	3	28	8	96	0.00	0.0	5.904	0.051	0	0	0	12
PL.55617	PL.55616	A	#2 ACSR	7.44Y	124.0	0.00	0.99	3.18	2	23	7	96	0.00	0.0	5.933	0.029	23	7	8	8
PL.55618	PL.55616	A	6 A (CWC)	7.44Y	124.0	0.00	0.99	0.67	0	5	1	98	0.00	0.0	5.958	0.054	4	1	1	4
PL.55620	PL.55618	A	#1/0 ACSR	7.44Y	124.0	0.00	0.99	0.00	0	0	0	100	0.00	0.0	5.990	0.032	0	0	1	1
PL.55619	PL.55618	A	6 A (CWC)	7.44Y	124.0	0.00	0.99	0.07	0	0	0	100	0.00	0.0	6.013	0.055	0	0	2	2
PL.41501	PL.42988	A	6 A (CWC)	7.44Y	124.0	0.00	0.97	0.00	0	0	0	100	0.00	0.0	5.865	0.048	0	0	0	0
PL.59680	PL.41501	A	6 A (CWC)	7.44Y	124.0	0.00	0.97	0.00	0	0	0	100	0.00	0.0	5.875	0.009	0	0	0	0
PL.55490	PL.42988	A	6 A (CWC)	7.44Y	124.0	0.03	1.00	4.41	3	31	9	96	0.01	0.0	5.975	0.158	0	0	0	5
PL.55491	PL.55490	A	6 A (CWC)	7.44Y	124.0	0.02	1.02	4.41	3	31	9	96	0.00	0.0	6.098	0.123	11	3	1	5

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.55489	PL.55491	A	6 A (CWC)	7.44Y	124.0	0.01	1.03	2.90	2	21	6	96	0.00	0.0	6.157	0.059	0	0	0	4
PL.42861	PL.55489	A	6 A (CWC)	7.44Y	124.0	0.02	1.04	2.90	2	21	6	96	0.00	0.0	6.289	0.132	0	0	0	4
PL.55486	PL.42861	A	6 A (CWC)	7.44Y	124.0	0.01	1.05	2.90	2	21	6	96	0.00	0.0	6.356	0.067	15	5	2	4
PL.55487	PL.55486	A	#1/0 ACSR	7.44Y	123.9	0.00	1.05	0.73	0	5	2	93	0.00	0.0	6.501	0.146	4	1	1	2
PL.63529	PL.55487	A	#1/0 ACSR	7.44Y	123.9	0.00	1.05	0.18	0	1	0	100	0.00	0.0	6.663	0.162	1	0	1	1
PL.55488	PL.55489	A	#4 ACSR	7.44Y	124.0	0.00	1.03	0.00	0	0	0	100	0.00	0.0	6.220	0.063	0	0	0	0
PL.43066	PL.43065	A	#4 ACSR	7.45Y	124.1	0.01	0.88	9.91	8	71	21	96	0.01	0.0	5.676	0.032	8	2	1	6
PL.43067	PL.43066	A	#4 ACSR	7.44Y	124.1	0.03	0.92	8.81	7	63	18	96	0.02	0.0	5.762	0.087	0	0	0	5
PL.41310	PL.43067	A	#2 ACSR	7.44Y	124.1	0.00	0.92	1.76	1	13	4	96	0.00	0.0	5.841	0.079	13	4	1	1
PL.43068	PL.43067	A	#4 ACSR	7.44Y	124.1	0.02	0.93	7.04	5	50	15	96	0.01	0.0	5.816	0.054	7	2	1	4
PL.43069	PL.43068	A	#4 ACSR	7.44Y	124.0	0.02	0.95	6.08	5	43	13	96	0.00	0.0	5.894	0.078	17	5	1	3
PL.55935	PL.43069	A	#4 ACSR	7.44Y	124.0	0.01	0.96	3.70	3	26	8	96	0.00	0.0	5.981	0.087	0	0	0	2
PL.55936	PL.55935	A	#4 ACSR	7.44Y	124.0	0.01	0.97	3.70	3	26	8	96	0.00	0.0	6.032	0.051	16	5	1	2
PL.55938	PL.55936	A	#1/0 ACSR	7.44Y	124.0	0.00	0.97	1.41	1	10	3	96	0.00	0.0	6.099	0.067	10	3	1	1
PL.55937	PL.55936	A	#4 ACSR	7.44Y	124.0	0.00	0.97	0.00	0	0	0	100	0.00	0.0	6.098	0.066	0	0	0	0
PL.41292	PL.43060	A	6 A (CWC)	7.49Y	124.8	0.01	0.18	17.58	13	126	37	96	0.01	0.0	5.052	0.014	0	0	0	18
PL.43062	PL.41292	A	6 A (CWC)	7.49Y	124.8	0.00	0.19	17.58	13	126	37	96	0.00	0.0	5.058	0.006	0	0	0	18
PD.6799	PL.43062	A	50L	7.49Y	124.8	0.00	0.19	17.58	35	126	37	96	0.00	0.0	5.058	0.006	0	0	0	18
PL.60822	PD.6799	A	6 A (CWC)	7.48Y	124.7	0.06	0.25	17.58	13	126	37	96	0.06	0.0	5.137	0.079	0	0	0	18
PL.59987	PL.60822	A	6 A (CWC)	7.48Y	124.7	0.00	0.25	0.77	1	6	2	95	0.00	0.0	5.141	0.003	0	0	0	1
PD.9066	PL.59987	A	15T	7.48Y	124.7	0.00	0.25	0.77	0	6	2	95	0.00	0.0	5.141	0.003	0	0	0	1
PL.59988	PD.9066	A	6 A (CWC)	7.48Y	124.7	0.00	0.25	0.77	1	6	2	95	0.00	0.0	5.156	0.016	6	2	1	1
PL.60821	PL.60822	A	#2 ACSR	7.48Y	124.7	0.00	0.25	1.10	1	8	2	97	0.00	0.0	5.199	0.062	8	2	1	1
PL.60823	PL.60822	A	6 A (CWC)	7.48Y	124.7	0.03	0.28	15.71	11	113	33	96	0.02	0.0	5.173	0.036	2	0	1	16
PL.54345	PL.60823	A	6 A (CWC)	7.48Y	124.7	0.05	0.32	15.48	11	111	32	96	0.04	0.0	5.237	0.064	0	0	0	15
PL.42841	PL.54345	A	#4 ACSR	7.48Y	124.7	0.01	0.33	2.47	2	18	5	96	0.00	0.0	5.306	0.069	1	0	1	3
PL.54374	PL.42841	A	#4 ACSR	7.48Y	124.7	0.00	0.33	2.29	2	16	5	95	0.00	0.0	5.348	0.041	16	5	2	2
PL.63738	PL.54345	A	6 A (CWC)	7.47Y	124.6	0.10	0.42	13.00	9	93	27	96	0.07	0.1	5.398	0.161	0	0	0	12
PL.63739	PL.63738	A	6 A (CWC)	7.47Y	124.6	0.00	0.42	13.00	9	93	27	96	0.00	0.0	5.398	0.000	13	4	1	12
PL.42842	PL.63739	A	6 A (CWC)	7.47Y	124.5	0.07	0.49	11.18	8	80	23	96	0.04	0.1	5.543	0.145	0	0	0	11
PL.54106	PL.42842	A	6 A (CWC)	7.47Y	124.5	0.02	0.51	6.03	4	43	13	96	0.01	0.0	5.623	0.080	2	1	1	8

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54107	PL.54106	A	#2 ACSR	7.47Y	124.5	0.00	0.51	1.48	1	11	3	96	0.00	0.0	5.651	0.027	11	3	1	1
PL.60898	PL.54106	A	6 A (CWC)	7.47Y	124.5	0.00	0.52	4.22	3	30	9	96	0.00	0.0	5.644	0.021	0	0	0	6
PL.60899	PL.60898	A	6 A (CWC)	7.47Y	124.5	0.00	0.52	0.02	0	0	0	100	0.00	0.0	5.685	0.040	0	0	1	1
PL.63769	PL.60898	A	#1/0 ACSR	7.47Y	124.5	0.00	0.52	4.20	2	30	9	96	0.00	0.0	5.689	0.045	10	3	3	5
PL.63770	PL.63769	A	#1/0 ACSR	7.47Y	124.5	0.00	0.52	2.81	1	20	6	96	0.00	0.0	5.744	0.055	0	0	0	2
PL.63732	PL.63770	A	#1/0 ACSR	7.47Y	124.5	0.00	0.53	2.81	1	20	6	96	0.00	0.0	5.781	0.037	20	6	2	2
PL.63733	PL.63732	A	#1/0 ACSR	7.47Y	124.5	0.00	0.53	0.00	0	0	0	100	0.00	0.0	5.849	0.068	0	0	0	0
PL.41924	PL.42842	A	6 A (CWC)	7.47Y	124.5	0.03	0.52	5.15	4	37	11	96	0.01	0.0	5.701	0.158	14	4	1	3
PL.41735	PL.41924	A	#4 ACSR	7.47Y	124.5	0.00	0.52	1.38	1	10	3	96	0.00	0.0	5.788	0.088	10	3	1	1
PL.61845	PL.41924	A	6 A (CWC)	7.47Y	124.5	0.00	0.52	1.75	1	13	4	96	0.00	0.0	5.745	0.045	13	4	1	1
PL.61846	PL.61845	A	6 A (CWC)	7.47Y	124.5	0.00	0.52	0.00	0	0	0	100	0.00	0.0	5.827	0.081	0	0	0	0
PD.9325-B	PL.61846	A	Open	7.47Y	124.5	0.00	0.52	0.00	0	0	0	100	0.00	0.0	5.827	0.081	0	0	0	0
PL.63740	PL.63738	A	#1/0 ACSR	7.47Y	124.6	0.00	0.42	0.00	0	0	0	100	0.00	0.0	5.439	0.042	0	0	0	0
PL.43052	PL.43050	C	6 A (CWC)	7.50Y	125.0	0.00	0.00	0.95	1	7	2	96	0.00	0.0	4.330	0.006	0	0	0	2
PD.6701	PL.43052	C	60QA	7.50Y	125.0	0.00	0.00	0.95	2	7	2	96	0.00	0.0	4.330	0.006	0	0	0	2
PL.43053	PD.6701	C	6 A (CWC)	7.50Y	125.0	0.00	0.01	0.95	1	7	2	96	0.00	0.0	4.389	0.059	7	2	2	2
CP.61	PL.43467	ABC	Cap (300)	7.50Y	125.1	0.00	-0.06	0.00	0	0	0	100	0.00	0.0	4.095	0.059	0	0	0	0
PL.53437	PL.42860	ABC	#1/0 ACSR	7.51Y	125.1	0.01	-0.12	39.17	17	847	248	96	0.06	0.0	3.870	0.014	0	0	0	63
PL.53438	PL.53437	B	1/0 AL URD	7.51Y	125.1	0.00	-0.12	2.13	1	15	4	97	0.00	0.0	3.911	0.041	15	4	1	1
PL.60933	PL.53437	ABC	#1/0 ACSR	7.51Y	125.1	0.01	-0.11	38.46	17	831	243	96	0.05	0.0	3.883	0.013	0	0	0	62
PL.60931	PL.60933	ABC	#1/0 ACSR	7.51Y	125.1	0.01	-0.10	20.10	9	434	127	96	0.03	0.0	3.910	0.028	0	0	0	31
PL.60930	PL.60931	A	1/0 AL URD	7.51Y	125.1	0.01	-0.09	60.30	35	434	127	96	0.03	0.0	3.914	0.004	0	0	0	31
PD.9072	PL.60930	A	80T	7.51Y	125.1	0.00	-0.09	60.30	0	434	127	96	0.00	0.0	3.914	0.004	0	0	0	31
PL.60929	PD.9072	A	1/0 AL URD	7.50Y	125.0	0.07	-0.02	60.30	35	434	127	96	0.23	0.1	3.953	0.039	48	14	1	31
PL.53407	PL.60929	A	1/0 AL URD	7.50Y	125.0	0.04	0.02	53.68	32	386	113	96	0.13	0.0	3.981	0.027	44	13	2	30
PL.53206	PL.53407	A	1/0 AL URD	7.50Y	124.9	0.05	0.08	47.50	28	342	100	96	0.14	0.0	4.019	0.038	35	10	2	28
PL.53207	PL.53206	A	1/0 AL URD	7.49Y	124.9	0.06	0.14	42.66	25	307	90	96	0.14	0.0	4.065	0.046	23	7	2	26
PL.53428	PL.53207	A	1/0 AL URD	7.49Y	124.8	0.11	0.24	39.49	23	284	83	96	0.24	0.1	4.151	0.086	0	0	0	24
PL.53429	PL.53428	A	1/0 AL URD	7.48Y	124.6	0.11	0.35	37.31	22	268	78	96	0.23	0.1	4.244	0.093	0	0	0	23
PL.53369	PL.53429	A	1/0 AL URD	7.47Y	124.5	0.20	0.55	36.01	21	259	76	96	0.40	0.2	4.419	0.174	0	0	0	22
PL.53370	PL.53369	A	1/0 AL URD	7.46Y	124.3	0.15	0.70	30.54	18	219	64	96	0.26	0.1	4.578	0.159	0	0	0	18

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.53433	PL.53370	A	1/0 AL URD	7.46Y	124.3	0.00	0.70	1.89	1	14	4	96	0.00	0.0	4.616	0.038	14	4	2	2
PL.53432	PL.53370	A	1/0 AL URD	7.45Y	124.2	0.11	0.81	28.65	17	205	60	96	0.17	0.1	4.711	0.133	28	8	2	16
PL.53431	PL.53432	A	1/0 AL URD	7.45Y	124.1	0.05	0.87	24.75	15	177	52	96	0.07	0.0	4.784	0.073	13	4	2	14
PL.53209	PL.53431	A	1/0 AL URD	7.45Y	124.1	0.02	0.89	22.90	13	164	48	96	0.03	0.0	4.817	0.033	35	10	2	12
PL.53367	PL.53209	A	1/0 AL URD	7.45Y	124.1	0.01	0.90	18.00	11	129	38	96	0.01	0.0	4.833	0.017	0	0	0	10
PL.53373	PL.53367	A	1/0 AL URD	7.44Y	124.1	0.02	0.92	14.15	8	101	30	96	0.02	0.0	4.888	0.055	13	4	1	8
PL.53371	PL.53373	A	1/0 AL URD	7.44Y	124.1	0.03	0.95	9.70	6	69	20	96	0.01	0.0	4.978	0.090	0	0	0	6
PL.53375	PL.53371	A	1/0 AL URD	7.44Y	124.0	0.00	0.95	1.90	1	14	4	96	0.00	0.0	5.038	0.060	14	4	1	1
PL.53374	PL.53371	A	1/0 AL URD	7.44Y	124.0	0.00	0.95	1.95	1	14	4	96	0.00	0.0	5.005	0.026	14	4	1	1
PL.53372	PL.53371	A	1/0 AL URD	7.44Y	124.0	0.01	0.96	5.84	3	42	12	96	0.00	0.0	5.070	0.092	18	5	2	4
PL.53211	PL.53372	A	1/0 AL URD	7.44Y	124.0	0.00	0.97	3.36	2	24	7	96	0.00	0.0	5.150	0.080	24	7	2	2
PL.53213	PL.53211	A	1/0 AL URD	7.44Y	124.0	0.00	0.97	0.00	0	0	0	100	0.00	0.0	5.216	0.066	0	0	0	0
PL.53435	PL.53373	A	1/0 AL URD	7.44Y	124.1	0.00	0.92	2.64	2	19	6	95	0.00	0.0	4.913	0.025	19	6	1	1
PL.53368	PL.53367	A	1/0 AL URD	7.45Y	124.1	0.00	0.90	3.85	2	28	8	96	0.00	0.0	4.864	0.031	28	8	2	2
PL.53379	PL.53369	A	1/0 AL URD	7.47Y	124.4	0.00	0.55	1.29	1	9	3	95	0.00	0.0	4.441	0.023	9	3	1	1
PL.53376	PL.53369	A	1/0 AL URD	7.47Y	124.4	0.00	0.55	4.18	2	30	9	96	0.00	0.0	4.438	0.020	12	3	1	3
PL.64377	PL.53376	A	1/0 AL URD	7.47Y	124.4	0.00	0.55	2.57	2	18	5	96	0.00	0.0	4.499	0.061	18	5	2	2
PL.53208	PL.53429	A	1/0 AL URD	7.48Y	124.6	0.00	0.35	1.30	1	9	3	95	0.00	0.0	4.353	0.109	9	3	1	1
PL.53430	PL.53428	A	1/0 AL URD	7.49Y	124.8	0.00	0.25	2.18	1	16	5	95	0.00	0.0	4.226	0.075	16	5	1	1
PL.60937	PL.60931	A	#1/0 ACSR	7.51Y	125.1	0.00	-0.10	0.00	0	0	0	100	0.00	0.0	3.914	0.003	0	0	0	0
PL.60932	PL.60933	B	1/0 AL URD	7.51Y	125.1	0.00	-0.10	55.08	32	397	116	96	0.01	0.0	3.885	0.002	0	0	0	31
PD.8892	PL.60932	B	80T	7.51Y	125.1	0.00	-0.10	55.08	0	397	116	96	0.00	0.0	3.885	0.002	0	0	0	31
PL.59578	PD.8892	B	1/0 AL URD	7.50Y	125.0	0.09	-0.01	55.05	32	397	116	96	0.28	0.1	3.942	0.057	36	11	3	30
PL.53405	PL.59578	B	1/0 AL URD	7.50Y	125.0	0.06	0.05	49.99	29	360	105	96	0.15	0.0	3.977	0.035	0	0	0	27
PL.55844	PL.53405	B	1/0 AL URD	7.49Y	124.9	0.08	0.13	48.17	28	347	101	96	0.23	0.1	4.033	0.056	0	0	0	24
PL.55847	PL.55844	B	1/0 AL URD	7.48Y	124.7	0.13	0.26	45.39	27	326	95	96	0.34	0.1	4.126	0.093	0	0	0	22
PL.55849	PL.55847	B	1/0 AL URD	7.48Y	124.7	0.00	0.26	1.67	1	12	3	97	0.00	0.0	4.176	0.050	12	3	1	1
PL.55848	PL.55847	B	1/0 AL URD	7.48Y	124.7	0.01	0.27	43.72	26	314	92	96	0.03	0.0	4.135	0.009	0	0	0	21
PL.55845	PL.55848	B	1/0 AL URD	7.48Y	124.7	0.01	0.29	43.72	26	314	92	96	0.03	0.0	4.142	0.008	0	0	0	21
PL.53427	PL.55845	B	1/0 AL URD	7.48Y	124.7	0.00	0.29	43.72	26	314	92	96	0.00	0.0	4.143	0.000	16	5	1	21
PL.53426	PL.53427	B	1/0 AL URD	7.47Y	124.5	0.17	0.46	41.49	24	298	87	96	0.39	0.1	4.280	0.137	21	6	2	20

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.53215	PL.53426	B	1/0 AL URD	7.46Y	124.4	0.17	0.63	38.55	23	277	81	96	0.37	0.1	4.420	0.140	0	0	0	18
PL.53216	PL.53215	B	1/0 AL URD	7.46Y	124.4	0.00	0.63	0.00	0	0	0	100	0.00	0.0	4.431	0.012	0	0	0	0
PL.53440	PL.53215	B	1/0 AL URD	7.46Y	124.3	0.12	0.74	38.55	23	276	81	96	0.25	0.1	4.518	0.099	13	4	1	18
PL.53441	PL.53440	B	1/0 AL URD	7.45Y	124.2	0.06	0.81	36.72	22	263	77	96	0.13	0.0	4.573	0.054	0	0	0	17
PL.53442	PL.53441	B	1/0 AL URD	7.44Y	124.1	0.13	0.94	29.27	17	209	61	96	0.22	0.1	4.718	0.146	0	0	0	14
PL.53365	PL.53442	B	1/0 AL URD	7.44Y	124.0	0.03	0.97	21.40	13	153	45	96	0.03	0.0	4.760	0.042	0	0	0	11
PL.53364	PL.53365	B	1/0 AL URD	7.44Y	124.0	0.01	0.98	4.68	3	33	10	96	0.00	0.0	4.858	0.098	33	10	2	2
PL.53378	PL.53365	B	1/0 AL URD	7.44Y	124.0	0.00	0.97	5.20	3	37	11	96	0.00	0.0	4.778	0.018	37	11	2	2
PL.53366	PL.53365	B	1/0 AL URD	7.44Y	124.0	0.01	0.98	11.53	7	82	24	96	0.01	0.0	4.803	0.042	26	8	3	7
PL.53210	PL.53366	B	1/0 AL URD	7.44Y	124.0	0.00	0.99	7.87	5	56	16	96	0.00	0.0	4.822	0.019	18	5	1	4
PL.53212	PL.53210	B	1/0 AL URD	7.44Y	124.0	0.01	0.99	2.45	1	17	5	96	0.00	0.0	4.923	0.101	0	0	0	2
PL.53214	PL.53212	B	1/0 AL URD	7.44Y	124.0	0.00	0.99	0.00	0	0	0	100	0.00	0.0	4.927	0.005	0	0	0	0
PL.53380	PL.53212	B	1/0 AL URD	7.44Y	124.0	0.00	1.00	2.45	1	17	5	96	0.00	0.0	4.951	0.029	5	1	1	2
PL.53381	PL.53380	B	1/0 AL URD	7.44Y	124.0	0.00	1.00	1.74	1	12	4	95	0.00	0.0	4.997	0.045	12	4	1	1
PL.53377	PL.53210	B	1/0 AL URD	7.44Y	124.0	0.00	0.99	2.85	2	20	6	96	0.00	0.0	4.873	0.051	20	6	1	1
PL.53439	PL.53442	B	1/0 AL URD	7.44Y	124.1	0.00	0.94	1.26	1	9	3	95	0.00	0.0	4.775	0.057	9	3	1	1
PL.53434	PL.53442	B	1/0 AL URD	7.44Y	124.1	0.00	0.95	6.61	4	47	14	96	0.00	0.0	4.764	0.045	47	14	2	2
PL.53443	PL.53441	B	1/0 AL URD	7.45Y	124.2	0.01	0.82	7.45	4	53	16	96	0.00	0.0	4.616	0.044	13	4	1	3
PL.53446	PL.53443	B	1/0 AL URD	7.45Y	124.2	0.00	0.82	5.65	3	40	12	96	0.00	0.0	4.633	0.017	40	12	2	2
PL.55846	PL.55844	B	1/0 AL URD	7.49Y	124.9	0.00	0.13	2.79	2	20	6	96	0.00	0.0	4.082	0.049	20	6	2	2
PL.53406	PL.53405	B	1/0 AL URD	7.50Y	125.0	0.00	0.05	1.81	1	13	4	96	0.00	0.0	4.019	0.042	13	4	3	3
PL.59579	PD.8892	B	1/0 AL URD	7.51Y	125.1	0.00	-0.10	0.03	0	0	0	100	0.00	0.0	3.887	0.002	0	0	1	1
PL.60928	PL.42859	A	6 A (CWC)	7.51Y	125.2	0.00	-0.21	5.12	4	37	11	96	0.00	0.0	3.760	0.006	0	0	0	3
PD.9071	PL.60928	A	65T	7.51Y	125.2	0.00	-0.21	5.12	0	37	11	96	0.00	0.0	3.760	0.006	0	0	0	3
PL.60934	PD.9071	A	6 A (CWC)	7.51Y	125.2	0.00	-0.20	5.12	4	37	11	96	0.00	0.0	3.779	0.019	0	0	0	3
PL.60936	PL.60934	A	#1/0 ACSR	7.51Y	125.2	0.00	-0.20	0.00	0	0	0	100	0.00	0.0	3.833	0.054	0	0	0	0
PL.60935	PL.60934	A	6 A (CWC)	7.51Y	125.2	0.00	-0.20	5.12	4	37	11	96	0.00	0.0	3.798	0.019	25	7	2	3
PL.60927	PL.60935	A	#1/0 ACSR	7.51Y	125.2	0.00	-0.20	1.60	1	12	3	97	0.00	0.0	3.986	0.188	12	3	1	1
PL.42858	PL.41843	C	6 A (CWC)	7.52Y	125.3	0.00	-0.27	1.83	1	13	4	96	0.00	0.0	3.688	0.006	0	0	0	1
PD.6765	PL.42858	C	60QA	7.52Y	125.3	0.00	-0.27	1.83	3	13	4	96	0.00	0.0	3.688	0.006	0	0	0	1
PL.53363	PD.6765	C	6 A (CWC)	7.52Y	125.3	0.00	-0.26	1.83	1	13	4	96	0.00	0.0	3.780	0.092	13	4	1	1

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.41694	PL.41541	A	#4 ACSR	7.15Y	119.2	0.00	5.80	4.08	3	28	8	96	0.00	0.0	3.460	0.006	0	0	0	3
PD.6764	PL.41694	A	60QA	7.15Y	119.2	0.00	5.80	4.08	7	28	8	96	0.00	0.0	3.460	0.006	0	0	0	3
PL.41647	PD.6764	A	#4 ACSR	7.15Y	119.2	0.01	5.81	4.08	3	28	8	96	0.00	0.0	3.512	0.052	3	1	1	3
PL.41648	PL.41647	A	#4 ACSR	7.15Y	119.2	0.00	5.81	3.61	3	25	7	96	0.00	0.0	3.539	0.027	17	5	1	2
PL.41274	PL.41648	A	#4 ACSR	7.15Y	119.2	0.00	5.81	1.18	1	8	2	97	0.00	0.0	3.568	0.029	8	2	1	1
PL.43457	PL.43455	B	#4 ACSR	7.16Y	119.4	0.00	5.59	1.72	1	12	3	97	0.00	0.0	3.291	0.006	0	0	0	3
PD.6422	PL.43457	B	60QA	7.16Y	119.4	0.00	5.59	1.72	3	12	3	97	0.00	0.0	3.291	0.006	0	0	0	3
PL.42747	PD.6422	B	#4 ACSR	7.16Y	119.4	0.00	5.59	1.72	1	12	3	97	0.00	0.0	3.325	0.034	8	2	2	3
PL.54364	PL.42747	B	#4 ACSR	7.16Y	119.4	0.00	5.59	0.50	0	3	1	95	0.00	0.0	3.375	0.050	3	1	1	1
PL.43349	PL.53685	A	6 A (CWC)	7.18Y	119.7	0.00	5.33	9.54	7	66	19	96	0.00	0.0	3.129	0.006	0	0	0	8
PD.6509	PL.43349	A	60QA	7.18Y	119.7	0.00	5.33	9.54	16	66	19	96	0.00	0.0	3.129	0.006	0	0	0	8
PL.43379	PD.6509	A	6 A (CWC)	7.18Y	119.7	0.01	5.34	9.54	7	66	19	96	0.00	0.0	3.150	0.021	10	3	1	8
PL.43437	PL.43379	A	6 A (CWC)	7.18Y	119.6	0.05	5.39	8.12	6	56	16	96	0.02	0.0	3.277	0.127	0	0	0	7
PL.41845	PL.43437	A	#4 ACSR	7.18Y	119.6	0.00	5.39	2.05	2	14	4	96	0.00	0.0	3.329	0.052	14	4	2	2
PL.43438	PL.43437	A	6 A (CWC)	7.18Y	119.6	0.01	5.40	6.07	4	42	12	96	0.00	0.0	3.301	0.024	0	0	0	5
PL.41682	PL.43438	A	6 A (CWC)	7.18Y	119.6	0.00	5.40	1.07	1	7	2	96	0.00	0.0	3.372	0.070	7	2	1	1
PL.43451	PL.43438	A	6 A (CWC)	7.18Y	119.6	0.01	5.40	5.00	4	34	10	96	0.00	0.0	3.331	0.030	16	5	2	4
PL.43452	PL.43451	A	6 A (CWC)	7.18Y	119.6	0.00	5.41	2.70	2	19	5	97	0.00	0.0	3.376	0.044	8	2	1	2
PL.43453	PL.43452	A	6 A (CWC)	7.18Y	119.6	0.00	5.41	1.47	1	10	3	96	0.00	0.0	3.437	0.062	10	3	1	1
PL.53687	PL.53686	C	#1/0 ACSR	7.19Y	119.8	0.00	5.24	1.78	1	12	4	95	0.00	0.0	3.071	0.003	0	0	0	1
PD.8143	PL.53687	C	20QA	7.19Y	119.8	0.00	5.24	1.78	9	12	4	95	0.00	0.0	3.071	0.003	0	0	0	1
PL.53688	PD.8143	C	#1/0 ACSR	7.19Y	119.8	0.00	5.24	1.78	1	12	4	95	0.00	0.0	3.127	0.056	0	0	0	1
PL.53689	PL.53688	C	1/0 AL URD	7.19Y	119.8	0.00	5.24	1.78	1	12	4	95	0.00	0.0	3.176	0.049	12	4	1	1
PL.52984	PL.53390	A	#1/0 ACSR	7.19Y	119.9	0.00	5.11	1.77	1	12	4	95	0.00	0.0	3.001	0.003	0	0	0	1
PD.8099	PL.52984	A	20QA	7.19Y	119.9	0.00	5.11	1.77	9	12	4	95	0.00	0.0	3.001	0.003	0	0	0	1
PL.52985	PD.8099	A	#1/0 ACSR	7.19Y	119.9	0.00	5.12	1.77	1	12	4	95	0.00	0.0	3.107	0.106	12	4	1	1
PL.53312	PL.53315	C	6 A (CWC)	7.21Y	120.1	0.00	4.90	1.97	1	14	4	96	0.00	0.0	2.880	0.006	0	0	0	1
PD.6500	PL.53312	C	60QA	7.21Y	120.1	0.00	4.90	1.97	3	14	4	96	0.00	0.0	2.880	0.006	0	0	0	1
PL.53311	PD.6500	C	6 A (CWC)	7.21Y	120.1	0.00	4.90	1.97	1	14	4	96	0.00	0.0	2.917	0.036	14	4	1	1
PL.53313	PL.53315	A	#1/0 ACSR	7.21Y	120.1	0.00	4.90	2.00	1	14	4	96	0.00	0.0	2.880	0.006	0	0	0	1
PD.6497	PL.53313	A	40QA	7.21Y	120.1	0.00	4.90	2.00	5	14	4	96	0.00	0.0	2.880	0.006	0	0	0	1

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.53316	PD.6497	A	#1/0 ACSR	7.21Y	120.1	0.00	4.90	2.00	1	14	4	96	0.00	0.0	2.907	0.027	14	4	1	1
PL.53320	PL.59026	ABC	1/0 AL URD	7.22Y	120.3	0.00	4.68	4.97	3	103	30	96	0.00	0.0	2.688	0.002	0	0	0	8
PD.8094	PL.53320	ABC	40QA	7.22Y	120.3	0.00	4.68	4.97	12	103	30	96	0.00	0.0	2.688	0.002	0	0	0	8
PL.53321	PD.8094	ABC	1/0 AL URD	7.22Y	120.3	0.00	4.68	4.97	3	103	30	96	0.00	0.0	2.694	0.006	0	0	0	8
PL.53319	PL.53321	ABC	1/0 AL URD	7.22Y	120.3	0.01	4.69	4.97	3	103	30	96	0.01	0.0	2.778	0.083	28	8	3	8
PL.53325	PL.53319	ABC	1/0 AL URD	7.22Y	120.3	0.00	4.69	3.62	2	75	22	96	0.00	0.0	2.800	0.023	0	0	0	5
PL.53327	PL.53325	C	1/0 AL URD	7.22Y	120.3	0.01	4.70	10.86	6	75	22	96	0.01	0.0	2.833	0.033	24	7	1	5
PL.53328	PL.53327	C	1/0 AL URD	7.22Y	120.3	0.01	4.71	7.36	4	51	15	96	0.01	0.0	2.890	0.056	0	0	0	4
PL.53329	PL.53328	C	1/0 AL URD	7.22Y	120.3	0.01	4.72	7.36	4	51	15	96	0.00	0.0	2.935	0.045	0	0	0	4
PL.53330	PL.53329	C	1/0 AL URD	7.22Y	120.3	0.01	4.73	7.36	4	51	15	96	0.00	0.0	2.970	0.035	10	3	1	4
PL.53331	PL.53330	C	1/0 AL URD	7.22Y	120.3	0.01	4.74	5.96	4	41	12	96	0.00	0.0	3.012	0.041	0	0	0	3
PL.53332	PL.53331	C	1/0 AL URD	7.21Y	120.2	0.01	4.75	5.96	4	41	12	96	0.00	0.0	3.120	0.108	22	6	2	3
PL.53333	PL.53332	C	1/0 AL URD	7.21Y	120.2	0.00	4.76	2.84	2	20	6	96	0.00	0.0	3.199	0.079	20	6	1	1
PL.53326	PL.53325	ABC	1/0 AL URD	7.22Y	120.3	0.00	4.69	0.00	0	0	0	100	0.00	0.0	2.946	0.146	0	0	0	0
PL.53317	PL.53326	ABC	1/0 AL URD	7.22Y	120.3	0.00	4.69	0.00	0	0	0	100	0.00	0.0	2.954	0.008	0	0	0	0
PL.59025	PL.59030	ABC	336 MCM AC	7.22Y	120.4	0.00	4.60	5.54	1	115	34	96	0.00	0.0	2.709	0.088	0	0	0	14
PL.51808	PL.59025	ABC	336 MCM AC	7.22Y	120.4	0.00	4.60	0.65	0	13	4	96	0.00	0.0	2.746	0.037	13	4	1	1
PL.51809	PL.59025	ABC	336 MCM AC	7.22Y	120.4	0.00	4.61	4.89	1	102	30	96	0.00	0.0	2.773	0.064	12	3	1	13
PL.43734	PL.51809	ABC	336 MCM AC	7.22Y	120.4	0.01	4.61	4.32	1	90	26	96	0.00	0.0	2.955	0.183	1	0	1	12
PL.43564	PL.43734	ABC	336 MCM AC	7.22Y	120.4	0.00	4.61	4.28	1	89	26	96	0.00	0.0	3.027	0.071	0	0	0	11
PL.54120	PL.43564	ABC	#2 ACSR	7.22Y	120.4	0.00	4.62	2.37	1	49	14	96	0.00	0.0	3.055	0.028	7	2	1	6
PL.54121	PL.54120	C	#2 ACSR	7.22Y	120.4	0.00	4.62	4.08	2	28	8	96	0.00	0.0	3.061	0.006	0	0	0	4
PD.6738	PL.54121	C	40QA	7.22Y	120.4	0.00	4.62	4.08	10	28	8	96	0.00	0.0	3.061	0.006	0	0	0	4
PL.43563	PD.6738	C	#2 ACSR	7.22Y	120.4	0.00	4.62	4.08	2	28	8	96	0.00	0.0	3.128	0.067	28	8	4	4
PL.54122	PL.54120	ABC	#2 ACSR	7.22Y	120.4	0.00	4.62	0.65	0	13	4	96	0.00	0.0	3.253	0.198	13	4	1	1
PL.43733	PL.54122	ABC	#2 ACSR	7.22Y	120.4	0.00	4.62	0.00	0	0	0	100	0.00	0.0	3.284	0.031	0	0	0	0
PL.57364	PL.43564	ABC	336 MCM AC	7.22Y	120.4	0.00	4.61	0.18	0	4	1	97	0.00	0.0	3.067	0.041	4	1	1	1
PL.57368	PL.57364	ABC	336 MCM AC	7.22Y	120.4	0.00	4.61	0.00	0	0	0	100	0.00	0.0	3.135	0.067	0	0	0	0
PD.8356-B	PL.57368	ABC	Open	7.22Y	120.4	0.00	4.61	0.00	0	0	0	100	0.00	0.0	3.135	0.067	0	0	0	0
PL.43562	PL.43564	A	6 A (CWC)	7.22Y	120.4	0.00	4.62	5.19	4	36	10	96	0.00	0.0	3.033	0.006	0	0	0	4
PD.6499	PL.43562	A	60QA	7.22Y	120.4	0.00	4.62	5.19	9	36	10	96	0.00	0.0	3.033	0.006	0	0	0	4

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.43736	PD.6499	A	6 A (CWC)	7.22Y	120.4	0.02	4.63	5.19	4	36	10	96	0.00	0.0	3.118	0.085	16	5	2	4
PL.43737	PL.43736	A	6 A (CWC)	7.22Y	120.4	0.00	4.63	2.91	2	20	6	96	0.00	0.0	3.150	0.032	13	4	1	2
PL.43735	PL.43737	A	6 A (CWC)	7.22Y	120.4	0.00	4.64	1.10	1	8	2	97	0.00	0.0	3.237	0.088	8	2	1	1
PL.59028	PL.59027	C	#2 ACSR	7.25Y	120.8	0.00	4.24	1.54	1	11	3	96	0.00	0.0	2.335	0.003	0	0	0	1
PD.8696	PL.59028	C	20T	7.25Y	120.8	0.00	4.24	1.54	0	11	3	96	0.00	0.0	2.335	0.003	0	0	0	1
PL.58499	PD.8696	C	#2 ACSR	7.25Y	120.8	0.00	4.24	1.54	1	11	3	96	0.00	0.0	2.364	0.029	11	3	1	1
PL.59029	PL.59027	B	#4 ACSR	7.25Y	120.8	0.00	4.24	5.65	4	39	11	96	0.00	0.0	2.335	0.003	0	0	0	3
PD.8697	PL.59029	B	20T	7.25Y	120.8	0.00	4.24	5.65	0	39	11	96	0.00	0.0	2.335	0.003	0	0	0	3
PL.58500	PD.8697	B	#4 ACSR	7.25Y	120.8	0.01	4.25	5.65	4	39	11	96	0.00	0.0	2.381	0.046	0	0	0	3
PL.58498	PL.58500	B	1/0 AL URD	7.25Y	120.8	0.00	4.25	4.63	3	32	9	96	0.00	0.0	2.387	0.006	0	0	0	2
PD.6498	PL.58498	B	25QA	7.25Y	120.8	0.00	4.25	4.63	19	32	9	96	0.00	0.0	2.387	0.006	0	0	0	2
PL.43208	PD.6498	B	1/0 AL URD	7.24Y	120.7	0.00	4.25	4.63	3	32	9	96	0.00	0.0	2.428	0.041	32	9	2	2
PL.43207	PL.43208	B	1/0 AL URD	7.24Y	120.7	0.00	4.25	0.00	0	0	0	100	0.00	0.0	2.506	0.078	0	0	0	0
PL.58497	PL.58500	B	6 A (CWC)	7.24Y	120.7	0.00	4.25	1.03	1	7	2	96	0.00	0.0	2.515	0.134	7	2	1	1
PL.43200	PL.52991	B	6 A (CWC)	7.25Y	120.9	0.00	4.09	17.48	12	122	36	96	0.00	0.0	2.221	0.006	0	0	0	11
PD.6656	PL.43200	B	60QA	7.25Y	120.9	0.00	4.09	17.48	29	122	36	96	0.00	0.0	2.221	0.006	0	0	0	11
PL.43201	PD.6656	B	6 A (CWC)	7.25Y	120.9	0.04	4.13	17.48	12	122	36	96	0.04	0.0	2.272	0.052	12	4	2	11
PL.41839	PL.43201	B	6 A (CWC)	7.25Y	120.9	0.01	4.14	2.49	2	17	5	96	0.00	0.0	2.388	0.116	4	1	1	4
PL.43347	PL.41839	B	6 A (CWC)	7.25Y	120.9	0.01	4.15	1.92	1	13	4	96	0.00	0.0	2.499	0.111	3	1	1	3
PL.41700	PL.43347	B	#4 ACSR	7.25Y	120.9	0.00	4.15	1.47	1	10	3	96	0.00	0.0	2.539	0.040	10	3	1	1
PL.43348	PL.43347	B	6 A (CWC)	7.25Y	120.9	0.00	4.15	0.02	0	0	0	100	0.00	0.0	2.564	0.065	0	0	1	1
PL.43202	PL.43201	B	6 A (CWC)	7.25Y	120.8	0.03	4.15	13.25	9	92	27	96	0.02	0.0	2.315	0.043	0	0	1	5
PL.43203	PL.43202	B	6 A (CWC)	7.25Y	120.8	0.04	4.19	13.19	9	92	27	96	0.03	0.0	2.379	0.064	0	0	0	4
PL.43209	PL.43203	B	6 A (CWC)	7.25Y	120.8	0.00	4.19	0.00	0	0	0	100	0.00	0.0	2.443	0.064	0	0	0	0
PL.43210	PL.43209	B	#4 ACSR	7.25Y	120.8	0.00	4.19	0.00	0	0	0	100	0.00	0.0	2.470	0.026	0	0	0	0
PL.41884	PL.43203	B	#4 ACSR	7.25Y	120.8	0.03	4.23	13.19	10	92	27	96	0.02	0.0	2.449	0.070	30	9	1	4
PL.43204	PL.41884	B	1/0 AL URD	7.25Y	120.8	0.00	4.23	8.85	5	62	18	96	0.00	0.0	2.455	0.006	0	0	0	3
PD.6688	PL.43204	B	30QA	7.25Y	120.8	0.00	4.23	8.85	29	62	18	96	0.00	0.0	2.455	0.006	0	0	0	3
PL.43205	PD.6688	B	1/0 AL URD	7.25Y	120.8	0.01	4.24	8.85	5	62	18	96	0.00	0.0	2.525	0.070	62	18	3	3
PL.43206	PL.43205	B	1/0 AL URD	7.25Y	120.8	0.00	4.24	0.00	0	0	0	100	0.00	0.0	2.536	0.011	0	0	0	0
PL.52990	PL.52989	C	#4 ACSR	7.28Y	121.3	0.00	3.66	5.62	4	39	11	96	0.00	0.0	1.912	0.006	0	0	0	4

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PD.6776	PL.52990	C	60QA	7.28Y	121.3	0.00	3.66	5.62	9	39	11	96	0.00	0.0	1.912	0.006	0	0	0	4
PL.52988	PD.6776	C	#4 ACSR	7.28Y	121.3	0.01	3.66	5.62	4	39	11	96	0.00	0.0	1.982	0.069	39	11	4	4
PL.42715	PL.64455	C	6 A (CWC)	7.29Y	121.5	0.00	3.55	7.46	5	52	15	96	0.00	0.0	1.838	0.006	0	0	0	9
PD.6687	PL.42715	C	60QA	7.29Y	121.5	0.00	3.55	7.46	12	52	15	96	0.00	0.0	1.838	0.006	0	0	0	9
PL.64741	PD.6687	C	6 A (CWC)	7.29Y	121.4	0.01	3.56	7.46	5	52	15	96	0.00	0.0	1.860	0.021	3	1	1	9
PL.64742	PL.64741	C	6 A (CWC)	7.29Y	121.4	0.01	3.56	7.02	5	49	14	96	0.00	0.0	1.879	0.019	10	3	1	8
PL.52986	PL.64742	C	6 A (CWC)	7.29Y	121.4	0.01	3.57	5.56	4	39	11	96	0.00	0.0	1.913	0.034	14	4	2	7
PL.52987	PL.52986	C	6 A (CWC)	7.29Y	121.4	0.00	3.57	3.49	2	24	7	96	0.00	0.0	1.933	0.020	24	7	5	5
PL.42820	PL.42818	A	#2 ACSR	7.31Y	121.8	0.00	3.20	1.02	1	7	2	96	0.00	0.0	1.611	0.006	0	0	0	3
PD.6619	PL.42820	A	40QA	7.31Y	121.8	0.00	3.20	1.02	3	7	2	96	0.00	0.0	1.611	0.006	0	0	0	3
PL.42821	PD.6619	A	#2 ACSR	7.31Y	121.8	0.00	3.20	1.02	1	7	2	96	0.00	0.0	1.617	0.006	7	2	3	3
PL.41640	PL.42812	ABC	336 MCM AC	7.35Y	122.5	0.04	2.49	60.31	12	1276	377	96	0.25	0.0	1.220	0.081	0	0	0	152
PL.51934	PL.41640	B	#4/0 ACSR	7.35Y	122.5	0.00	2.49	3.06	1	22	6	96	0.00	0.0	1.240	0.020	22	6	2	2
PL.51935	PL.41640	ABC	336 MCM AC	7.35Y	122.5	0.03	2.52	59.29	11	1254	370	96	0.17	0.0	1.276	0.057	2	1	1	150
PL.51939	PL.51935	ABC	336 MCM AC	7.35Y	122.5	0.01	2.53	59.18	11	1251	369	96	0.08	0.0	1.304	0.027	0	0	0	149
PL.51940	PL.51939	A	6 A (CWC)	7.34Y	122.4	0.06	2.59	68.13	49	480	142	96	0.22	0.0	1.323	0.020	0	0	0	58
PL.51937	PL.51940	A	6 A (CWC)	7.34Y	122.4	0.01	2.60	68.13	49	480	142	96	0.02	0.0	1.326	0.002	0	0	0	58
PD.7958	PL.51937	A	100L	7.34Y	122.4	0.00	2.60	68.13	68	480	142	96	0.00	0.0	1.326	0.002	0	0	0	58
PL.51938	PD.7958	A	6 A (CWC)	7.34Y	122.3	0.13	2.73	68.13	49	480	142	96	0.45	0.1	1.367	0.041	14	4	1	58
PL.51936	PL.51938	A	#2 ACSR	7.34Y	122.3	0.00	2.73	2.18	1	15	4	97	0.00	0.0	1.410	0.043	15	4	2	2
PL.41925	PL.51938	A	6 A (CWC)	7.33Y	122.1	0.17	2.89	63.99	46	450	133	96	0.56	0.1	1.423	0.057	3	1	1	55
PL.63719	PL.41925	A	6 A (CWC)	7.31Y	121.8	0.26	3.16	63.61	45	447	132	96	0.87	0.2	1.514	0.091	10	3	1	54
PL.63720	PL.63719	A	6 A (CWC)	7.29Y	121.5	0.39	3.55	62.20	44	436	129	96	1.29	0.3	1.651	0.137	0	0	0	53
PL.63721	PL.63720	A	6 A (CWC)	7.26Y	121.0	0.46	4.01	58.93	42	412	121	96	1.45	0.4	1.823	0.171	0	0	0	50
PL.54379	PL.63721	A	6 A (CWC)	7.25Y	120.8	0.15	4.16	41.57	30	290	85	96	0.33	0.1	1.903	0.080	11	3	3	36
PL.54377	PL.54379	A	6 A (CWC)	7.24Y	120.7	0.17	4.34	40.03	29	279	82	96	0.36	0.1	1.999	0.096	11	3	1	33
PL.54300	PL.54377	A	6 A (CWC)	7.24Y	120.6	0.04	4.38	38.50	27	268	78	96	0.08	0.0	2.022	0.023	3	1	1	32
PL.54301	PL.54300	A	6 A (CWC)	7.23Y	120.4	0.20	4.58	38.14	27	265	77	96	0.41	0.2	2.139	0.116	0	0	0	31
PL.41926	PL.54301	A	#4 ACSR	7.22Y	120.4	0.02	4.60	12.83	10	89	26	96	0.01	0.0	2.174	0.035	14	4	2	17
PL.41861	PL.41926	A	#2 ACSR	7.22Y	120.4	0.00	4.60	0.03	0	0	0	100	0.00	0.0	2.219	0.045	0	0	0	1
PL.72567	PL.41861	A	#1/0 ACSR	7.22Y	120.4	0.00	4.60	0.03	0	0	0	100	0.00	0.0	2.293	0.074	0	0	1	1

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.41927	PL.41926	A	#4 ACSR	7.22Y	120.4	0.02	4.62	10.75	8	75	22	96	0.01	0.0	2.216	0.042	20	6	6	14
PL.41928	PL.41927	A	#4 ACSR	7.22Y	120.4	0.01	4.63	7.81	6	54	16	96	0.00	0.0	2.269	0.053	27	8	3	8
PL.43458	PL.41928	A	#4 ACSR	7.22Y	120.4	0.01	4.64	3.88	3	27	8	96	0.00	0.0	2.339	0.070	3	1	1	5
PL.43459	PL.43458	A	#4 ACSR	7.22Y	120.4	0.01	4.65	3.48	3	24	7	96	0.00	0.0	2.409	0.070	24	7	4	4
PL.43460	PL.54301	A	6 A (CWC)	7.22Y	120.4	0.03	4.62	21.46	15	149	43	96	0.04	0.0	2.175	0.037	12	3	1	12
PL.43461	PL.43460	A	6 A (CWC)	7.22Y	120.4	0.03	4.64	17.21	12	119	35	96	0.02	0.0	2.212	0.037	26	8	2	9
PL.41686	PL.43461	A	6 A (CWC)	7.22Y	120.4	0.01	4.65	4.23	3	29	9	96	0.00	0.0	2.268	0.057	29	9	1	1
PL.43462	PL.43461	A	6 A (CWC)	7.22Y	120.3	0.02	4.66	9.22	7	64	19	96	0.01	0.0	2.273	0.061	25	7	3	6
PL.54737	PL.43462	A	6 A (CWC)	7.22Y	120.3	0.01	4.67	5.59	4	39	11	96	0.00	0.0	2.322	0.049	27	8	2	3
PL.61665	PL.54737	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	1.70	1	12	3	97	0.00	0.0	2.404	0.082	0	0	0	1
PL.61683	PL.61665	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	1.70	1	12	3	97	0.00	0.0	2.494	0.090	0	0	0	1
PL.61684	PL.61683	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	1.70	1	12	3	97	0.00	0.0	2.539	0.045	12	3	1	1
PL.61682	PL.61684	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.546	0.007	0	0	0	0
PL.61678	PL.61665	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.466	0.062	0	0	0	0
PL.61679	PL.61678	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.541	0.075	0	0	0	0
PL.61680	PL.61679	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.588	0.047	0	0	0	0
PL.61681	PL.61680	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.685	0.096	0	0	0	0
PL.61666	PL.61665	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.448	0.044	0	0	0	0
PL.61667	PL.61666	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.516	0.068	0	0	0	0
PL.61668	PL.61667	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.581	0.065	0	0	0	0
PL.61669	PL.61668	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.633	0.051	0	0	0	0
PL.61670	PL.61669	A	1/0 AL URD	7.22Y	120.3	0.00	4.68	0.00	0	0	0	100	0.00	0.0	2.676	0.043	0	0	0	0
PL.54738	PL.54737	A	6 A (CWC)	7.22Y	120.3	0.00	4.67	0.00	0	0	0	100	0.00	0.0	2.325	0.003	0	0	0	0
PL.41705	PL.43460	A	6 A (CWC)	7.22Y	120.4	0.00	4.62	2.53	2	18	5	96	0.00	0.0	2.200	0.025	18	5	2	2
PL.41491	PL.54301	A	6 A (CWC)	7.22Y	120.4	0.00	4.58	3.85	3	27	8	96	0.00	0.0	2.165	0.026	27	8	2	2
PL.63246	PL.54377	A	6 A (CWC)	7.24Y	120.7	0.00	4.34	0.00	0	0	0	100	0.00	0.0	2.003	0.004	0	0	0	0
PL.54378	PL.63721	A	#4 ACSR	7.26Y	120.9	0.05	4.06	17.36	13	121	35	96	0.04	0.0	1.904	0.081	52	15	8	14
PL.54302	PL.54378	A	#4 ACSR	7.26Y	120.9	0.01	4.07	9.91	8	69	20	96	0.00	0.0	1.945	0.041	69	20	6	6
PL.63718	PL.63720	A	#2 ACSR	7.29Y	121.4	0.00	3.55	3.27	2	23	7	96	0.00	0.0	1.706	0.055	23	7	3	3
PL.51941	PL.51939	B	#1/0 ACSR	7.35Y	122.5	0.00	2.53	2.15	1	15	4	97	0.00	0.0	1.339	0.035	0	0	0	1
PD.7959	PL.51941	B	10QA	7.35Y	122.5	0.00	2.53	2.15	0	15	4	97	0.00	0.0	1.339	0.035	0	0	0	1

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.51942	PD.7959	B	#1/0 ACSR	7.35Y	122.5	0.00	2.53	2.15	1	15	4	97	0.00	0.0	1.341	0.002	15	4	1	1
PL.64517	PL.51939	ABC	#1/0 ACSR	7.35Y	122.5	0.00	2.53	35.75	16	756	222	96	0.00	0.0	1.304	0.000	0	0	0	90
PL.64518	PL.64517	ABC	#1/0 ACSR	7.35Y	122.5	0.01	2.54	35.75	16	756	222	96	0.04	0.0	1.315	0.011	0	0	0	90
PL.51990	PL.64518	ABC	#1/0 ACSR	7.35Y	122.5	0.00	2.54	35.75	16	756	222	96	0.00	0.0	1.315	0.001	0	0	0	90
PD.8001	PL.51990	ABC	50L	7.35Y	122.5	0.00	2.54	35.75	72	756	222	96	0.00	0.0	1.315	0.001	0	0	0	90
PL.54074	PD.8001	ABC	#1/0 ACSR	7.35Y	122.4	0.03	2.57	35.75	16	756	222	96	0.13	0.0	1.355	0.040	15	4	1	90
PL.54075	PL.54074	ABC	#1/0 ACSR	7.34Y	122.4	0.02	2.59	35.04	15	741	218	96	0.12	0.0	1.392	0.037	0	0	0	89
PL.51946	PL.54075	A	#4 ACSR	7.34Y	122.4	0.00	2.59	2.27	2	16	5	95	0.00	0.0	1.405	0.013	16	5	3	3
PL.51947	PL.54075	ABC	#1/0 ACSR	7.34Y	122.4	0.06	2.65	34.29	15	725	213	96	0.30	0.0	1.489	0.096	0	0	0	86
PL.51943	PL.51947	A	6 A (CWC)	7.34Y	122.3	0.00	2.65	1.74	1	12	4	95	0.00	0.0	1.520	0.031	12	4	1	1
PL.51948	PL.51947	ABC	#1/0 ACSR	7.33Y	122.2	0.14	2.79	32.87	14	694	204	96	0.66	0.1	1.719	0.230	0	0	0	84
PL.42989	PL.51948	C	#2 ACSR	7.33Y	122.2	0.05	2.84	13.92	8	98	29	96	0.03	0.0	1.860	0.141	32	9	5	17
PL.42990	PL.42989	C	#2 ACSR	7.33Y	122.2	0.01	2.84	9.32	5	66	19	96	0.00	0.0	1.882	0.022	31	9	4	12
PL.42991	PL.42990	C	#2 ACSR	7.33Y	122.2	0.00	2.85	4.87	3	34	10	96	0.00	0.0	1.904	0.022	34	10	8	8
PL.62996	PL.42991	C	#1/0 ACSR	7.33Y	122.2	0.00	2.85	0.00	0	0	0	100	0.00	0.0	1.944	0.039	0	0	0	0
PL.62997	PL.62996	C	#1/0 ACSR	7.33Y	122.2	0.00	2.85	0.00	0	0	0	100	0.00	0.0	1.977	0.034	0	0	0	0
PL.61838	PL.51948	ABC	#1/0 ACSR	7.33Y	122.2	0.01	2.80	28.23	12	596	175	96	0.06	0.0	1.747	0.028	0	0	0	67
PL.61839	PL.61838	A	6 A (CWC)	7.33Y	122.2	0.00	2.80	3.39	2	24	7	96	0.00	0.0	1.749	0.001	0	0	0	7
PD.7996	PL.61839	A	25T	7.33Y	122.2	0.00	2.80	3.39	0	24	7	96	0.00	0.0	1.749	0.001	0	0	0	7
PL.52019	PD.7996	A	6 A (CWC)	7.33Y	122.2	0.00	2.80	3.39	2	24	7	96	0.00	0.0	1.776	0.027	8	2	5	7
PL.52018	PL.52019	A	6 A (CWC)	7.33Y	122.2	0.01	2.82	2.24	2	16	5	95	0.00	0.0	1.876	0.100	0	0	1	2
PL.51949	PL.52018	A	6 A (CWC)	7.33Y	122.2	0.00	2.82	2.18	2	15	4	97	0.00	0.0	1.926	0.050	15	4	1	1
PL.61840	PL.61838	C	#4 ACSR	7.33Y	122.2	0.00	2.80	5.46	4	38	11	96	0.00	0.0	1.749	0.001	0	0	0	5
PD.9322	PL.61840	C	25T	7.33Y	122.2	0.00	2.80	5.46	0	38	11	96	0.00	0.0	1.749	0.001	0	0	0	5
PL.64287	PD.9322	C	#4 ACSR	7.33Y	122.1	0.10	2.90	5.46	4	38	11	96	0.03	0.1	2.147	0.399	0	0	0	5
PL.64289	PL.64287	C	#4 ACSR	7.33Y	122.1	0.01	2.91	2.41	2	17	5	96	0.00	0.0	2.239	0.091	0	0	0	1
PL.41752	PL.64289	C	#4 ACSR	7.33Y	122.1	0.00	2.91	0.00	0	0	0	100	0.00	0.0	2.340	0.101	0	0	0	0
PL.43259	PL.64289	C	#4 ACSR	7.33Y	122.1	0.00	2.91	2.41	2	17	5	96	0.00	0.0	2.265	0.027	17	5	1	1
PL.64288	PL.64287	C	#4 ACSR	7.33Y	122.1	0.01	2.91	3.05	2	21	6	96	0.00	0.0	2.257	0.110	0	0	1	4
PL.41581	PL.64288	C	1/0 AL URD	7.33Y	122.1	0.00	2.92	3.05	2	21	6	96	0.00	0.0	2.298	0.041	21	6	3	3
PL.64746	PL.61838	ABC	#1/0 ACSR	7.33Y	122.2	0.02	2.82	25.28	11	533	156	96	0.07	0.0	1.788	0.041	0	0	0	55

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Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.64747	PL.64746	A	#4 ACSR	7.33Y	122.2	0.00	2.82	1.39	1	10	3	96	0.00	0.0	1.789	0.001	0	0	0	1
PD.8048	PL.64747	A	20QA	7.33Y	122.2	0.00	2.82	1.39	7	10	3	96	0.00	0.0	1.789	0.001	0	0	0	1
PL.51556	PD.8048	A	#4 ACSR	7.33Y	122.2	0.00	2.82	1.39	1	10	3	96	0.00	0.0	1.808	0.019	10	3	1	1
PL.64748	PL.64746	ABC	#1/0 ACSR	7.33Y	122.1	0.07	2.88	24.81	11	524	154	96	0.24	0.0	1.932	0.144	0	0	0	54
PL.41396	PL.64748	C	#2 ACSR	7.33Y	122.1	0.00	2.88	0.04	0	0	0	100	0.00	0.0	2.002	0.070	0	0	1	1
PL.62976	PL.64748	ABC	#1/0 ACSR	7.33Y	122.1	0.02	2.91	24.35	11	514	150	96	0.08	0.0	1.983	0.050	0	0	0	52
PL.63512	PL.62976	ABC	#1/0 ACSR	7.32Y	122.1	0.04	2.94	24.35	11	514	150	96	0.13	0.0	2.066	0.083	0	0	0	52
PL.63513	PL.63512	ABC	#1/0 ACSR	7.32Y	122.0	0.02	2.96	24.08	10	508	149	96	0.07	0.0	2.113	0.048	0	0	0	51
PL.62980	PL.63513	ABC	#1/0 ACSR	7.32Y	122.0	0.04	3.00	22.91	10	483	141	96	0.13	0.0	2.207	0.094	15	4	1	49
PL.60894	PL.62980	B	#1/0 ACSR	7.32Y	122.0	0.00	3.00	0.34	0	2	1	89	0.00	0.0	2.210	0.003	0	0	0	1
PD.9067	PL.60894	B	15T	7.32Y	122.0	0.00	3.00	0.34	0	2	1	89	0.00	0.0	2.210	0.003	0	0	0	1
PL.60895	PD.9067	B	#1/0 ACSR	7.32Y	122.0	0.00	3.00	0.34	0	2	1	89	0.00	0.0	2.246	0.036	2	1	1	1
PL.61841	PL.62980	ABC	#1/0 ACSR	7.32Y	122.0	0.02	3.02	20.86	9	440	129	96	0.05	0.0	2.251	0.044	13	4	1	45
PL.61844	PL.61841	ABC	#1/0 ACSR	7.32Y	122.0	0.02	3.04	19.16	8	404	118	96	0.06	0.0	2.309	0.057	0	0	0	41
PL.62349	PL.61844	A	6 A (CWC)	7.32Y	122.0	0.00	3.04	19.29	14	135	40	96	0.00	0.0	2.310	0.001	0	0	0	14
PD.9326	PL.62349	A	40QA	7.32Y	122.0	0.00	3.04	19.29	48	135	40	96	0.00	0.0	2.310	0.001	0	0	0	14
PL.62350	PD.9326	A	6 A (CWC)	7.31Y	121.9	0.06	3.10	19.29	14	135	40	96	0.06	0.0	2.381	0.071	1	0	1	14
PL.62325	PL.62350	A	#2 ACSR	7.31Y	121.9	0.00	3.11	2.00	1	14	4	96	0.00	0.0	2.447	0.066	14	4	1	1
PL.62348	PL.62350	A	6 A (CWC)	7.31Y	121.8	0.13	3.23	15.49	11	109	32	96	0.10	0.1	2.578	0.197	16	5	2	11
PL.54330	PL.62348	A	6 A (CWC)	7.30Y	121.7	0.04	3.28	13.15	9	92	27	96	0.03	0.0	2.651	0.073	0	0	0	9
PL.57621	PL.54330	A	#4 ACSR	7.30Y	121.7	0.01	3.28	8.36	6	59	17	96	0.00	0.0	2.670	0.019	16	5	1	5
PL.57622	PL.57621	A	6 A (CWC)	7.30Y	121.7	0.02	3.30	6.10	4	43	12	96	0.01	0.0	2.770	0.100	22	6	2	4
PL.54372	PL.57622	A	6 A (CWC)	7.30Y	121.7	0.00	3.31	2.92	2	20	6	96	0.00	0.0	2.799	0.030	8	2	1	2
PL.54373	PL.54372	A	6 A (CWC)	7.30Y	121.7	0.00	3.31	1.72	1	12	4	95	0.00	0.0	2.831	0.032	12	4	1	1
PL.54371	PL.54330	A	#1/0 ACSR	7.30Y	121.7	0.00	3.28	3.35	1	23	7	96	0.00	0.0	2.703	0.052	23	7	2	2
PL.62351	PL.54330	A	6 A (CWC)	7.30Y	121.7	0.00	3.28	1.44	1	10	3	96	0.00	0.0	2.746	0.096	10	3	2	2
PL.54329	PL.62348	A	6 A (CWC)	7.31Y	121.8	0.00	3.23	0.00	0	0	0	100	0.00	0.0	2.606	0.029	0	0	0	0
PD.9325-A	PL.54329	A	Open	7.31Y	121.8	0.00	3.23	0.00	0	0	0	100	0.00	0.0	2.606	0.029	0	0	0	0
PL.62347	PL.62350	A	#4 ACSR	7.31Y	121.9	0.00	3.11	1.71	1	12	3	97	0.00	0.0	2.423	0.042	12	3	1	1
PL.61842	PL.61844	C	6 A (CWC)	7.32Y	122.0	0.00	3.04	5.98	4	42	12	96	0.00	0.0	2.310	0.001	0	0	0	6
PD.9324	PL.61842	C	40QA	7.32Y	122.0	0.00	3.04	5.98	15	42	12	96	0.00	0.0	2.310	0.001	0	0	0	6

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.62978	PD.9324	C	6 A (CWC)	7.32Y	121.9	0.03	3.07	5.98	4	42	12	96	0.01	0.0	2.408	0.099	0	0	1	6
PL.63492	PL.62978	C	6 A (CWC)	7.32Y	121.9	0.01	3.08	5.96	4	42	12	96	0.00	0.0	2.450	0.042	0	0	0	5
PL.60856	PL.63492	C	6 A (CWC)	7.31Y	121.9	0.02	3.10	5.96	4	42	12	96	0.01	0.0	2.530	0.080	0	0	0	5
PL.54084	PL.60856	C	6 A (CWC)	7.31Y	121.9	0.01	3.11	4.29	3	30	9	96	0.00	0.0	2.613	0.083	30	9	3	3
PL.54311	PL.60856	C	6 A (CWC)	7.31Y	121.9	0.00	3.10	1.67	1	12	3	97	0.00	0.0	2.635	0.105	12	3	2	2
PL.61843	PL.61844	B	6 A (CWC)	7.31Y	121.8	0.17	3.21	32.21	23	226	66	96	0.28	0.1	2.422	0.113	0	0	0	21
PL.62295	PL.61843	B	6 A (CWC)	7.30Y	121.7	0.13	3.34	26.43	19	185	54	96	0.18	0.1	2.529	0.108	0	0	0	19
PL.52184	PL.62295	B	6 A (CWC)	7.29Y	121.6	0.08	3.42	18.47	13	129	38	96	0.07	0.1	2.629	0.100	15	4	2	13
PL.42557	PL.52184	B	6 A (CWC)	7.29Y	121.5	0.08	3.49	16.36	12	115	33	96	0.07	0.1	2.731	0.103	0	0	0	11
PL.54304	PL.42557	B	6 A (CWC)	7.29Y	121.5	0.00	3.50	16.36	12	115	33	96	0.00	0.0	2.735	0.004	9	3	1	11
PL.54305	PL.54304	B	6 A (CWC)	7.29Y	121.5	0.02	3.52	7.64	5	53	16	96	0.01	0.0	2.790	0.055	8	2	2	6
PL.54306	PL.54305	B	6 A (CWC)	7.29Y	121.5	0.01	3.53	6.51	5	46	13	96	0.00	0.0	2.832	0.042	16	5	2	4
PL.57727	PL.54306	B	6 A (CWC)	7.29Y	121.5	0.00	3.53	3.09	2	22	6	96	0.00	0.0	2.884	0.051	22	6	1	1
PL.63734	PL.54306	B	#1/0 ACSR	7.29Y	121.5	0.00	3.53	1.15	0	8	2	97	0.00	0.0	2.849	0.017	8	2	1	1
PL.54307	PL.54304	B	6 A (CWC)	7.29Y	121.5	0.04	3.53	7.49	5	52	15	96	0.01	0.0	2.860	0.125	17	5	1	4
PL.54308	PL.54307	B	6 A (CWC)	7.29Y	121.5	0.01	3.54	5.03	4	35	10	96	0.00	0.0	2.890	0.031	18	5	1	3
PL.52185	PL.54308	B	6 A (CWC)	7.29Y	121.5	0.00	3.54	1.13	1	8	2	97	0.00	0.0	2.949	0.059	8	2	1	1
PL.54317	PL.54308	B	6 A (CWC)	7.29Y	121.5	0.00	3.54	1.31	1	9	3	95	0.00	0.0	2.957	0.067	9	3	1	1
PL.54318	PL.54317	B	6 A (CWC)	7.29Y	121.5	0.00	3.54	0.00	0	0	0	100	0.00	0.0	2.986	0.028	0	0	0	0
PL.54309	PL.54307	B	#1/0 ACSR	7.29Y	121.5	0.00	3.53	0.00	0	0	0	100	0.00	0.0	2.959	0.099	0	0	0	0
PL.41704	PL.52184	B	#4 ACSR	7.29Y	121.6	0.00	3.42	0.00	0	0	0	100	0.00	0.0	2.698	0.069	0	0	0	0
PL.57478	PL.62295	B	6 A (CWC)	7.30Y	121.6	0.02	3.36	7.96	6	56	16	96	0.01	0.0	2.589	0.060	22	6	2	6
PL.57477	PL.57478	B	6 A (CWC)	7.30Y	121.6	0.05	3.40	4.88	3	34	10	96	0.01	0.0	2.805	0.215	0	0	0	4
PL.52186	PL.57477	B	6 A (CWC)	7.30Y	121.6	0.00	3.40	0.91	1	6	2	95	0.00	0.0	2.858	0.053	6	2	1	1
PL.42556	PL.57477	B	6 A (CWC)	7.30Y	121.6	0.01	3.41	3.97	3	28	8	96	0.00	0.0	2.870	0.065	3	1	1	3
PL.55890	PL.42556	B	6 A (CWC)	7.29Y	121.6	0.01	3.42	3.56	3	25	7	96	0.00	0.0	2.958	0.088	16	5	1	2
PL.55891	PL.55890	B	#1/0 ACSR	7.29Y	121.6	0.00	3.43	1.28	1	9	3	95	0.00	0.0	3.027	0.070	9	3	1	1
PL.62296	PL.61843	B	6 A (CWC)	7.31Y	121.8	0.01	3.22	5.78	4	41	12	96	0.00	0.0	2.482	0.060	24	7	1	2
PL.54363	PL.62296	B	6 A (CWC)	7.31Y	121.8	0.00	3.22	2.39	2	17	5	96	0.00	0.0	2.551	0.069	17	5	1	1
PL.63516	PL.61841	B	1/0 AL URD	7.32Y	122.0	0.00	3.02	3.23	2	23	7	96	0.00	0.0	2.271	0.020	23	7	3	3
PL.54522	PL.62980	B	1/0 AL URD	7.32Y	122.0	0.01	3.01	3.75	2	26	8	96	0.00	0.0	2.275	0.068	15	4	1	2

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.63525	PL.54522	B	1/0 AL URD	7.32Y	122.0	0.00	3.01	1.67	1	12	3	97	0.00	0.0	2.365	0.090	12	3	1	1
PL.62979	PL.63513	A	#4 ACSR	7.32Y	122.0	0.01	2.97	3.51	3	25	7	96	0.00	0.0	2.168	0.055	0	0	0	2
PD.9320	PL.62979	A	10QA	7.32Y	122.0	0.00	2.97	3.51	0	25	7	96	0.00	0.0	2.168	0.055	0	0	0	2
PL.61831	PD.9320	A	#4 ACSR	7.32Y	122.0	0.00	2.98	3.51	3	25	7	96	0.00	0.0	2.221	0.053	25	7	2	2
PL.63514	PL.63512	A	#1/0 ACSR	7.32Y	122.1	0.00	2.94	0.80	0	6	2	95	0.00	0.0	2.069	0.004	0	0	0	1
PD.9477	PL.63514	A	10T	7.32Y	122.1	0.00	2.94	0.80	0	6	2	95	0.00	0.0	2.069	0.004	0	0	0	1
PL.63515	PD.9477	A	#1/0 ACSR	7.32Y	122.1	0.00	2.94	0.80	0	6	2	95	0.00	0.0	2.109	0.039	6	2	1	1
PL.62977	PL.62976	C	#2 ACSR	7.33Y	122.1	0.00	2.91	0.00	0	0	0	100	0.00	0.0	1.984	0.001	0	0	0	0
PD.7997	PL.62977	C	10QA	7.33Y	122.1	0.00	2.91	0.00	0	0	0	100	0.00	0.0	1.984	0.001	0	0	0	0
PL.52020	PD.7997	C	#2 ACSR	7.33Y	122.1	0.00	2.91	0.00	0	0	0	100	0.00	0.0	2.023	0.039	0	0	0	0
PL.64749	PL.64748	C	#1/0 ACSR	7.33Y	122.1	0.00	2.89	1.35	1	9	3	95	0.00	0.0	1.936	0.004	0	0	0	1
PD.9556	PL.64749	C	25T	7.33Y	122.1	0.00	2.89	1.35	0	9	3	95	0.00	0.0	1.936	0.004	0	0	0	1
PL.64750	PD.9556	C	#1/0 ACSR	7.33Y	122.1	0.00	2.89	1.35	1	9	3	95	0.00	0.0	1.992	0.056	0	0	0	1
PL.64751	PL.64750	C	#1/0 ACSR	7.33Y	122.1	0.00	2.89	1.35	1	9	3	95	0.00	0.0	2.046	0.054	9	3	1	1
PL.51944	PL.51947	C	6 A (CWC)	7.34Y	122.4	0.00	2.65	2.52	2	18	5	96	0.00	0.0	1.491	0.002	0	0	0	1
PD.7960	PL.51944	C	20QA	7.34Y	122.4	0.00	2.65	2.52	13	18	5	96	0.00	0.0	1.491	0.002	0	0	0	1
PL.51945	PD.7960	C	6 A (CWC)	7.34Y	122.3	0.00	2.65	2.52	2	18	5	96	0.00	0.0	1.541	0.050	18	5	1	1
PL.41442	PL.42810	C	#2 ACSR	7.37Y	122.8	0.00	2.19	1.34	1	9	3	95	0.00	0.0	1.040	0.029	9	3	1	1
PL.43196	PL.54082	C	6 A (CWC)	7.44Y	124.0	0.00	1.00	15.36	11	110	32	96	0.00	0.0	0.452	0.006	0	0	0	15
PD.6650	PL.43196	C	75QA	7.44Y	124.0	0.00	1.00	15.36	20	110	32	96	0.00	0.0	0.452	0.006	0	0	0	15
PL.54078	PD.6650	C	6 A (CWC)	7.44Y	124.0	0.02	1.02	15.36	11	110	32	96	0.02	0.0	0.492	0.039	29	9	5	15
PL.54080	PL.54078	C	6 A (CWC)	7.44Y	124.0	0.00	1.02	1.66	1	12	3	97	0.00	0.0	0.535	0.043	0	0	0	1
PL.41709	PL.54080	C	#4 ACSR	7.44Y	124.0	0.00	1.03	1.66	1	12	3	97	0.00	0.0	0.619	0.084	12	3	1	1
PL.42802	PL.54080	C	6 A (CWC)	7.44Y	124.0	0.00	1.02	0.00	0	0	0	100	0.00	0.0	0.643	0.108	0	0	0	0
PL.54079	PL.54078	C	#4 ACSR	7.44Y	124.0	0.02	1.04	9.58	7	68	20	96	0.01	0.0	0.547	0.055	39	11	5	9
PL.43197	PL.54079	C	#4 ACSR	7.44Y	124.0	0.01	1.05	4.18	3	30	9	96	0.00	0.0	0.584	0.038	0	0	0	4
PL.43198	PL.43197	C	#4 ACSR	7.44Y	124.0	0.00	1.05	4.18	3	30	9	96	0.00	0.0	0.609	0.025	11	3	2	4
PL.43199	PL.43198	C	#4 ACSR	7.44Y	123.9	0.00	1.05	2.57	2	18	5	96	0.00	0.0	0.641	0.032	18	5	2	2
PL.54147	PL.54148	C	6 A (CWC)	7.48Y	124.7	0.00	0.27	13.61	10	98	29	96	0.00	0.0	0.125	0.006	0	0	0	10
PD.6618	PL.54147	C	75QA	7.48Y	124.7	0.00	0.27	13.61	18	98	29	96	0.00	0.0	0.125	0.006	0	0	0	10
PL.63000	PD.6618	C	6 A (CWC)	7.48Y	124.7	0.04	0.31	13.61	10	98	29	96	0.03	0.0	0.191	0.066	20	6	2	10

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.62998	PL.63000	C	6 A (CWC)	7.48Y	124.7	0.01	0.32	5.87	4	42	12	96	0.00	0.0	0.249	0.058	21	6	3	5
PL.54146	PL.62998	C	#4 ACSR	7.48Y	124.7	0.00	0.33	2.97	2	21	6	96	0.00	0.0	0.311	0.062	21	6	2	2
PL.62999	PL.63000	C	6 A (CWC)	7.48Y	124.7	0.01	0.32	4.95	4	36	10	96	0.00	0.0	0.225	0.034	16	5	1	3
PL.54145	PL.62999	C	6 A (CWC)	7.48Y	124.7	0.00	0.32	2.69	2	19	6	95	0.00	0.0	0.296	0.071	19	6	2	2
PL.62452	Pine Grove 1	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	220.60	42	4727	1515	95	0.02	0.0	0.002	0.002	0	0	0	590
PL.63661	PL.62452	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	220.60	42	4727	1515	95	0.01	0.0	0.004	0.002	0	0	0	590
---------- Feeder No. 1 (Yorkshire F1) Beginning with Device PD.9523 ----------																				
PD.9523	PL.63661	ABC	400VWE	7.50Y	125.0	0.00	0.00	220.60	0	4727	1514	95	0.00	0.0	0.004	0.002	0	0	0	590
PL.63660	PD.9523	ABC	397 SPACER	7.50Y	124.9	0.06	0.06	220.60	42	4727	1514	95	0.53	0.0	0.088	0.083	0	0	0	590
PL.43372	PL.63660	ABC	#3/0 ACSR	7.49Y	124.8	0.16	0.22	220.60	74	4726	1508	95	4.48	0.1	0.142	0.055	0	0	1	590
PL.43373	PL.43372	ABC	#3/0 ACSR	7.48Y	124.6	0.19	0.41	219.58	73	4700	1495	95	5.41	0.1	0.209	0.067	14	4	1	587
PL.43378	PL.43373	ABC	#3/0 ACSR	7.46Y	124.4	0.21	0.62	216.20	72	4621	1466	95	5.83	0.1	0.284	0.074	0	0	0	580
PL.43327	PL.43378	ABC	#3/0 ACSR	7.45Y	124.2	0.16	0.78	216.20	72	4616	1458	95	4.56	0.1	0.342	0.058	0	0	0	580
PL.43329	PL.43327	C	6 A (CWC)	7.45Y	124.2	0.00	0.78	0.00	0	0	0	100	0.00	0.0	0.347	0.006	0	0	0	0
PD.6673	PL.43329	C	60QA	7.45Y	124.2	0.00	0.78	0.00	0	0	0	100	0.00	0.0	0.347	0.006	0	0	0	0
PL.43330	PD.6673	C	6 A (CWC)	7.45Y	124.2	0.00	0.78	0.00	0	0	0	100	0.00	0.0	0.420	0.072	0	0	0	0
PL.43328	PL.43327	ABC	#3/0 ACSR	7.44Y	124.0	0.26	1.04	216.20	72	4611	1451	95	7.17	0.2	0.433	0.091	0	0	0	580
PL.43331	PL.43328	A	6 A (CWC)	7.44Y	124.0	0.00	1.04	17.92	13	128	37	96	0.00	0.0	0.439	0.006	0	0	0	11
PD.6133	PL.43331	A	60QA	7.44Y	124.0	0.00	1.04	17.92	30	128	37	96	0.00	0.0	0.439	0.006	0	0	0	11
PL.43332	PD.6133	A	6 A (CWC)	7.43Y	123.8	0.11	1.15	17.92	13	128	37	96	0.10	0.1	0.576	0.137	11	3	1	11
PL.43335	PL.43332	A	#4 ACSR	7.43Y	123.8	0.02	1.17	7.89	6	56	16	96	0.01	0.0	0.640	0.064	13	4	1	5
PL.54150	PL.43335	A	#4 ACSR	7.43Y	123.8	0.01	1.18	6.02	5	43	13	96	0.00	0.0	0.671	0.032	13	4	1	4
PL.54203	PL.54150	A	#4 ACSR	7.43Y	123.8	0.00	1.18	4.19	3	30	9	96	0.00	0.0	0.698	0.027	30	9	3	3
PL.54204	PL.54203	A	#4 ACSR	7.43Y	123.8	0.00	1.18	0.00	0	0	0	100	0.00	0.0	0.738	0.040	0	0	0	0
PL.43336	PL.43332	A	6 A (CWC)	7.43Y	123.8	0.03	1.18	8.42	6	60	18	96	0.01	0.0	0.657	0.082	0	0	0	5
PL.43337	PL.43336	A	6 A (CWC)	7.43Y	123.8	0.03	1.21	5.82	4	42	12	96	0.01	0.0	0.765	0.108	8	2	1	3
PL.43338	PL.43337	A	6 A (CWC)	7.43Y	123.8	0.01	1.22	4.65	3	33	10	96	0.00	0.0	0.821	0.056	19	6	1	2
PL.43339	PL.43338	A	6 A (CWC)	7.43Y	123.8	0.00	1.22	1.95	1	14	4	96	0.00	0.0	0.914	0.093	14	4	1	1
PL.43340	PL.43339	A	6 A (CWC)	7.43Y	123.8	0.00	1.22	0.00	0	0	0	100	0.00	0.0	0.987	0.073	0	0	0	0

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54149	PL.43336	A	6 A (CWC)	7.43Y	123.8	0.00	1.19	2.59	2	18	5	96	0.00	0.0	0.687	0.029	18	5	2	2
PL.41048	PL.43328	ABC	#3/0 ACSR	7.43Y	123.8	0.20	1.24	210.23	70	4476	1403	95	5.43	0.1	0.506	0.073	16	5	8	569
PL.41049	PL.41048	ABC	#3/0 ACSR	7.42Y	123.6	0.13	1.37	209.50	70	4455	1391	95	3.43	0.1	0.553	0.047	0	0	1	561
PL.41632	PL.41049	ABC	#3/0 ACSR	7.41Y	123.5	0.09	1.45	209.50	70	4452	1386	95	2.36	0.1	0.585	0.032	21	6	2	560
PL.41352	PL.41632	ABC	#3/0 ACSR	7.38Y	123.1	0.49	1.94	208.53	70	4429	1376	95	13.17	0.3	0.765	0.180	0	0	0	558
PL.60911	PL.41352	ABC	#1/0 ACSR	7.38Y	123.1	0.00	1.94	0.00	0	0	0	100	0.00	0.0	0.899	0.134	0	0	0	0
PL.60912	PL.60911	ABC	#1/0 ACSR	7.38Y	123.1	0.00	1.94	0.00	0	0	0	100	0.00	0.0	0.937	0.038	0	0	0	0
PL.60913	PL.60912	ABC	#1/0 ACSR	7.38Y	123.1	0.00	1.94	0.00	0	0	0	100	0.00	0.0	0.997	0.060	0	0	0	0
PL.60910	PL.60913	ABC	1/0 AL URD	7.38Y	123.1	0.00	1.94	0.00	0	0	0	100	0.00	0.0	1.082	0.085	0	0	0	0
PL.41633	PL.41352	ABC	#3/0 ACSR	7.38Y	123.0	0.11	2.05	208.53	70	4415	1357	96	2.93	0.1	0.805	0.040	3	1	1	558
PL.54542	PL.41633	ABC	#3/0 ACSR	7.37Y	122.8	0.19	2.23	165.00	55	3488	1082	96	3.99	0.1	0.894	0.089	82	24	11	434
PL.59257	PL.54542	ABC	#3/0 ACSR	7.36Y	122.7	0.06	2.30	139.18	46	2936	916	95	1.15	0.0	0.930	0.036	58	17	7	376
PL.59256	PL.59257	ABC	#3/0 ACSR	7.36Y	122.6	0.08	2.38	136.45	45	2877	897	95	1.44	0.1	0.976	0.046	7	2	1	369
PL.54717	PL.59256	ABC	#3/0 ACSR	7.35Y	122.5	0.10	2.48	136.13	45	2869	893	95	1.70	0.1	1.031	0.055	10	3	3	368
PL.54718	PL.54717	ABC	#3/0 ACSR	7.34Y	122.4	0.11	2.59	135.68	45	2858	888	95	1.94	0.1	1.094	0.063	11	3	1	365
PL.54269	PL.54718	ABC	#3/0 ACSR	7.34Y	122.4	0.06	2.65	135.18	45	2845	882	96	1.04	0.0	1.129	0.034	13	4	5	364
PL.54270	PL.54269	B	6 A (CWC)	7.34Y	122.4	0.00	2.65	2.53	2	18	5	96	0.00	0.0	1.134	0.006	0	0	0	3
PD.6567	PL.54270	B	60QA	7.34Y	122.4	0.00	2.65	2.53	4	18	5	96	0.00	0.0	1.134	0.006	0	0	0	3
PL.54268	PD.6567	B	6 A (CWC)	7.34Y	122.4	0.00	2.65	2.53	2	18	5	96	0.00	0.0	1.156	0.021	18	5	3	3
PL.59266	PL.54269	ABC	#3/0 ACSR	7.34Y	122.3	0.05	2.70	133.72	45	2813	871	96	0.87	0.0	1.158	0.029	16	5	1	356
PL.59601	PL.59266	ABC	#3/0 ACSR	7.34Y	122.3	0.05	2.75	131.67	44	2769	858	96	0.86	0.0	1.187	0.029	0	0	0	350
PL.60814	PL.59601	ABC	336 MCM AC	7.33Y	122.2	0.06	2.80	129.15	25	2715	841	96	0.82	0.0	1.246	0.059	13	4	3	345
PL.60816	PL.60814	ABC	336 MCM AC	7.32Y	122.0	0.16	2.96	128.53	25	2701	835	96	2.20	0.1	1.404	0.158	0	0	0	342
PL.60815	PL.60816	ABC	336 MCM AC	7.32Y	122.0	0.08	3.04	127.75	25	2682	825	96	1.14	0.0	1.487	0.083	13	4	1	341
PL.59604	PL.60815	C	#4 ACSR	7.32Y	122.0	0.00	3.04	1.53	1	11	3	96	0.00	0.0	1.516	0.030	11	3	2	2
PL.59605	PL.60815	ABC	336 MCM AC	7.31Y	121.9	0.05	3.10	126.62	24	2657	815	96	0.76	0.0	1.543	0.056	13	4	1	338
PL.59606	PL.59605	ABC	336 MCM AC	7.31Y	121.9	0.04	3.13	126.00	24	2644	810	96	0.50	0.0	1.580	0.037	0	0	0	337
PD.8800-A	PL.59606	ABC	Closed	7.31Y	121.9	0.00	3.13	126.00	0	2643	809	96	0.00	0.0	1.580	0.037	0	0	0	337
PD.8800-B	PD.8800-A	ABC	Closed	7.31Y	121.9	0.00	3.13	126.00	0	2643	809	96	0.00	0.0	1.580	0.037	0	0	0	337
PL.61110	PD.8800-B	ABC	336 MCM AC	7.31Y	121.8	0.04	3.17	126.00	24	2643	809	96	0.51	0.0	1.618	0.038	0	0	0	337
PD.9070	PL.61110	ABC	25T	7.31Y	121.8	0.00	3.17	126.00	0	2643	808	96	0.00	0.0	1.618	0.038	0	0	0	337

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.61109	PD.9070	ABC	336 MCM AC	7.31Y	121.8	0.01	3.17	126.00	24	2643	808	96	0.08	0.0	1.624	0.006	14	4	1	337
PL.43127	PL.61109	ABC	#3/0 ACSR	7.31Y	121.8	0.04	3.22	123.34	41	2586	791	96	0.69	0.0	1.651	0.027	0	0	1	329
PL.43128	PL.43127	ABC	#3/0 ACSR	7.31Y	121.8	0.02	3.24	123.34	41	2586	790	96	0.35	0.0	1.665	0.014	10	3	1	328
PL.53681	PL.43128	ABC	#3/0 ACSR	7.30Y	121.7	0.07	3.31	122.87	41	2575	787	96	1.09	0.0	1.708	0.043	33	10	4	327
PL.53682	PL.53681	ABC	#3/0 ACSR	7.30Y	121.6	0.07	3.38	115.35	38	2416	739	96	1.07	0.0	1.756	0.048	0	0	0	310
PL.43129	PL.53682	C	#4 ACSR	7.30Y	121.6	0.00	3.38	5.10	4	36	10	96	0.00	0.0	1.761	0.006	0	0	0	3
PD.6542	PL.43129	C	50QA	7.30Y	121.6	0.00	3.38	5.10	10	36	10	96	0.00	0.0	1.761	0.006	0	0	0	3
PL.43130	PD.6542	C	#4 ACSR	7.30Y	121.6	0.00	3.38	5.10	4	36	10	96	0.00	0.0	1.774	0.012	11	3	1	3
PL.43131	PL.43130	C	#4 ACSR	7.30Y	121.6	0.01	3.39	3.60	3	25	7	96	0.00	0.0	1.821	0.047	12	4	1	2
PL.43132	PL.43131	C	#4 ACSR	7.30Y	121.6	0.00	3.39	1.88	1	13	4	96	0.00	0.0	1.899	0.078	13	4	1	1
PL.41553	PL.53682	C	#2 ACSR	7.30Y	121.6	0.00	3.38	2.37	1	17	5	96	0.00	0.0	1.779	0.023	17	5	1	1
PL.41967	PL.53682	ABC	#3/0 ACSR	7.29Y	121.6	0.06	3.44	112.86	38	2363	722	96	0.93	0.0	1.800	0.044	9	3	1	306
PL.43380	PL.41967	ABC	#3/0 ACSR	7.29Y	121.5	0.10	3.54	110.98	37	2322	709	96	1.46	0.1	1.871	0.071	19	6	2	302
PL.43381	PL.43380	A	#4 ACSR	7.29Y	121.5	0.00	3.54	3.77	3	26	8	96	0.00	0.0	1.876	0.006	0	0	0	3
PD.6695	PL.43381	A	60QA	7.29Y	121.5	0.00	3.54	3.77	6	26	8	96	0.00	0.0	1.876	0.006	0	0	0	3
PL.43382	PD.6695	A	#4 ACSR	7.29Y	121.4	0.01	3.55	3.77	3	26	8	96	0.00	0.0	1.990	0.114	26	8	3	3
PL.43383	PL.43380	ABC	#3/0 ACSR	7.29Y	121.4	0.04	3.58	108.82	36	2276	694	96	0.57	0.0	1.899	0.029	13	4	2	297
PL.43384	PL.43383	ABC	#3/0 ACSR	7.28Y	121.4	0.04	3.62	108.18	36	2262	689	96	0.57	0.0	1.929	0.029	7	2	1	295
PL.63252	PL.43384	ABC	#3/0 ACSR	7.28Y	121.3	0.11	3.73	106.64	36	2229	679	96	1.48	0.1	2.006	0.077	0	0	0	291
PL.63253	PL.63252	ABC	#3/0 ACSR	7.27Y	121.2	0.07	3.80	106.14	35	2217	674	96	0.95	0.0	2.056	0.050	0	0	0	290
PL.43273	PL.63253	A	#4 ACSR	7.27Y	121.2	0.00	3.80	2.87	2	20	6	96	0.00	0.0	2.062	0.006	0	0	0	1
PD.6544	PL.43273	A	60QA	7.27Y	121.2	0.00	3.80	2.87	5	20	6	96	0.00	0.0	2.062	0.006	0	0	0	1
PL.43274	PD.6544	A	#4 ACSR	7.27Y	121.2	0.00	3.80	2.87	2	20	6	96	0.00	0.0	2.079	0.017	20	6	1	1
PL.43275	PL.63253	ABC	#3/0 ACSR	7.27Y	121.1	0.09	3.89	105.19	35	2196	666	96	1.29	0.1	2.126	0.070	0	0	0	289
PL.43276	PL.43275	ABC	#3/0 ACSR	7.26Y	120.9	0.17	4.06	103.90	35	2168	657	96	2.31	0.1	2.254	0.128	0	0	0	287
PL.43014	PL.43276	A	#4 ACSR	7.26Y	120.9	0.00	4.06	5.97	5	42	12	96	0.00	0.0	2.259	0.006	0	0	0	8
PD.6590	PL.43014	A	50QA	7.26Y	120.9	0.00	4.06	5.97	12	42	12	96	0.00	0.0	2.259	0.006	0	0	0	8
PL.54216	PD.6590	A	#4 ACSR	7.25Y	120.9	0.02	4.08	5.97	5	42	12	96	0.01	0.0	2.333	0.074	0	0	0	8
PL.54219	PL.54216	A	#4 ACSR	7.25Y	120.9	0.02	4.11	5.97	5	42	12	96	0.01	0.0	2.416	0.083	0	0	0	8
PD.8136	PL.54219	A	40QA	7.25Y	120.9	0.00	4.11	5.97	15	42	12	96	0.00	0.0	2.416	0.083	0	0	0	8
PL.54220	PD.8136	A	#4 ACSR	7.25Y	120.9	0.00	4.11	5.97	5	42	12	96	0.00	0.0	2.420	0.004	0	0	0	8

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54217	PL.54220	A	6 A (CWC)	7.25Y	120.9	0.01	4.12	4.27	3	30	9	96	0.00	0.0	2.506	0.087	13	4	3	5
PL.43015	PL.54217	A	6 A (CWC)	7.25Y	120.9	0.00	4.12	2.47	2	17	5	96	0.00	0.0	2.527	0.020	0	0	0	2
PL.42474	PL.43015	A	6 A (CWC)	7.25Y	120.9	0.00	4.13	2.47	2	17	5	96	0.00	0.0	2.568	0.041	0	0	0	2
PL.54225	PL.42474	A	6 A (CWC)	7.25Y	120.9	0.00	4.13	0.06	0	0	0	100	0.00	0.0	2.596	0.028	0	0	1	1
PL.54226	PL.54225	A	1/0 AL URD	7.25Y	120.9	0.00	4.13	0.00	0	0	0	100	0.00	0.0	2.806	0.210	0	0	0	0
PL.54227	PL.54226	A	1/0 AL URD	7.25Y	120.9	0.00	4.13	0.00	0	0	0	100	0.00	0.0	2.880	0.074	0	0	0	0
PL.54224	PL.42474	A	#1/0 ACSR	7.25Y	120.9	0.00	4.13	2.42	1	17	5	96	0.00	0.0	2.584	0.016	17	5	1	1
PL.54218	PL.54220	A	6 A (CWC)	7.25Y	120.9	0.01	4.12	1.70	1	12	3	97	0.00	0.0	2.566	0.146	0	0	1	3
PL.54144	PL.54218	A	6 A (CWC)	7.25Y	120.9	0.00	4.12	1.64	1	11	3	96	0.00	0.0	2.608	0.042	11	3	2	2
PL.41023	PL.43276	ABC	#3/0 ACSR	7.25Y	120.9	0.08	4.15	101.91	34	2124	641	96	1.09	0.1	2.316	0.063	0	0	0	279
PL.41379	PL.41023	ABC	#4 ACSR	7.25Y	120.9	0.00	4.15	0.60	0	12	6	89	0.00	0.0	2.523	0.207	12	6	1	1
PL.41024	PL.41023	ABC	#3/0 ACSR	7.25Y	120.8	0.09	4.23	101.32	34	2111	634	96	1.15	0.1	2.383	0.067	0	0	0	278
PL.58992	PL.41024	ABC	#3/0 ACSR	7.24Y	120.6	0.16	4.39	101.32	34	2110	632	96	2.10	0.1	2.505	0.122	0	0	0	278
PL.58993	PL.58992	ABC	#3/0 ACSR	7.23Y	120.5	0.14	4.53	101.32	34	2108	629	96	1.86	0.1	2.613	0.108	0	0	0	278
PL.41493	PL.58993	ABC	#1/0 ACSR	7.22Y	120.4	0.09	4.62	101.32	44	2106	627	96	1.30	0.1	2.660	0.047	0	0	0	278
PL.41005	PL.41493	ABC	#1/0 ACSR	7.22Y	120.4	0.01	4.63	101.32	44	2105	625	96	0.16	0.0	2.666	0.006	0	0	0	278
PD.6624	PL.41005	ABC	140L	7.22Y	120.4	0.00	4.63	101.32	72	2104	625	96	0.00	0.0	2.666	0.006	0	0	0	278
PL.41649	PD.6624	ABC	#1/0 ACSR	7.22Y	120.3	0.06	4.69	101.32	44	2104	625	96	0.92	0.0	2.700	0.034	47	14	5	278
PL.43166	PL.41649	ABC	#1/0 ACSR	7.21Y	120.2	0.07	4.76	91.19	40	1893	563	96	0.88	0.0	2.740	0.040	20	6	4	249
PL.43167	PL.43166	ABC	#1/0 ACSR	7.21Y	120.2	0.04	4.80	90.21	39	1872	556	96	0.51	0.0	2.764	0.024	16	5	1	245
PL.53715	PL.43167	ABC	#1/0 ACSR	7.21Y	120.1	0.09	4.89	89.46	39	1855	551	96	1.21	0.1	2.822	0.058	37	11	3	244
PL.53716	PL.53715	ABC	#1/0 ACSR	7.20Y	120.0	0.07	4.96	87.68	38	1817	539	96	0.93	0.1	2.867	0.046	15	4	2	241
PL.43170	PL.53716	C	6 A (CWC)	7.20Y	120.0	0.00	4.96	2.88	2	20	6	96	0.00	0.0	2.873	0.006	0	0	0	1
PD.6595	PL.43170	C	50QA	7.20Y	120.0	0.00	4.96	2.88	6	20	6	96	0.00	0.0	2.873	0.006	0	0	0	1
PL.54173	PD.6595	C	6 A (CWC)	7.20Y	120.0	0.00	4.96	2.88	2	20	6	96	0.00	0.0	2.897	0.024	20	6	1	1
PL.43168	PL.53716	ABC	#1/0 ACSR	7.20Y	120.0	0.06	5.02	86.01	37	1782	528	96	0.75	0.0	2.906	0.038	35	10	4	238
PL.43171	PL.43168	ABC	#1/0 ACSR	7.20Y	120.0	0.00	5.02	0.22	0	4	2	89	0.00	0.0	2.911	0.006	0	0	0	1
PD.6502	PL.43171	ABC	50QA	7.20Y	120.0	0.00	5.02	0.22	0	4	2	89	0.00	0.0	2.911	0.006	0	0	0	1
PL.43172	PD.6502	ABC	#1/0 ACSR	7.20Y	120.0	0.00	5.02	0.22	0	4	2	89	0.00	0.0	2.915	0.003	4	2	1	1
PL.43169	PL.43168	ABC	#1/0 ACSR	7.20Y	119.9	0.03	5.05	84.10	37	1742	515	96	0.39	0.0	2.927	0.021	36	11	5	233
PL.43539	PL.43169	ABC	#1/0 ACSR	7.19Y	119.8	0.15	5.21	74.54	32	1543	457	96	1.66	0.1	3.040	0.113	17	5	4	209

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Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54467	PL.43539	ABC	#1/0 ACSR	7.18Y	119.6	0.15	5.36	73.71	32	1524	450	96	1.62	0.1	3.154	0.114	31	9	2	205
PL.54468	PL.54467	ABC	#1/0 ACSR	7.18Y	119.6	0.04	5.40	71.10	31	1469	433	96	0.39	0.0	3.183	0.029	3	1	1	200
PL.54399	PL.54468	A	#4 ACSR	7.18Y	119.6	0.00	5.40	8.18	6	56	16	96	0.00	0.0	3.189	0.006	0	0	0	9
PD.6746	PL.54399	A	50QA	7.18Y	119.6	0.00	5.40	8.18	16	56	16	96	0.00	0.0	3.189	0.006	0	0	0	9
PL.54401	PD.6746	A	#4 ACSR	7.18Y	119.6	0.01	5.40	8.18	6	56	16	96	0.00	0.0	3.207	0.019	5	1	3	9
PL.54402	PL.54401	A	#4 ACSR	7.18Y	119.6	0.01	5.41	7.45	6	51	15	96	0.00	0.0	3.236	0.029	4	1	1	6
PL.54466	PL.54402	A	#4 ACSR	7.17Y	119.6	0.01	5.43	6.93	5	48	14	96	0.00	0.0	3.281	0.045	3	1	1	5
PL.54557	PL.54466	A	#4 ACSR	7.17Y	119.6	0.01	5.44	6.53	5	45	13	96	0.00	0.0	3.320	0.039	11	3	1	4
PL.54558	PL.54557	A	#4 ACSR	7.17Y	119.6	0.00	5.44	4.87	4	34	10	96	0.00	0.0	3.332	0.012	15	4	2	3
PL.54559	PL.54558	A	#4 ACSR	7.17Y	119.6	0.00	5.44	2.68	2	18	5	96	0.00	0.0	3.366	0.034	18	5	1	1
PL.54400	PL.54468	ABC	#1/0 ACSR	7.17Y	119.6	0.04	5.44	68.22	30	1409	415	96	0.41	0.0	3.216	0.033	11	3	2	190
PL.54398	PL.54400	C	#4 ACSR	7.17Y	119.6	0.00	5.44	7.58	6	52	15	96	0.00	0.0	3.222	0.006	0	0	0	4
PD.6648	PL.54398	C	50QA	7.17Y	119.6	0.00	5.44	7.58	15	52	15	96	0.00	0.0	3.222	0.006	0	0	0	4
PL.43540	PD.6648	C	#4 ACSR	7.17Y	119.5	0.01	5.45	7.58	6	52	15	96	0.01	0.0	3.273	0.051	19	6	1	4
PL.43541	PL.43540	C	#4 ACSR	7.17Y	119.5	0.00	5.46	4.80	4	33	10	96	0.00	0.0	3.293	0.020	5	1	1	3
PL.63261	PL.43541	C	#4 ACSR	7.17Y	119.5	0.00	5.46	4.08	3	28	8	96	0.00	0.0	3.342	0.049	28	8	2	2
PL.54397	PL.54400	ABC	#1/0 ACSR	7.17Y	119.5	0.09	5.52	65.18	28	1346	396	96	0.81	0.1	3.289	0.073	22	7	4	184
PL.54498	PL.54397	ABC	#1/0 ACSR	7.16Y	119.4	0.08	5.60	29.14	13	601	176	96	0.32	0.1	3.435	0.146	15	4	3	84
PL.54500	PL.54498	ABC	#1/0 ACSR	7.16Y	119.4	0.03	5.63	28.42	12	586	171	96	0.13	0.0	3.493	0.059	2	1	1	81
PL.54501	PL.54500	ABC	#1/0 ACSR	7.16Y	119.4	0.01	5.64	27.61	12	569	167	96	0.04	0.0	3.513	0.019	0	0	0	77
PL.54497	PL.54501	ABC	#1/0 ACSR	7.16Y	119.4	0.01	5.65	19.64	9	405	118	96	0.03	0.0	3.540	0.027	6	2	4	59
PL.41932	PL.54497	ABC	#1/0 ACSR	7.16Y	119.3	0.00	5.65	5.16	2	106	31	96	0.00	0.0	3.580	0.041	8	2	1	16
PL.54531	PL.41932	ABC	#1/0 ACSR	7.16Y	119.3	0.00	5.65	4.79	2	99	29	96	0.00	0.0	3.629	0.049	24	7	4	15
PL.54535	PL.54531	ABC	#1/0 ACSR	7.16Y	119.3	0.00	5.66	3.64	2	75	22	96	0.00	0.0	3.707	0.078	42	12	4	11
PL.54536	PL.54535	A	6 A (CWC)	7.16Y	119.3	0.00	5.66	4.85	3	33	10	96	0.00	0.0	3.713	0.006	0	0	0	7
PD.6543	PL.54536	A	50QA	7.16Y	119.3	0.00	5.66	4.85	10	33	10	96	0.00	0.0	3.713	0.006	0	0	0	7
PL.54533	PD.6543	A	6 A (CWC)	7.16Y	119.3	0.00	5.66	4.85	3	33	10	96	0.00	0.0	3.735	0.021	3	1	1	7
PL.54534	PL.54533	A	6 A (CWC)	7.16Y	119.3	0.01	5.68	4.44	3	31	9	96	0.00	0.0	3.809	0.074	9	3	1	6
PL.54532	PL.54534	A	6 A (CWC)	7.16Y	119.3	0.00	5.68	3.07	2	21	6	96	0.00	0.0	3.836	0.027	13	4	3	5
PL.54161	PL.54532	A	6 A (CWC)	7.16Y	119.3	0.00	5.68	1.15	1	8	2	97	0.00	0.0	3.897	0.061	8	2	2	2
PL.43606	PL.54497	A	6 A (CWC)	7.16Y	119.3	0.01	5.66	42.50	30	292	85	96	0.02	0.0	3.545	0.006	0	0	0	39

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PD.6520	PL.43606	A	25T	7.16Y	119.3	0.00	5.66	42.50	0	292	85	96	0.00	0.0	3.545	0.006	0	0	0	39
PL.43607	PD.6520	A	6 A (CWC)	7.16Y	119.3	0.06	5.72	42.50	30	292	85	96	0.14	0.0	3.577	0.032	7	2	2	39
PL.43605	PL.43607	A	6 A (CWC)	7.15Y	119.2	0.11	5.83	41.42	30	285	83	96	0.23	0.1	3.633	0.056	1	0	1	37
PL.43608	PL.43605	A	6 A (CWC)	7.15Y	119.1	0.06	5.88	41.28	29	283	83	96	0.13	0.0	3.665	0.032	12	4	1	36
PL.54165	PL.43608	A	6 A (CWC)	7.15Y	119.1	0.00	5.89	2.02	1	14	4	96	0.00	0.0	3.697	0.032	14	4	1	1
PL.54166	PL.54165	A	6 A (CWC)	7.15Y	119.1	0.00	5.89	0.00	0	0	0	100	0.00	0.0	3.733	0.036	0	0	0	0
PL.54163	PL.43608	A	6 A (CWC)	7.14Y	119.0	0.09	5.97	37.50	27	257	75	96	0.17	0.1	3.720	0.056	33	10	2	34
PL.54164	PL.54163	A	6 A (CWC)	7.14Y	119.0	0.00	5.98	2.59	2	18	5	96	0.00	0.0	3.758	0.038	9	3	1	2
PL.54162	PL.54164	A	6 A (CWC)	7.14Y	119.0	0.00	5.98	1.26	1	9	3	95	0.00	0.0	3.797	0.038	9	3	1	1
PL.54547	PL.54163	A	6 A (CWC)	7.14Y	119.0	0.05	6.02	30.13	22	207	60	96	0.07	0.0	3.756	0.036	17	5	5	30
PL.54548	PL.54547	A	6 A (CWC)	7.14Y	119.0	0.01	6.03	5.33	4	37	11	96	0.00	0.0	3.799	0.043	7	2	1	4
PL.54196	PL.54548	A	6 A (CWC)	7.14Y	119.0	0.00	6.04	4.31	3	30	9	96	0.00	0.0	3.826	0.027	13	4	1	3
PL.54167	PL.54196	A	6 A (CWC)	7.14Y	119.0	0.00	6.04	1.19	1	8	2	97	0.00	0.0	3.877	0.051	8	2	1	1
PL.54197	PL.54196	A	#1/0 ACSR	7.14Y	119.0	0.00	6.04	1.22	1	8	2	97	0.00	0.0	3.851	0.025	8	2	1	1
PL.54551	PL.54547	A	6 A (CWC)	7.14Y	119.0	0.01	6.04	3.44	2	24	7	96	0.00	0.0	3.849	0.093	0	0	0	5
PD.8142	PL.54551	A	20QA	7.14Y	119.0	0.00	6.04	3.44	17	24	7	96	0.00	0.0	3.849	0.093	0	0	0	5
PL.54552	PD.8142	A	6 A (CWC)	7.14Y	119.0	0.00	6.04	3.44	2	24	7	96	0.00	0.0	3.853	0.004	24	7	5	5
PL.54550	PL.54547	A	6 A (CWC)	7.14Y	118.9	0.06	6.08	15.69	11	108	31	96	0.05	0.0	3.847	0.091	16	5	2	13
PL.43610	PL.54550	A	6 A (CWC)	7.13Y	118.9	0.01	6.09	5.28	4	36	11	96	0.00	0.0	3.886	0.039	13	4	2	4
PL.43611	PL.43610	A	6 A (CWC)	7.13Y	118.9	0.00	6.09	3.34	2	23	7	96	0.00	0.0	3.931	0.045	23	7	2	2
PL.43612	PL.54550	A	6 A (CWC)	7.13Y	118.9	0.02	6.10	8.03	6	55	16	96	0.01	0.0	3.905	0.058	8	2	1	7
PL.43613	PL.43612	A	6 A (CWC)	7.13Y	118.9	0.02	6.12	6.81	5	47	14	96	0.01	0.0	3.954	0.049	0	0	0	6
PL.41415	PL.43613	A	#4 ACSR	7.13Y	118.9	0.00	6.12	1.12	1	8	2	97	0.00	0.0	4.049	0.095	8	2	2	2
PL.43614	PL.43613	A	6 A (CWC)	7.13Y	118.9	0.01	6.13	5.70	4	39	11	96	0.00	0.0	4.001	0.047	31	9	3	4
PL.43615	PL.43614	A	6 A (CWC)	7.13Y	118.9	0.00	6.13	1.23	1	8	2	97	0.00	0.0	4.053	0.052	8	2	1	1
PL.54549	PL.54547	A	6 A (CWC)	7.14Y	119.0	0.01	6.03	3.26	2	22	7	95	0.00	0.0	3.799	0.043	0	0	0	3
PL.43609	PL.54549	A	6 A (CWC)	7.14Y	119.0	0.00	6.03	0.98	1	7	2	96	0.00	0.0	3.864	0.065	7	2	2	2
PL.54546	PL.54549	A	6 A (CWC)	7.14Y	119.0	0.00	6.03	2.28	2	16	5	95	0.00	0.0	3.858	0.059	16	5	1	1
PL.61129	PL.54546	A	6 A (CWC)	7.14Y	119.0	0.00	6.03	0.00	0	0	0	100	0.00	0.0	3.894	0.035	0	0	0	0
PL.54499	PL.54501	C	6 A (CWC)	7.16Y	119.4	0.01	5.64	23.92	17	164	48	96	0.01	0.0	3.518	0.006	0	0	0	18
PD.6742	PL.54499	C	50QA	7.16Y	119.4	0.00	5.64	23.92	48	164	48	96	0.00	0.0	3.518	0.006	0	0	0	18

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.41931	PD.6742	C	6 A (CWC)	7.16Y	119.3	0.06	5.71	23.92	17	164	48	96	0.08	0.0	3.578	0.060	11	3	2	18
PL.72568	PL.41931	C	6 A (CWC)	7.16Y	119.3	0.01	5.72	22.35	16	154	45	96	0.02	0.0	3.591	0.013	0	0	0	16
PL.72569	PL.72568	C	6 A (CWC)	7.16Y	119.3	0.00	5.72	22.35	16	154	45	96	0.00	0.0	3.591	0.000	0	0	0	16
PL.42844	PL.72569	C	6 A (CWC)	7.15Y	119.2	0.04	5.76	17.63	13	121	35	96	0.03	0.0	3.647	0.055	40	12	5	12
PL.43604	PL.42844	C	6 A (CWC)	7.15Y	119.2	0.02	5.78	9.26	7	64	19	96	0.01	0.0	3.704	0.057	9	3	1	5
PL.54223	PL.43604	C	#4 ACSR	7.15Y	119.2	0.01	5.79	5.87	5	40	12	96	0.00	0.0	3.773	0.070	40	12	2	2
PL.54593	PL.43604	C	6 A (CWC)	7.15Y	119.2	0.00	5.78	2.14	2	15	4	97	0.00	0.0	3.753	0.050	15	4	2	2
PL.54221	PL.42844	C	#4 ACSR	7.15Y	119.2	0.00	5.76	2.48	2	17	5	96	0.00	0.0	3.694	0.047	11	3	1	2
PL.54222	PL.54221	C	#4 ACSR	7.15Y	119.2	0.00	5.76	0.88	1	6	2	95	0.00	0.0	3.710	0.015	6	2	1	1
PL.41935	PL.72569	C	#4 ACSR	7.16Y	119.3	0.01	5.73	4.72	4	32	9	96	0.00	0.0	3.652	0.060	19	6	2	4
PL.42843	PL.41935	C	#4 ACSR	7.16Y	119.3	0.00	5.73	1.95	1	13	4	96	0.00	0.0	3.679	0.027	3	1	1	2
PL.41934	PL.42843	C	#4 ACSR	7.16Y	119.3	0.00	5.73	1.53	1	11	3	96	0.00	0.0	3.688	0.009	11	3	1	1
PL.54502	PL.54500	A	#1/0 ACSR	7.16Y	119.4	0.00	5.63	2.10	1	14	4	96	0.00	0.0	3.497	0.004	0	0	0	3
PD.8139	PL.54502	A	20QA	7.16Y	119.4	0.00	5.63	2.10	11	14	4	96	0.00	0.0	3.497	0.004	0	0	0	3
PL.54503	PD.8139	A	#1/0 ACSR	7.16Y	119.4	0.00	5.63	2.10	1	14	4	96	0.00	0.0	3.523	0.025	14	4	3	3
PL.43542	PL.54397	ABC	#1/0 ACSR	7.17Y	119.5	0.02	5.54	34.97	15	721	213	96	0.11	0.0	3.323	0.034	10	3	3	96
PL.43543	PL.43542	ABC	#1/0 ACSR	7.17Y	119.4	0.02	5.57	34.48	15	711	210	96	0.12	0.0	3.360	0.037	16	5	2	93
PL.43546	PL.43543	C	6 A (CWC)	7.17Y	119.4	0.00	5.57	0.39	0	3	1	95	0.00	0.0	3.366	0.006	0	0	0	3
PD.6505	PL.43546	C	50QA	7.17Y	119.4	0.00	5.57	0.39	1	3	1	95	0.00	0.0	3.366	0.006	0	0	0	3
PL.54723	PD.6505	C	6 A (CWC)	7.17Y	119.4	0.00	5.57	0.39	0	3	1	95	0.00	0.0	3.435	0.069	3	1	3	3
PL.43544	PL.43543	A	#4 ACSR	7.17Y	119.4	0.00	5.57	0.63	0	4	1	97	0.00	0.0	3.366	0.006	0	0	0	1
PD.6686	PL.43544	A	50QA	7.17Y	119.4	0.00	5.57	0.63	1	4	1	97	0.00	0.0	3.366	0.006	0	0	0	1
PL.43545	PD.6686	A	#4 ACSR	7.17Y	119.4	0.00	5.57	0.63	0	4	1	97	0.00	0.0	3.403	0.037	4	1	1	1
PL.43547	PL.43543	ABC	#1/0 ACSR	7.16Y	119.4	0.05	5.62	33.36	15	688	203	96	0.26	0.0	3.449	0.089	0	0	0	87
PL.58439	PL.43547	C	#4 ACSR	7.16Y	119.4	0.00	5.62	6.95	5	48	14	96	0.00	0.0	3.452	0.003	0	0	0	7
PD.8591	PL.58439	C	25T	7.16Y	119.4	0.00	5.62	6.95	0	48	14	96	0.00	0.0	3.452	0.003	0	0	0	7
PL.58440	PD.8591	C	#4 ACSR	7.16Y	119.4	0.03	5.65	6.95	5	48	14	96	0.01	0.0	3.542	0.090	0	0	1	7
PL.58438	PL.58440	C	#4 ACSR	7.16Y	119.3	0.01	5.66	6.95	5	48	14	96	0.00	0.0	3.579	0.036	20	6	3	6
PL.43550	PL.58438	C	#4 ACSR	7.16Y	119.3	0.00	5.66	4.05	3	28	8	96	0.00	0.0	3.604	0.026	28	8	3	3
PL.43548	PL.43547	ABC	#1/0 ACSR	7.16Y	119.4	0.00	5.62	31.04	13	640	189	96	0.02	0.0	3.456	0.007	4	2	1	80
PL.43549	PL.43548	ABC	#1/0 ACSR	7.16Y	119.4	0.02	5.64	30.86	13	636	187	96	0.08	0.0	3.489	0.032	28	8	2	79

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54571	PL.43549	ABC	#1/0 ACSR	7.16Y	119.3	0.03	5.68	26.02	11	536	158	96	0.13	0.0	3.559	0.071	6	2	2	69
PL.54572	PL.54571	ABC	#1/0 ACSR	7.16Y	119.3	0.02	5.69	25.73	11	530	156	96	0.06	0.0	3.598	0.039	48	14	4	67
PL.41962	PL.54572	B	#1/0 ACSR	7.16Y	119.3	0.00	5.69	5.24	2	36	11	96	0.00	0.0	3.604	0.006	0	0	0	4
PD.6508	PL.41962	B	50QA	7.16Y	119.3	0.00	5.69	5.24	10	36	11	96	0.00	0.0	3.604	0.006	0	0	0	4
PL.62878	PD.6508	B	#1/0 ACSR	7.16Y	119.3	0.00	5.70	5.24	2	36	11	96	0.00	0.0	3.651	0.047	29	8	3	4
PL.62879	PL.62878	B	#1/0 ACSR	7.16Y	119.3	0.00	5.70	1.02	0	7	2	96	0.00	0.0	3.713	0.062	7	2	1	1
PL.54573	PL.54572	ABC	#1/0 ACSR	7.16Y	119.3	0.02	5.71	21.64	9	446	131	96	0.06	0.0	3.648	0.050	16	5	4	59
PL.54574	PL.54573	ABC	#1/0 ACSR	7.16Y	119.3	0.01	5.72	20.88	9	430	127	96	0.03	0.0	3.671	0.023	34	10	7	55
PL.54575	PL.54574	ABC	#1/0 ACSR	7.16Y	119.3	0.02	5.74	19.22	8	396	117	96	0.05	0.0	3.725	0.053	32	9	2	48
PL.54576	PL.54575	ABC	#1/0 ACSR	7.15Y	119.2	0.01	5.75	17.69	8	364	108	96	0.04	0.0	3.773	0.048	43	13	5	46
PL.41963	PL.54576	ABC	#1/0 ACSR	7.15Y	119.2	0.01	5.77	15.60	7	321	95	96	0.03	0.0	3.822	0.049	40	12	3	41
PL.41964	PL.41963	ABC	#1/0 ACSR	7.15Y	119.2	0.01	5.78	13.67	6	281	83	96	0.02	0.0	3.873	0.051	34	10	3	38
PL.43174	PL.41964	ABC	#1/0 ACSR	7.15Y	119.2	0.01	5.79	12.01	5	247	73	96	0.02	0.0	3.916	0.043	10	3	1	35
PL.61022	PL.43174	ABC	#1/0 ACSR	7.15Y	119.2	0.00	5.79	3.92	2	80	25	95	0.00	0.0	3.923	0.007	0	0	0	9
PL.61023	PL.61022	ABC	#1/0 ACSR	7.15Y	119.2	0.00	5.79	3.92	2	80	25	95	0.00	0.0	3.960	0.037	21	6	2	9
PL.61020	PL.61023	ABC	#1/0 ACSR	7.15Y	119.2	0.00	5.79	2.91	1	60	19	95	0.00	0.0	3.996	0.036	0	0	0	7
PL.61024	PL.61020	B	#4 ACSR	7.15Y	119.2	0.00	5.79	7.76	6	53	16	96	0.00	0.0	3.999	0.004	0	0	0	6
PD.9131	PL.61024	B	40QA	7.15Y	119.2	0.00	5.79	7.76	19	53	16	96	0.00	0.0	3.999	0.004	0	0	0	6
PL.61025	PD.9131	B	#4 ACSR	7.15Y	119.2	0.02	5.81	7.76	6	53	16	96	0.01	0.0	4.044	0.044	0	0	0	6
PL.43175	PL.61025	B	#4 ACSR	7.15Y	119.2	0.01	5.82	4.98	4	34	10	96	0.00	0.0	4.093	0.050	0	0	0	4
PL.43176	PL.43175	B	#4 ACSR	7.15Y	119.2	0.01	5.83	4.98	4	34	10	96	0.00	0.0	4.123	0.030	13	4	1	3
PL.43177	PL.43176	B	#4 ACSR	7.15Y	119.2	0.00	5.83	3.12	2	21	6	96	0.00	0.0	4.159	0.036	21	6	2	2
PL.41738	PL.43175	B	#2 ACSR	7.15Y	119.2	0.00	5.82	0.00	0	0	0	100	0.00	0.0	4.125	0.032	0	0	1	1
PL.41838	PL.61025	B	#4 ACSR	7.15Y	119.2	0.00	5.81	2.78	2	19	6	95	0.00	0.0	4.080	0.037	19	6	2	2
PL.61021	PL.61020	ABC	#1/0 ACSR	7.15Y	119.2	0.00	5.79	0.33	0	6	3	89	0.00	0.0	4.006	0.010	0	0	0	1
PL.63262	PL.61021	ABC	#1/0 ACSR	7.15Y	119.2	0.00	5.79	0.33	0	6	3	89	0.00	0.0	4.417	0.411	6	3	1	1
PL.61017	PL.43174	ABC	#4 ACSR	7.15Y	119.2	0.01	5.80	7.59	6	156	46	96	0.01	0.0	3.949	0.033	0	0	0	25
PL.61018	PL.61017	A	#4 ACSR	7.15Y	119.2	0.00	5.80	22.78	18	156	46	96	0.00	0.0	3.953	0.004	0	0	0	25
PD.9130	PL.61018	A	40QA	7.15Y	119.2	0.00	5.80	22.78	57	156	46	96	0.00	0.0	3.953	0.004	0	0	0	25
PL.61019	PD.9130	A	#4 ACSR	7.15Y	119.1	0.06	5.86	22.78	18	156	46	96	0.07	0.0	4.015	0.062	17	5	2	25
PL.43178	PL.61019	A	#4 ACSR	7.15Y	119.1	0.05	5.91	20.35	16	140	41	96	0.05	0.0	4.073	0.059	20	6	6	23

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54495	PL.43178	A	#4 ACSR	7.14Y	119.1	0.03	5.94	17.41	13	119	35	96	0.02	0.0	4.113	0.040	33	10	4	17
PL.54496	PL.54495	A	#4 ACSR	7.14Y	119.0	0.02	5.96	12.59	10	86	25	96	0.01	0.0	4.164	0.051	29	8	6	13
PL.43179	PL.54496	A	#4 ACSR	7.14Y	119.0	0.01	5.97	8.35	6	57	17	96	0.00	0.0	4.196	0.032	17	5	2	7
PL.41929	PL.43179	A	#4 ACSR	7.14Y	119.0	0.00	5.98	5.91	5	41	12	96	0.00	0.0	4.215	0.019	0	0	0	5
PL.41930	PL.41929	A	#4 ACSR	7.14Y	119.0	0.00	5.98	4.37	3	30	9	96	0.00	0.0	4.243	0.028	30	9	4	4
PL.41314	PL.41929	A	#4 ACSR	7.14Y	119.0	0.00	5.98	1.53	1	11	3	96	0.00	0.0	4.273	0.058	11	3	1	1
PL.43551	PL.43549	C	6 A (CWC)	7.16Y	119.4	0.00	5.64	3.40	2	23	7	96	0.00	0.0	3.494	0.006	0	0	0	2
PD.6507	PL.43551	C	50QA	7.16Y	119.4	0.00	5.64	3.40	7	23	7	96	0.00	0.0	3.494	0.006	0	0	0	2
PL.54577	PD.6507	C	6 A (CWC)	7.16Y	119.4	0.00	5.64	3.40	2	23	7	96	0.00	0.0	3.505	0.011	23	7	2	2
PL.41960	PL.43549	A	6 A (CWC)	7.16Y	119.4	0.00	5.64	7.11	5	49	14	96	0.00	0.0	3.494	0.006	0	0	0	6
PD.6506	PL.41960	A	50QA	7.16Y	119.4	0.00	5.64	7.11	14	49	14	96	0.00	0.0	3.494	0.006	0	0	0	6
PL.41961	PD.6506	A	6 A (CWC)	7.16Y	119.3	0.02	5.66	7.11	5	49	14	96	0.01	0.0	3.540	0.046	0	0	0	6
PL.54578	PL.41961	A	6 A (CWC)	7.16Y	119.3	0.01	5.67	5.91	4	41	12	96	0.00	0.0	3.567	0.027	15	4	2	4
PL.54579	PL.54578	A	6 A (CWC)	7.16Y	119.3	0.00	5.67	3.70	3	25	7	96	0.00	0.0	3.607	0.040	25	7	2	2
PL.54580	PL.41961	A	6 A (CWC)	7.16Y	119.3	0.00	5.66	1.20	1	8	2	97	0.00	0.0	3.563	0.022	8	2	2	2
PL.54472	PL.54467	A	#1/0 ACSR	7.18Y	119.6	0.00	5.36	3.35	1	23	7	96	0.00	0.0	3.156	0.002	0	0	0	3
PD.8138	PL.54472	A	10QA	7.18Y	119.6	0.00	5.36	3.35	0	23	7	96	0.00	0.0	3.156	0.002	0	0	0	3
PL.54553	PD.8138	A	#1/0 ACSR	7.18Y	119.6	0.00	5.36	3.35	1	23	7	96	0.00	0.0	3.192	0.036	23	7	3	3
PL.54545	PL.43169	ABC	#1/0 ACSR	7.20Y	119.9	0.00	5.06	7.82	3	162	47	96	0.00	0.0	2.953	0.026	19	5	7	19
PL.54589	PL.54545	ABC	#1/0 ACSR	7.20Y	119.9	0.01	5.07	6.91	3	143	42	96	0.01	0.0	3.039	0.086	12	4	1	12
PL.54590	PL.54589	C	#1/0 ACSR	7.20Y	119.9	0.00	5.07	18.95	8	131	38	96	0.00	0.0	3.045	0.006	0	0	0	11
PD.6510	PL.54590	C	40QA	7.20Y	119.9	0.00	5.07	18.95	47	131	38	96	0.00	0.0	3.045	0.006	0	0	0	11
PL.54587	PD.6510	C	#1/0 ACSR	7.19Y	119.9	0.01	5.08	18.95	8	131	38	96	0.01	0.0	3.078	0.034	16	5	1	11
PL.54592	PL.54587	C	#1/0 ACSR	7.19Y	119.9	0.02	5.10	16.70	7	115	34	96	0.01	0.0	3.121	0.043	22	6	2	10
PL.54591	PL.54592	C	6 A (CWC)	7.19Y	119.9	0.03	5.13	13.48	10	93	27	96	0.02	0.0	3.186	0.064	28	8	2	8
PL.43173	PL.54591	C	6 A (CWC)	7.19Y	119.9	0.01	5.14	5.59	4	39	11	96	0.00	0.0	3.240	0.054	12	4	1	4
PL.43536	PL.43173	C	6 A (CWC)	7.19Y	119.9	0.00	5.15	3.80	3	26	8	96	0.00	0.0	3.260	0.021	10	3	1	3
PL.43537	PL.43536	C	6 A (CWC)	7.19Y	119.8	0.00	5.15	2.37	2	16	5	95	0.00	0.0	3.294	0.034	9	3	1	2
PL.54731	PL.43537	C	#4 ACSR	7.19Y	119.8	0.00	5.15	1.03	1	7	2	96	0.00	0.0	3.336	0.042	7	2	1	1
PL.43538	PL.43537	C	6 A (CWC)	7.19Y	119.8	0.00	5.15	0.00	0	0	0	100	0.00	0.0	3.314	0.019	0	0	0	0
PL.41498	PL.54591	C	#4 ACSR	7.19Y	119.9	0.01	5.14	3.81	3	26	8	96	0.00	0.0	3.230	0.044	0	0	0	2

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54478	PL.41498	C	#1/0 ACSR	7.19Y	119.9	0.00	5.14	3.81	2	26	8	96	0.00	0.0	3.248	0.018	26	8	2	2
PL.54588	PL.54589	ABC	#1/0 ACSR	7.20Y	119.9	0.00	5.07	0.00	0	0	0	100	0.00	0.0	3.048	0.009	0	0	0	0
PL.41650	PL.41649	C	6 A (CWC)	7.22Y	120.3	0.01	4.70	23.55	17	163	48	96	0.01	0.0	2.706	0.006	0	0	0	24
PD.6546	PL.41650	C	40T	7.22Y	120.3	0.00	4.70	23.55	0	163	48	96	0.00	0.0	2.706	0.006	0	0	0	24
PL.41651	PD.6546	C	#4 ACSR	7.22Y	120.3	0.03	4.73	23.55	18	163	48	96	0.04	0.0	2.739	0.033	4	1	1	24
PL.54177	PL.41651	C	#4 ACSR	7.21Y	120.2	0.10	4.84	22.95	18	159	46	96	0.13	0.1	2.840	0.101	0	0	0	23
PL.54394	PL.54177	C	#4 ACSR	7.21Y	120.2	0.01	4.84	7.90	6	55	16	96	0.00	0.0	2.862	0.022	27	8	6	8
PL.42475	PL.54394	C	#4 ACSR	7.21Y	120.2	0.00	4.84	3.95	3	27	8	96	0.00	0.0	2.883	0.021	27	8	2	2
PL.53717	PL.42475	C	#4 ACSR	7.21Y	120.2	0.00	4.84	0.00	0	0	0	100	0.00	0.0	2.909	0.026	0	0	0	0
PL.54395	PL.54177	C	6 A (CWC)	7.21Y	120.1	0.03	4.86	9.85	7	68	20	96	0.01	0.0	2.906	0.066	21	6	2	10
PL.54199	PL.54395	C	6 A (CWC)	7.21Y	120.1	0.01	4.87	6.84	5	47	14	96	0.00	0.0	2.930	0.024	4	1	1	8
PL.54200	PL.54199	C	6 A (CWC)	7.21Y	120.1	0.02	4.89	6.33	5	44	13	96	0.01	0.0	3.004	0.074	16	5	1	7
PL.42476	PL.54200	C	6 A (CWC)	7.21Y	120.1	0.01	4.89	4.01	3	28	8	96	0.00	0.0	3.041	0.037	0	0	0	6
PL.54198	PL.42476	C	#2 ACSR	7.21Y	120.1	0.00	4.89	0.00	0	0	0	100	0.00	0.0	3.074	0.033	0	0	1	1
PL.42477	PL.42476	C	6 A (CWC)	7.21Y	120.1	0.01	4.90	4.01	3	28	8	96	0.00	0.0	3.099	0.058	23	7	4	5
PL.42478	PL.42477	C	6 A (CWC)	7.21Y	120.1	0.00	4.90	0.63	0	4	1	97	0.00	0.0	3.128	0.029	4	1	1	1
PL.54396	PL.54177	C	#4 ACSR	7.21Y	120.1	0.02	4.85	5.20	4	36	11	96	0.00	0.0	2.907	0.067	0	0	0	5
PL.42479	PL.54396	C	#4 ACSR	7.21Y	120.1	0.00	4.85	3.86	3	27	8	96	0.00	0.0	2.926	0.019	0	0	1	4
PL.53718	PL.42479	C	#4 ACSR	7.21Y	120.1	0.00	4.86	3.84	3	27	8	96	0.00	0.0	2.950	0.024	27	8	3	3
PL.54732	PL.54396	C	#2 ACSR	7.21Y	120.1	0.00	4.85	1.34	1	9	3	95	0.00	0.0	2.926	0.019	9	3	1	1
PL.58994	PL.58993	ABC	#3/0 ACSR	7.23Y	120.5	0.00	4.53	0.00	0	0	0	100	0.00	0.0	2.712	0.100	0	0	0	0
PD.8678-A	PL.58994	ABC	Open	7.23Y	120.5	0.00	4.53	0.00	0	0	0	100	0.00	0.0	2.712	0.100	0	0	0	0
PL.43277	PL.43275	A	#4 ACSR	7.27Y	121.1	0.00	3.89	3.86	3	27	8	96	0.00	0.0	2.132	0.006	0	0	0	2
PD.6545	PL.43277	A	20T	7.27Y	121.1	0.00	3.89	3.86	0	27	8	96	0.00	0.0	2.132	0.006	0	0	0	2
PL.43278	PD.6545	A	#4 ACSR	7.27Y	121.1	0.01	3.90	3.86	3	27	8	96	0.00	0.0	2.206	0.074	13	4	1	2
PL.43013	PL.43278	A	#4 ACSR	7.27Y	121.1	0.00	3.91	1.95	2	14	4	96	0.00	0.0	2.267	0.062	14	4	1	1
PL.63254	PL.63252	C	1/0 AL URD	7.28Y	121.3	0.00	3.73	1.48	1	10	3	96	0.00	0.0	2.055	0.049	10	3	1	1
PL.43385	PL.43384	A	#2 ACSR	7.28Y	121.4	0.00	3.62	3.58	2	25	7	96	0.00	0.0	1.934	0.006	0	0	0	3
PD.6562	PL.43385	A	60QA	7.28Y	121.4	0.00	3.62	3.58	6	25	7	96	0.00	0.0	1.934	0.006	0	0	0	3
PL.43272	PD.6562	A	#2 ACSR	7.28Y	121.4	0.00	3.62	3.58	2	25	7	96	0.00	0.0	1.947	0.012	25	7	3	3
PL.41968	PL.41967	B	#4 ACSR	7.29Y	121.6	0.00	3.44	4.29	3	30	9	96	0.00	0.0	1.805	0.006	0	0	0	3

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Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PD.6561	PL.41968	B	60QA	7.29Y	121.6	0.00	3.44	4.29	7	30	9	96	0.00	0.0	1.805	0.006	0	0	0	3
PL.41969	PD.6561	B	#4 ACSR	7.29Y	121.6	0.00	3.44	4.29	3	30	9	96	0.00	0.0	1.818	0.013	10	3	1	3
PL.41970	PL.41969	B	#4 ACSR	7.29Y	121.6	0.00	3.45	2.84	2	20	6	96	0.00	0.0	1.852	0.034	20	6	2	2
PL.53680	PL.53681	A	#4 ACSR	7.30Y	121.7	0.00	3.31	17.83	14	125	36	96	0.00	0.0	1.714	0.006	0	0	0	13
PD.6560	PL.53680	A	60QA	7.30Y	121.7	0.00	3.31	17.83	30	125	36	96	0.00	0.0	1.714	0.006	0	0	0	13
PL.54192	PD.6560	A	#4 ACSR	7.30Y	121.6	0.08	3.40	17.83	14	125	36	96	0.08	0.1	1.829	0.116	21	6	2	13
PL.54193	PL.54192	A	#4 ACSR	7.30Y	121.6	0.01	3.41	8.37	6	59	17	96	0.00	0.0	1.866	0.037	22	6	2	5
PL.54191	PL.54193	A	#4 ACSR	7.30Y	121.6	0.01	3.41	5.21	4	36	11	96	0.00	0.0	1.923	0.057	36	11	3	3
PL.54194	PL.54192	A	#4 ACSR	7.30Y	121.6	0.01	3.40	6.40	5	45	13	96	0.00	0.0	1.864	0.034	25	7	4	6
PL.54195	PL.54194	A	#4 ACSR	7.30Y	121.6	0.00	3.41	2.77	2	19	6	95	0.00	0.0	1.911	0.047	19	6	2	2
PL.60820	PL.61109	ABC	#3/0 ACSR	7.31Y	121.8	0.00	3.17	0.00	0	0	0	100	0.00	0.0	1.641	0.017	0	0	0	0
PD.9065-B	PL.60820	ABC	Open	7.31Y	121.8	0.00	3.17	0.00	0	0	0	100	0.00	0.0	1.641	0.017	0	0	0	0
PL.43123	PL.61109	B	6 A (CWC)	7.31Y	121.8	0.00	3.18	5.98	4	42	12	96	0.00	0.0	1.630	0.006	0	0	0	7
PD.6598	PL.43123	B	60QA	7.31Y	121.8	0.00	3.18	5.98	10	42	12	96	0.00	0.0	1.630	0.006	0	0	0	7
PL.43124	PD.6598	B	6 A (CWC)	7.31Y	121.8	0.01	3.19	5.98	4	42	12	96	0.00	0.0	1.668	0.039	7	2	1	7
PL.43125	PL.43124	B	6 A (CWC)	7.31Y	121.8	0.00	3.19	4.94	4	35	10	96	0.00	0.0	1.690	0.022	18	5	2	6
PL.43126	PL.43125	B	6 A (CWC)	7.31Y	121.8	0.00	3.19	2.36	2	17	5	96	0.00	0.0	1.729	0.039	17	5	4	4
PL.60817	PL.60816	C	6 A (CWC)	7.32Y	122.0	0.00	2.96	2.32	2	16	5	95	0.00	0.0	1.407	0.003	0	0	0	1
PD.9064	PL.60817	C	10T	7.32Y	122.0	0.00	2.96	2.32	0	16	5	95	0.00	0.0	1.407	0.003	0	0	0	1
PL.60818	PD.9064	C	6 A (CWC)	7.32Y	122.0	0.00	2.96	2.32	2	16	5	95	0.00	0.0	1.468	0.061	16	5	1	1
PL.59600	PL.59601	ABC	#3/0 ACSR	7.34Y	122.3	0.00	2.75	2.52	1	53	16	96	0.00	0.0	1.216	0.029	11	3	1	5
PL.59599	PL.59600	C	#4 ACSR	7.34Y	122.3	0.00	2.75	3.18	2	22	7	95	0.00	0.0	1.245	0.029	10	3	1	2
PL.56751	PL.59599	C	#4 ACSR	7.33Y	122.2	0.00	2.75	1.81	1	13	4	96	0.00	0.0	1.265	0.020	13	4	1	1
PL.59598	PL.59600	ABC	#3/0 ACSR	7.34Y	122.3	0.00	2.75	0.94	0	20	6	96	0.00	0.0	1.270	0.054	0	0	0	2
PL.54726	PL.59598	A	#2 ACSR	7.34Y	122.3	0.00	2.75	2.81	2	20	6	96	0.00	0.0	1.276	0.006	0	0	0	2
PD.6566	PL.54726	A	60QA	7.34Y	122.3	0.00	2.75	2.81	5	20	6	96	0.00	0.0	1.276	0.006	0	0	0	2
PL.54471	PD.6566	A	#2 ACSR	7.34Y	122.3	0.00	2.75	2.81	2	20	6	96	0.00	0.0	1.294	0.018	20	6	2	2
PL.59603	PL.59598	ABC	#3/0 ACSR	7.34Y	122.3	0.00	2.75	0.00	0	0	0	100	0.00	0.0	1.284	0.014	0	0	0	0
PD.8799-B	PL.59603	ABC	Open	7.34Y	122.3	0.00	2.75	0.00	0	0	0	100	0.00	0.0	1.284	0.014	0	0	0	0
PL.59265	PL.59266	B	#2 ACSR	7.34Y	122.3	0.00	2.70	3.87	2	27	8	96	0.00	0.0	1.202	0.045	27	8	5	5
PL.54544	PL.54542	A	#4 ACSR	7.36Y	122.7	0.11	2.35	50.38	39	356	104	96	0.30	0.1	0.944	0.050	5	2	3	36

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.43164	PL.54544	A	#4 ACSR	7.36Y	122.6	0.01	2.35	36.69	28	259	76	96	0.02	0.0	0.950	0.006	0	0	0	25
PD.6134	PL.43164	A	50T	7.36Y	122.6	0.00	2.35	36.69	0	259	76	96	0.00	0.0	0.950	0.006	0	0	0	25
PL.53697	PD.6134	A	#4 ACSR	7.36Y	122.6	0.04	2.40	36.69	28	259	76	96	0.09	0.0	0.978	0.028	14	4	2	25
PL.53698	PL.53697	A	#4 ACSR	7.35Y	122.5	0.08	2.48	34.70	27	245	72	96	0.15	0.1	1.033	0.056	22	6	2	23
PL.43011	PL.53698	A	#4 ACSR	7.35Y	122.4	0.10	2.58	24.95	19	176	51	96	0.12	0.1	1.123	0.089	15	4	1	17
PL.53699	PL.43011	A	#2 ACSR	7.35Y	122.4	0.00	2.58	1.69	1	12	3	97	0.00	0.0	1.134	0.011	12	3	1	1
PL.53703	PL.43011	A	#4 ACSR	7.34Y	122.4	0.03	2.61	21.16	16	149	44	96	0.03	0.0	1.156	0.034	7	2	1	15
PL.53704	PL.53703	A	#4 ACSR	7.34Y	122.4	0.00	2.61	3.56	3	25	7	96	0.00	0.0	1.186	0.030	9	3	2	4
PL.43012	PL.53704	A	#4 ACSR	7.34Y	122.4	0.00	2.61	2.32	2	16	5	95	0.00	0.0	1.235	0.049	16	5	2	2
PL.53705	PL.53703	A	#4 ACSR	7.34Y	122.4	0.03	2.64	16.63	13	117	34	96	0.03	0.0	1.203	0.047	0	0	0	10
PL.53700	PL.53705	A	#4 ACSR	7.34Y	122.3	0.04	2.68	16.63	13	117	34	96	0.03	0.0	1.256	0.052	10	3	1	10
PL.53701	PL.53700	A	#4 ACSR	7.34Y	122.3	0.02	2.70	15.17	12	107	31	96	0.02	0.0	1.288	0.032	7	2	1	9
PL.53702	PL.53701	A	#4 ACSR	7.34Y	122.3	0.02	2.72	14.23	11	100	29	96	0.02	0.0	1.325	0.038	17	5	1	8
PL.53696	PL.53702	A	#4 ACSR	7.34Y	122.3	0.02	2.74	11.76	9	83	24	96	0.01	0.0	1.370	0.045	19	5	2	7
PL.64373	PL.53696	A	#4 ACSR	7.33Y	122.2	0.03	2.77	9.12	7	64	19	96	0.01	0.0	1.436	0.066	8	2	1	5
PL.64374	PL.64373	A	#4 ACSR	7.33Y	122.2	0.00	2.77	7.97	6	56	16	96	0.00	0.0	1.436	0.000	12	4	1	4
PL.53694	PL.64374	A	#4 ACSR	7.33Y	122.2	0.02	2.79	6.24	5	44	13	96	0.00	0.0	1.515	0.079	19	6	1	3
PL.53695	PL.53694	A	#4 ACSR	7.33Y	122.2	0.00	2.79	3.54	3	25	7	96	0.00	0.0	1.562	0.046	25	7	2	2
PL.53706	PL.53698	A	#1/0 ACSR	7.35Y	122.5	0.00	2.48	1.95	1	14	4	96	0.00	0.0	1.057	0.023	14	4	1	1
PL.43010	PL.53698	A	#4 ACSR	7.35Y	122.5	0.01	2.49	4.68	4	33	10	96	0.00	0.0	1.093	0.059	19	6	2	3
PL.53693	PL.43010	A	#4 ACSR	7.35Y	122.5	0.00	2.49	1.92	1	14	4	96	0.00	0.0	1.144	0.051	14	4	1	1
PL.43165	PL.54544	A	#4 ACSR	7.36Y	122.6	0.03	2.37	12.95	10	91	27	96	0.02	0.0	0.995	0.051	3	1	1	8
PL.54719	PL.43165	A	#4 ACSR	7.35Y	122.6	0.04	2.42	12.55	10	89	26	96	0.03	0.0	1.098	0.103	41	12	2	7
PL.54720	PL.54719	A	#4 ACSR	7.35Y	122.6	0.00	2.42	6.76	5	48	14	96	0.00	0.0	1.112	0.013	0	0	0	5
PL.54721	PL.54720	A	#4 ACSR	7.35Y	122.6	0.01	2.43	6.76	5	48	14	96	0.00	0.0	1.154	0.043	20	6	3	5
PL.43009	PL.54721	A	#4 ACSR	7.35Y	122.6	0.00	2.44	3.90	3	28	8	96	0.00	0.0	1.190	0.035	28	8	2	2
PL.54543	PL.54542	A	6 A (CWC)	7.37Y	122.8	0.00	2.24	15.41	11	109	32	96	0.00	0.0	0.900	0.006	0	0	0	11
PD.6138	PL.54543	A	25T	7.37Y	122.8	0.00	2.24	15.41	0	109	32	96	0.00	0.0	0.900	0.006	0	0	0	11
PL.41504	PD.6138	A	6 A (CWC)	7.36Y	122.7	0.02	2.26	15.41	11	109	32	96	0.01	0.0	0.927	0.027	14	4	3	11
PL.54581	PL.41504	A	6 A (CWC)	7.36Y	122.7	0.03	2.28	13.49	10	95	28	96	0.02	0.0	0.972	0.046	0	0	0	8
PL.54583	PL.54581	A	6 A (CWC)	7.36Y	122.7	0.02	2.31	13.49	10	95	28	96	0.01	0.0	1.013	0.040	23	7	1	8

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54584	PL.54583	A	6 A (CWC)	7.36Y	122.7	0.01	2.32	6.72	5	48	14	96	0.00	0.0	1.056	0.044	0	0	0	4
PL.54585	PL.54584	A	6 A (CWC)	7.36Y	122.7	0.02	2.34	6.72	5	48	14	96	0.01	0.0	1.138	0.082	14	4	1	4
PL.54586	PL.54585	A	6 A (CWC)	7.36Y	122.6	0.01	2.35	4.75	3	34	10	96	0.00	0.0	1.189	0.050	8	2	1	3
PL.43162	PL.54586	A	6 A (CWC)	7.36Y	122.6	0.00	2.35	3.55	3	25	7	96	0.00	0.0	1.220	0.032	10	3	1	2
PL.43163	PL.43162	A	6 A (CWC)	7.36Y	122.6	0.01	2.36	2.13	2	15	4	97	0.00	0.0	1.373	0.153	15	4	1	1
PL.54582	PL.54583	A	#4 ACSR	7.36Y	122.7	0.01	2.31	3.57	3	25	7	96	0.00	0.0	1.075	0.062	8	2	2	3
PL.54751	PL.54582	A	#1/0 ACSR	7.36Y	122.7	0.00	2.31	2.39	1	17	5	96	0.00	0.0	1.113	0.038	17	5	1	1
PL.54612	PL.41633	ABC	#1/0 ACSR	7.36Y	122.7	0.21	2.25	43.39	19	921	270	96	1.31	0.1	1.071	0.265	14	4	2	123
PL.54610	PL.54612	B	#2 ACSR	7.36Y	122.7	0.00	2.25	0.46	0	3	1	95	0.00	0.0	1.095	0.025	3	1	1	1
PL.54657	PL.54612	ABC	#1/0 ACSR	7.36Y	122.7	0.03	2.29	34.42	15	730	214	96	0.17	0.0	1.124	0.054	15	4	1	99
PL.54661	PL.54657	ABC	#1/0 ACSR	7.36Y	122.7	0.04	2.32	20.07	9	426	124	96	0.10	0.0	1.226	0.102	24	7	4	59
PL.54660	PL.54661	B	6 A (CWC)	7.36Y	122.7	0.00	2.32	1.69	1	12	3	97	0.00	0.0	1.246	0.020	12	3	1	1
PL.54662	PL.54661	ABC	#1/0 ACSR	7.36Y	122.7	0.01	2.33	18.37	8	389	114	96	0.03	0.0	1.259	0.033	20	6	1	54
PL.54664	PL.54662	ABC	#1/0 ACSR	7.36Y	122.7	0.01	2.34	17.43	8	369	108	96	0.02	0.0	1.287	0.028	0	0	0	53
PL.54666	PL.54664	A	1/0 AL URD	7.36Y	122.7	0.00	2.34	3.73	2	26	8	96	0.00	0.0	1.290	0.003	0	0	0	5
PD.8147	PL.54666	A	40QA	7.36Y	122.7	0.00	2.34	3.73	9	26	8	96	0.00	0.0	1.290	0.003	0	0	0	5
PL.54667	PD.8147	A	1/0 AL URD	7.36Y	122.7	0.00	2.34	3.73	2	26	8	96	0.00	0.0	1.304	0.014	4	1	1	5
PL.54665	PL.54667	A	1/0 AL URD	7.36Y	122.7	0.00	2.35	3.23	2	23	7	96	0.00	0.0	1.339	0.036	8	2	2	4
PL.54663	PL.54665	A	1/0 AL URD	7.36Y	122.7	0.00	2.35	2.07	1	15	4	97	0.00	0.0	1.374	0.034	15	4	2	2
PL.54668	PL.54663	A	1/0 AL URD	7.36Y	122.7	0.00	2.35	0.00	0	0	0	100	0.00	0.0	1.390	0.016	0	0	0	0
PL.54669	PL.54668	A	1/0 AL URD	7.36Y	122.7	0.00	2.35	0.00	0	0	0	100	0.00	0.0	1.392	0.002	0	0	0	0
PL.54403	PL.54664	ABC	#1/0 ACSR	7.36Y	122.7	0.00	2.35	16.19	7	343	100	96	0.01	0.0	1.301	0.014	0	0	0	48
PL.54404	PL.54403	ABC	1/0 AL URD	7.36Y	122.6	0.01	2.35	16.19	10	343	100	96	0.01	0.0	1.317	0.017	9	3	1	48
PL.54405	PL.54404	ABC	1/0 AL URD	7.36Y	122.6	0.01	2.36	15.77	9	334	98	96	0.03	0.0	1.351	0.033	11	3	2	47
PL.54412	PL.54405	ABC	1/0 AL URD	7.36Y	122.6	0.02	2.38	15.26	9	323	95	96	0.05	0.0	1.417	0.067	0	0	0	45
PL.54413	PL.54412	ABC	1/0 AL URD	7.36Y	122.6	0.00	2.38	1.13	1	24	7	96	0.00	0.0	1.456	0.039	13	4	1	3
PL.54408	PL.54413	ABC	1/0 AL URD	7.36Y	122.6	0.00	2.38	0.51	0	11	3	96	0.00	0.0	1.495	0.039	0	0	0	2
PL.54407	PL.54408	ABC	1/0 AL URD	7.36Y	122.6	0.00	2.38	0.51	0	11	3	96	0.00	0.0	1.535	0.040	5	1	1	2
PL.54406	PL.54407	ABC	1/0 AL URD	7.36Y	122.6	0.00	2.38	0.28	0	6	2	95	0.00	0.0	1.574	0.039	0	0	0	1
PL.54714	PL.54406	A	1/0 AL URD	7.36Y	122.6	0.00	2.38	0.00	0	0	0	100	0.00	0.0	1.603	0.029	0	0	0	0
PL.54715	PL.54406	C	1/0 AL URD	7.36Y	122.6	0.00	2.38	0.85	0	6	2	95	0.00	0.0	1.590	0.016	6	2	1	1

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Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54414	PL.54412	B	1/0 AL URD	7.36Y	122.6	0.02	2.41	42.40	25	299	88	96	0.06	0.0	1.435	0.018	0	0	1	42
PL.54409	PL.54414	B	1/0 AL URD	7.35Y	122.5	0.07	2.48	42.40	25	299	88	96	0.16	0.1	1.489	0.053	18	5	4	41
PL.54410	PL.54409	B	1/0 AL URD	7.35Y	122.5	0.03	2.50	39.84	23	281	82	96	0.06	0.0	1.510	0.022	0	0	0	37
PL.54419	PL.54410	B	1/0 AL URD	7.35Y	122.5	0.02	2.53	39.84	23	281	82	96	0.05	0.0	1.531	0.020	18	5	3	37
PL.54420	PL.54419	B	1/0 AL URD	7.35Y	122.4	0.05	2.58	37.32	22	263	77	96	0.11	0.0	1.574	0.043	2	1	2	34
PL.62921	PL.54420	B	#1/0 ACSR	7.35Y	122.4	0.00	2.58	30.76	13	217	63	96	0.00	0.0	1.577	0.003	0	0	0	30
PD.9342	PL.62921	B	30T	7.35Y	122.4	0.00	2.58	30.76	0	217	63	96	0.00	0.0	1.577	0.003	0	0	0	30
PL.62455	PD.9342	B	6 A (CWC)	7.34Y	122.3	0.07	2.65	30.76	22	217	63	96	0.12	0.1	1.629	0.052	4	1	1	30
PL.54151	PL.62455	B	6 A (CWC)	7.34Y	122.3	0.06	2.71	28.10	20	198	58	96	0.09	0.0	1.679	0.049	15	4	2	26
PL.42466	PL.54151	B	6 A (CWC)	7.33Y	122.2	0.13	2.84	25.97	19	183	53	96	0.18	0.1	1.787	0.108	0	0	0	24
PL.54712	PL.42466	B	6 A (CWC)	7.33Y	122.1	0.02	2.87	22.99	16	162	47	96	0.03	0.0	1.811	0.024	2	1	1	22
PL.54713	PL.54712	B	6 A (CWC)	7.33Y	122.1	0.02	2.89	22.65	16	159	47	96	0.02	0.0	1.831	0.021	13	4	1	21
PL.54711	PL.54713	B	6 A (CWC)	7.33Y	122.1	0.02	2.91	20.83	15	147	43	96	0.02	0.0	1.852	0.021	11	3	2	20
PL.54297	PL.54711	B	6 A (CWC)	7.32Y	122.1	0.03	2.94	12.40	9	87	25	96	0.02	0.0	1.915	0.063	8	2	1	10
PL.54299	PL.54297	B	6 A (CWC)	7.32Y	122.0	0.05	2.99	11.27	8	79	23	96	0.03	0.0	2.009	0.093	10	3	1	9
PL.54298	PL.54299	B	6 A (CWC)	7.32Y	122.0	0.01	3.00	9.83	7	69	20	96	0.00	0.0	2.032	0.023	29	9	2	8
PL.42472	PL.54298	B	6 A (CWC)	7.32Y	122.0	0.01	3.00	5.64	4	40	12	96	0.00	0.0	2.068	0.036	6	2	1	6
PL.54310	PL.42472	B	6 A (CWC)	7.32Y	122.0	0.01	3.01	4.85	3	34	10	96	0.00	0.0	2.123	0.055	34	10	5	5
PL.42467	PL.54711	B	6 A (CWC)	7.32Y	122.1	0.01	2.92	6.84	5	48	14	96	0.01	0.0	1.902	0.050	7	2	1	8
PL.42470	PL.42467	B	6 A (CWC)	7.32Y	122.1	0.01	2.93	5.87	4	41	12	96	0.00	0.0	1.945	0.043	8	2	1	7
PL.42471	PL.42470	B	6 A (CWC)	7.32Y	122.1	0.01	2.94	4.71	3	33	10	96	0.00	0.0	1.982	0.036	11	3	2	6
PL.42469	PL.42471	B	6 A (CWC)	7.32Y	122.1	0.00	2.94	3.19	2	22	7	95	0.00	0.0	2.015	0.033	20	6	3	4
PL.42468	PL.42469	B	6 A (CWC)	7.32Y	122.1	0.00	2.94	0.35	0	2	1	89	0.00	0.0	2.058	0.043	2	1	1	1
PL.54710	PL.42466	B	#4 ACSR	7.33Y	122.2	0.00	2.85	2.97	2	21	6	96	0.00	0.0	1.830	0.043	21	6	2	2
PL.54152	PL.62455	B	#4 ACSR	7.34Y	122.3	0.00	2.66	2.09	2	15	4	97	0.00	0.0	1.669	0.040	7	2	2	3
PL.54153	PL.54152	B	#4 ACSR	7.34Y	122.3	0.00	2.66	1.07	1	8	2	97	0.00	0.0	1.750	0.081	8	2	1	1
PL.54154	PL.54420	B	#2 ACSR	7.34Y	122.4	0.01	2.59	6.22	4	44	13	96	0.00	0.0	1.651	0.077	28	8	1	2
PL.54411	PL.54154	B	#2 ACSR	7.34Y	122.4	0.00	2.59	2.32	1	16	5	95	0.00	0.0	1.711	0.061	16	5	1	1
PL.54415	PL.54412	A	1/0 AL URD	7.36Y	122.6	0.00	2.38	0.00	0	0	0	100	0.00	0.0	1.420	0.002	0	0	0	0
PL.54658	PL.54657	B	#4 ACSR	7.36Y	122.7	0.01	2.29	38.72	30	274	80	96	0.02	0.0	1.129	0.004	0	0	0	35
PD.8144	PL.54658	B	75QA	7.36Y	122.7	0.00	2.29	38.72	52	274	80	96	0.00	0.0	1.129	0.004	0	0	0	35

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54615	PD.8144	B	#4 ACSR	7.36Y	122.7	0.05	2.34	38.72	30	274	80	96	0.10	0.0	1.158	0.029	0	0	0	35
PL.54617	PL.54615	B	#4 ACSR	7.36Y	122.6	0.06	2.41	38.72	30	274	80	96	0.12	0.0	1.194	0.036	16	5	3	35
PL.54616	PL.54617	B	#4 ACSR	7.35Y	122.6	0.04	2.45	36.42	28	257	75	96	0.08	0.0	1.220	0.026	0	0	0	32
PL.54621	PL.54616	B	#4 ACSR	7.35Y	122.5	0.02	2.47	9.95	8	70	20	96	0.01	0.0	1.280	0.060	12	3	2	11
PL.54624	PL.54621	B	#4 ACSR	7.35Y	122.5	0.01	2.49	8.31	6	59	17	96	0.00	0.0	1.322	0.042	25	7	2	9
PL.54623	PL.54624	B	#4 ACSR	7.35Y	122.5	0.01	2.49	3.85	3	27	8	96	0.00	0.0	1.384	0.061	23	7	3	5
PL.54155	PL.54623	B	#2 ACSR	7.35Y	122.5	0.00	2.49	0.64	0	5	1	98	0.00	0.0	1.409	0.025	5	1	2	2
PL.54625	PL.54624	B	#2 ACSR	7.35Y	122.5	0.00	2.49	0.86	0	6	2	95	0.00	0.0	1.368	0.046	1	0	1	2
PL.54622	PL.54625	B	#2 ACSR	7.35Y	122.5	0.00	2.49	0.65	0	5	1	98	0.00	0.0	1.391	0.023	5	1	1	1
PL.54620	PL.54616	B	#4 ACSR	7.35Y	122.5	0.01	2.45	3.91	3	28	8	96	0.00	0.0	1.274	0.054	23	7	2	3
PL.54626	PL.54620	B	#4 ACSR	7.35Y	122.5	0.00	2.45	0.62	0	4	1	97	0.00	0.0	1.312	0.038	4	1	1	1
PL.54618	PL.54616	B	#4 ACSR	7.35Y	122.5	0.02	2.47	20.80	16	147	43	96	0.02	0.0	1.241	0.021	24	7	4	16
PL.54619	PL.54618	B	#4 ACSR	7.35Y	122.5	0.03	2.50	17.36	13	123	36	96	0.03	0.0	1.282	0.041	17	5	1	12
PL.43188	PL.54619	B	#4 ACSR	7.35Y	122.5	0.01	2.51	14.94	11	105	31	96	0.01	0.0	1.301	0.018	0	0	0	11
PL.41697	PL.43188	B	#4 ACSR	7.35Y	122.5	0.00	2.51	1.70	1	12	3	97	0.00	0.0	1.324	0.023	12	3	1	1
PL.43189	PL.43188	B	#4 ACSR	7.35Y	122.5	0.02	2.53	11.95	9	84	25	96	0.01	0.0	1.345	0.044	16	5	3	8
PL.53975	PL.43189	B	#4 ACSR	7.35Y	122.5	0.01	2.54	9.64	7	68	20	96	0.01	0.0	1.382	0.037	17	5	1	5
PL.53976	PL.53975	B	#4 ACSR	7.35Y	122.5	0.00	2.55	3.35	3	24	7	96	0.00	0.0	1.419	0.037	9	3	1	2
PL.54157	PL.53976	B	#4 ACSR	7.35Y	122.4	0.00	2.55	2.10	2	15	4	97	0.00	0.0	1.459	0.040	15	4	1	1
PL.54156	PL.54157	B	#4 ACSR	7.35Y	122.4	0.00	2.55	0.00	0	0	0	100	0.00	0.0	1.488	0.029	0	0	0	0
PL.54158	PL.53975	B	#2 ACSR	7.35Y	122.5	0.00	2.54	3.93	2	28	8	96	0.00	0.0	1.402	0.020	28	8	2	2
PL.41322	PL.43188	B	#4 ACSR	7.35Y	122.5	0.00	2.51	1.30	1	9	3	95	0.00	0.0	1.325	0.024	9	3	2	2
PL.43345	PL.54616	B	#2 ACSR	7.35Y	122.6	0.00	2.45	1.75	1	12	4	95	0.00	0.0	1.252	0.032	9	3	1	2
PL.43346	PL.43345	B	#2 ACSR	7.35Y	122.6	0.00	2.45	0.50	0	4	1	97	0.00	0.0	1.271	0.019	4	1	1	1
PL.54659	PL.54657	B	#4 ACSR	7.36Y	122.7	0.00	2.29	2.17	2	15	4	97	0.00	0.0	1.129	0.005	0	0	0	4
PD.8145	PL.54659	B	20QA	7.36Y	122.7	0.00	2.29	2.17	11	15	4	97	0.00	0.0	1.129	0.005	0	0	0	4
PL.54628	PD.8145	B	#4 ACSR	7.36Y	122.7	0.00	2.29	2.17	2	15	4	97	0.00	0.0	1.176	0.047	3	1	1	4
PL.54627	PL.54628	B	6 A (CWC)	7.36Y	122.7	0.00	2.29	1.80	1	13	4	96	0.00	0.0	1.205	0.029	9	2	1	3
PL.54656	PL.54627	B	6 A (CWC)	7.36Y	122.7	0.00	2.29	0.58	0	4	1	97	0.00	0.0	1.255	0.050	4	1	2	2
PL.54613	PL.54612	B	#4 ACSR	7.36Y	122.7	0.00	2.26	24.48	19	173	51	96	0.01	0.0	1.074	0.004	0	0	0	21
PD.8146	PL.54613	B	25T	7.36Y	122.7	0.00	2.26	24.48	0	173	51	96	0.00	0.0	1.074	0.004	0	0	0	21

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

Database: C:\MILSOFT\DATA\2010-2013 WP PROJECTED LOAD PHASE 2 IMPROVEMENTS.WM\
Title: 2010-2013 CWP - Jackson Energy Co-op - McKee, Kentucky
Case: 2013 Projected load with Phase 2 Improvements

Units Displayed In Volts
-Base Voltage:120.0-

Element Name	Parent Name	Cnf	Type/ Conductor	Pri kV	Base Volt	Element Drop	Accum Drop	Thru Amps	% Cap	Thru KW	KVAR	% PF	kW Loss	% Loss	mi From Src	Element Length (mi)	Element KW	Element KVAR	Element Cons On	Element Cons Thru
PL.54614	PD.8146	B	#4 ACSR	7.36Y	122.6	0.15	2.41	24.48	19	173	51	96	0.20	0.1	1.221	0.147	13	4	1	21
PL.54611	PL.54614	B	#4 ACSR	7.35Y	122.5	0.04	2.46	22.61	17	160	47	96	0.05	0.0	1.268	0.047	19	6	2	20
PL.42253	PL.54611	B	#4 ACSR	7.35Y	122.5	0.07	2.53	19.91	15	140	41	96	0.07	0.1	1.349	0.081	14	4	1	18
PL.42254	PL.42253	B	#4 ACSR	7.35Y	122.5	0.01	2.54	17.98	14	127	37	96	0.01	0.0	1.368	0.019	9	3	1	17
PL.42255	PL.42254	B	#4 ACSR	7.35Y	122.4	0.03	2.57	16.70	13	118	34	96	0.02	0.0	1.418	0.050	48	14	7	16
PL.42256	PL.42255	B	#4 ACSR	7.34Y	122.4	0.02	2.59	9.88	8	70	20	96	0.01	0.0	1.473	0.055	22	6	2	9
PL.43341	PL.42256	B	#4 ACSR	7.34Y	122.4	0.01	2.60	6.83	5	48	14	96	0.00	0.0	1.511	0.038	0	0	1	7
PL.43342	PL.43341	B	#4 ACSR	7.34Y	122.4	0.01	2.61	6.83	5	48	14	96	0.00	0.0	1.530	0.019	12	4	1	6
PL.43343	PL.43342	B	#4 ACSR	7.34Y	122.4	0.01	2.62	5.07	4	36	10	96	0.00	0.0	1.587	0.057	4	1	1	5
PL.43344	PL.43343	B	#4 ACSR	7.34Y	122.4	0.00	2.62	3.17	2	22	7	95	0.00	0.0	1.597	0.010	15	4	2	3
PL.54964	PL.43344	B	#4 ACSR	7.34Y	122.4	0.00	2.62	1.01	1	7	2	96	0.00	0.0	1.660	0.063	7	2	1	1
PL.54963	PL.43343	B	#4 ACSR	7.34Y	122.4	0.00	2.62	1.32	1	9	3	95	0.00	0.0	1.663	0.076	9	3	1	1
PL.60908	PL.41632	C	#4 ACSR	7.41Y	123.5	0.00	1.45	0.00	0	0	0	100	0.00	0.0	0.591	0.006	0	0	0	0
PD.9093	PL.60908	C	60QA	7.41Y	123.5	0.00	1.45	0.00	0	0	0	100	0.00	0.0	0.591	0.006	0	0	0	0
PL.60909	PD.9093	C	#4 ACSR	7.41Y	123.5	0.00	1.45	0.00	0	0	0	100	0.00	0.0	0.698	0.107	0	0	0	0
PL.43333	PL.43328	C	6 A (CWC)	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	0.439	0.006	0	0	0	0
PD.6131	PL.43333	C	60QA	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	0.439	0.006	0	0	0	0
PL.43334	PD.6131	C	6 A (CWC)	7.44Y	124.0	0.00	1.04	0.00	0	0	0	100	0.00	0.0	0.506	0.068	0	0	0	0
PL.43376	PL.43373	C	6 A (CWC)	7.48Y	124.6	0.00	0.41	8.20	6	59	17	96	0.00	0.0	0.215	0.006	0	0	0	6
PD.6132	PL.43376	C	60QA	7.48Y	124.6	0.00	0.41	8.20	14	59	17	96	0.00	0.0	0.215	0.006	0	0	0	6
PL.43377	PD.6132	C	6 A (CWC)	7.47Y	124.6	0.03	0.45	8.20	6	59	17	96	0.01	0.0	0.300	0.085	0	0	0	6
PL.60850	PL.43377	C	6 A (CWC)	7.47Y	124.6	0.00	0.45	4.31	3	31	9	96	0.00	0.0	0.322	0.022	31	9	4	4
PL.41822	PL.43377	C	#4 ACSR	7.47Y	124.6	0.00	0.45	0.00	0	0	0	100	0.00	0.0	0.374	0.074	0	0	0	0
PL.41303	PL.43377	C	#4 ACSR	7.47Y	124.5	0.00	0.45	3.88	3	28	8	96	0.00	0.0	0.352	0.052	28	8	2	2
PL.43374	PL.43372	A	#4 ACSR	7.49Y	124.8	0.00	0.22	3.05	2	22	6	96	0.00	0.0	0.148	0.006	0	0	0	2
PD.6130	PL.43374	A	60QA	7.49Y	124.8	0.00	0.22	3.05	5	22	6	96	0.00	0.0	0.148	0.006	0	0	0	2
PL.43375	PD.6130	A	#4 ACSR	7.49Y	124.8	0.00	0.23	3.05	2	22	6	96	0.00	0.0	0.211	0.063	22	6	2	2

KEY-> L = Low Voltage H = High Voltage C = Capacity Over Limit (%capacity or load amps) G = Generator Out of kvar Limits P = Power Factor Low

Balanced Voltage Drop Report
Source: Pine Grove 1

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load Losses	Total	
KW	10534	0	0	0	0	0	269	0.00	10803	Lowest Voltage = 118.65 on Element PL.42850
KVAR	3128	0	0	0	0	0	482		3610	Max Accm VoltD = 6.35 on Element PL.42850
										Max Elem VoltD = 0.52 on Element PL.43064