

Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
Pine Grove 2		ABC	SRC-Pine G	7.50Y	125.0	0.00	0.00	461.70	0	9852	3294	95	0.00	0.0	0.000	0.000	0	0	0	1005
PL.62453	Pine Grove 2	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	162.80	31	3497	1090	95	0.01	0.0	0.002	0.002	0	0	0	414
PL.62454	PL.62453	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	162.80	31	3497	1090	95	0.01	0.0	0.003	0.002	0	0	0	414
----- Feeder No. 3 (Hwy 363 F3) Beginning with Device PD.9339 -----																				
PD.9339	PL.62454	ABC	400VWE	7.50Y	125.0	0.00	0.00	162.80	0	3497	1090	95	0.00	0.0	0.003	0.002	0	0	0	414
PL.62448	PD.9339	ABC	397 SPACER	7.50Y	125.0	0.01	0.01	162.80	31	3497	1090	95	0.04	0.0	0.015	0.012	0	0	0	414
PL.62449	PL.62448	A	#3/0 ACSR	7.50Y	125.0	0.00	0.01	5.66	2	41	12	96	0.00	0.0	0.021	0.006	0	0	0	6
PD.6407	PL.62449	A	50QA	7.50Y	125.0	0.00	0.01	5.66	11	41	12	96	0.00	0.0	0.021	0.006	0	0	0	6
PL.42729	PD.6407	A	#3/0 ACSR	7.50Y	125.0	0.00	0.01	5.66	2	41	12	96	0.00	0.0	0.054	0.033	5	1	1	6
PL.42730	PL.42729	A	#3/0 ACSR	7.50Y	125.0	0.00	0.01	4.95	2	36	10	96	0.00	0.0	0.079	0.025	2	1	1	5
PL.42731	PL.42730	A	#3/0 ACSR	7.50Y	125.0	0.00	0.01	3.57	1	26	7	97	0.00	0.0	0.110	0.031	26	7	2	2
PL.41566	PL.42730	A	#4 ACSR	7.50Y	125.0	0.00	0.01	1.08	1	8	2	97	0.00	0.0	0.115	0.035	8	2	2	2
PL.62450	PL.62448	ABC	397 SPACER	7.49Y	124.9	0.10	0.11	160.91	31	3456	1077	95	0.64	0.0	0.204	0.189	5	2	1	408
PL.41047	PL.62450	ABC	397 SPACER	7.49Y	124.9	0.02	0.12	160.66	31	3450	1068	96	0.11	0.0	0.236	0.032	0	0	0	407
PL.41296	PL.41047	ABC	397 SPACER	7.49Y	124.8	0.04	0.17	160.66	31	3450	1067	96	0.29	0.0	0.321	0.085	0	0	0	407
PL.41297	PL.41296	B	#2 ACSR	7.49Y	124.8	0.00	0.17	2.54	1	18	5	96	0.00	0.0	0.326	0.006	0	0	0	3
PD.6601	PL.41297	B	65T	7.49Y	124.8	0.00	0.17	2.54	0	18	5	96	0.00	0.0	0.326	0.006	0	0	0	3
PL.41298	PD.6601	B	#2 ACSR	7.49Y	124.8	0.00	0.17	2.54	1	18	5	96	0.00	0.0	0.333	0.007	18	5	3	3
PL.41913	PL.41296	ABC	397 SPACER	7.49Y	124.8	0.03	0.20	159.81	31	3431	1058	96	0.17	0.0	0.372	0.052	14	4	1	404
PL.41918	PL.41913	C	#2 ACSR	7.49Y	124.8	0.00	0.20	0.18	0	1	0	100	0.00	0.0	0.450	0.078	1	0	1	1
PL.41919	PL.41918	C	#2 ACSR	7.49Y	124.8	0.00	0.20	0.00	0	0	0	100	0.00	0.0	0.543	0.093	0	0	0	0
PL.41914	PL.41913	ABC	397 SPACER	7.48Y	124.7	0.06	0.26	159.11	31	3416	1052	96	0.40	0.0	0.492	0.120	0	0	0	402
PL.58928	PL.41914	ABC	397 SPACER	7.48Y	124.7	0.03	0.29	154.66	30	3320	1019	96	0.22	0.0	0.561	0.069	0	0	0	393
PL.58929	PL.58928	ABC	336 MCM AC	7.48Y	124.6	0.08	0.38	154.66	30	3320	1017	96	1.44	0.0	0.633	0.072	12	3	1	393
PL.42996	PL.58929	ABC	336 MCM AC	7.48Y	124.6	0.04	0.41	153.64	30	3296	1007	96	0.60	0.0	0.663	0.030	0	0	1	391
PL.42997	PL.42996	ABC	336 MCM AC	7.47Y	124.4	0.15	0.56	153.64	30	3295	1006	96	2.52	0.1	0.790	0.127	0	0	0	390
PL.53676	PL.42997	ABC	336 MCM AC	7.46Y	124.4	0.08	0.64	153.08	29	3281	996	96	1.35	0.0	0.858	0.068	0	0	0	388
PL.53678	PL.53676	ABC	336 MCM AC	7.46Y	124.3	0.05	0.69	152.28	29	3262	988	96	0.86	0.0	0.902	0.044	2	1	1	386
PL.43000	PL.53678	ABC	336 MCM AC	7.46Y	124.3	0.05	0.75	152.16	29	3259	985	96	0.91	0.0	0.949	0.047	0	0	0	385
PL.42751	PL.43000	B	6 A (CWC)	7.46Y	124.3	0.00	0.75	1.34	1	10	3	96	0.00	0.0	0.954	0.006	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

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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	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.6151	PL.42751	B	65T	7.46Y	124.3	0.00	0.75	1.34	0	10	3	96	0.00	0.0	0.954	0.006	0	0	0	2
PL.53675	PD.6151	B	6 A (CWC)	7.45Y	124.2	0.01	0.75	1.34	1	10	3	96	0.00	0.0	1.152	0.197	10	3	2	2
PL.42752	PL.43000	ABC	336 MCM AC	7.45Y	124.2	0.03	0.78	149.87	29	3209	969	96	0.55	0.0	0.978	0.029	12	3	2	379
PL.42753	PL.42752	ABC	336 MCM AC	7.45Y	124.1	0.08	0.86	149.31	29	3196	964	96	1.36	0.0	1.051	0.073	23	7	3	377
PL.42754	PL.42753	C	#4 ACSR	7.45Y	124.1	0.00	0.86	2.11	2	15	4	97	0.00	0.0	1.056	0.006	0	0	0	1
PD.6602	PL.42754	C	65T	7.45Y	124.1	0.00	0.86	2.11	0	15	4	97	0.00	0.0	1.056	0.006	0	0	0	1
PL.53983	PD.6602	C	#4 ACSR	7.45Y	124.1	0.00	0.87	2.11	2	15	4	97	0.00	0.0	1.095	0.038	15	4	1	1
PL.42755	PL.42753	C	#4 ACSR	7.45Y	124.1	0.00	0.86	0.73	1	5	2	93	0.00	0.0	1.056	0.006	0	0	0	1
PD.6152	PL.42755	C	65T	7.45Y	124.1	0.00	0.86	0.73	0	5	2	93	0.00	0.0	1.056	0.006	0	0	0	1
PL.53980	PD.6152	C	#4 ACSR	7.45Y	124.1	0.00	0.86	0.73	1	5	2	93	0.00	0.0	1.103	0.047	5	2	1	1
PL.42542	PL.42753	ABC	336 MCM AC	7.44Y	124.0	0.12	0.98	147.28	28	3151	948	96	1.89	0.1	1.155	0.104	18	5	1	372
PL.54605	PL.42542	ABC	336 MCM AC	7.44Y	123.9	0.09	1.07	146.44	28	3131	939	96	1.47	0.0	1.236	0.081	4	1	1	371
PL.54607	PL.54605	C	#4 ACSR	7.44Y	123.9	0.00	1.07	0.72	1	5	1	98	0.00	0.0	1.242	0.006	0	0	0	1
PD.6153	PL.54607	C	65T	7.44Y	123.9	0.00	1.07	0.72	0	5	1	98	0.00	0.0	1.242	0.006	0	0	0	1
PL.53982	PD.6153	C	#4 ACSR	7.44Y	123.9	0.00	1.07	0.72	1	5	1	98	0.00	0.0	1.303	0.061	5	1	1	1
PL.54606	PL.54605	ABC	6 A (CWC)	7.44Y	123.9	0.01	1.08	25.20	18	537	166	96	0.02	0.0	1.242	0.006	0	0	0	61
PD.6147	PL.54606	ABC	65T	7.44Y	123.9	0.00	1.08	25.20	0	537	166	96	0.00	0.0	1.242	0.006	0	0	0	61
PL.41661	PD.6147	ABC	6 A (CWC)	7.43Y	123.8	0.09	1.17	25.20	18	537	166	96	0.38	0.1	1.333	0.091	1	0	1	61
PL.54233	PL.41661	ABC	6 A (CWC)	7.42Y	123.7	0.10	1.27	24.67	18	525	163	96	0.43	0.1	1.440	0.107	9	3	1	59
PL.54234	PL.54233	ABC	6 A (CWC)	7.41Y	123.6	0.16	1.43	24.26	17	516	160	96	0.65	0.1	1.606	0.166	0	0	0	58
PL.42795	PL.54234	C	6 A (CWC)	7.41Y	123.6	0.00	1.43	18.81	13	134	39	96	0.00	0.0	1.612	0.006	0	0	0	13
PD.6154	PL.42795	C	50QA	7.41Y	123.6	0.00	1.43	18.81	38	134	39	96	0.00	0.0	1.612	0.006	0	0	0	13
PL.41683	PD.6154	C	6 A (CWC)	7.41Y	123.5	0.03	1.46	18.81	13	134	39	96	0.03	0.0	1.648	0.037	0	0	0	13
PL.41382	PL.41683	C	6 A (CWC)	7.41Y	123.5	0.05	1.52	16.50	12	117	34	96	0.05	0.0	1.723	0.075	9	3	1	11
PL.54182	PL.41382	C	#1/0 ACSR	7.41Y	123.5	0.00	1.52	2.97	1	21	6	96	0.00	0.0	1.776	0.053	21	6	3	3
PL.41383	PL.41382	C	6 A (CWC)	7.41Y	123.5	0.02	1.54	12.22	9	87	25	96	0.01	0.0	1.774	0.051	25	7	2	7
PL.54757	PL.41383	C	6 A (CWC)	7.41Y	123.4	0.02	1.56	8.66	6	62	18	96	0.01	0.0	1.832	0.058	14	4	1	5
PL.54758	PL.54757	C	6 A (CWC)	7.41Y	123.4	0.02	1.58	6.70	5	48	14	96	0.01	0.0	1.891	0.059	11	3	1	4
PL.54759	PL.54758	C	#2 ACSR	7.41Y	123.4	0.00	1.58	1.53	1	11	3	96	0.00	0.0	1.966	0.074	11	3	1	1
PL.57326	PL.54758	C	6 A (CWC)	7.40Y	123.4	0.01	1.59	3.68	3	26	8	96	0.00	0.0	1.956	0.064	0	0	0	2
PL.57330	PL.57326	C	6 A (CWC)	7.40Y	123.4	0.04	1.64	3.68	3	26	8	96	0.01	0.0	2.220	0.264	0	0	0	2

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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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.57331	PL.57330	C	6 A (CWC)	7.40Y	123.4	0.00	1.64	1.18	1	8	2	97	0.00	0.0	2.323	0.103	8	2	1	1
PL.57329	PL.57330	C	#2 ACSR	7.40Y	123.4	0.01	1.64	2.49	1	18	5	96	0.00	0.0	2.350	0.130	18	5	1	1
PL.64519	PL.41683	C	#4 ACSR	7.41Y	123.5	0.00	1.47	2.31	2	16	5	95	0.00	0.0	1.695	0.047	0	0	0	2
PL.64520	PL.64519	C	#4 ACSR	7.41Y	123.5	0.00	1.47	2.31	2	16	5	95	0.00	0.0	1.695	0.000	16	5	2	2
PL.63244	PL.54234	C	6 A (CWC)	7.41Y	123.6	0.01	1.44	46.11	33	328	95	96	0.02	0.0	1.610	0.004	0	0	0	43
PD.9476	PL.63244	C	50T	7.41Y	123.6	0.00	1.44	46.11	0	328	95	96	0.00	0.0	1.610	0.004	0	0	0	43
PL.63245	PD.9476	C	6 A (CWC)	7.41Y	123.4	0.14	1.58	46.11	33	328	95	96	0.34	0.1	1.680	0.070	23	7	4	43
PL.54267	PL.63245	C	6 A (CWC)	7.40Y	123.4	0.04	1.62	17.99	13	128	37	96	0.03	0.0	1.725	0.045	16	5	2	22
PL.63519	PL.54267	C	6 A (CWC)	7.40Y	123.4	0.00	1.62	15.67	11	111	32	96	0.00	0.0	1.729	0.004	0	0	0	20
PD.9479	PL.63519	C	30T	7.40Y	123.4	0.00	1.62	15.67	0	111	32	96	0.00	0.0	1.729	0.004	0	0	0	20
PL.63520	PD.9479	C	6 A (CWC)	7.40Y	123.3	0.06	1.67	15.67	11	111	32	96	0.05	0.0	1.806	0.077	0	0	0	20
PL.55921	PL.63520	C	6 A (CWC)	7.40Y	123.3	0.01	1.68	0.85	1	6	2	95	0.00	0.0	1.997	0.191	0	0	0	1
PL.55922	PL.55921	C	6 A (CWC)	7.40Y	123.3	0.01	1.69	0.85	1	6	2	95	0.00	0.0	2.276	0.279	6	2	1	1
PL.54266	PL.63520	C	#4 ACSR	7.39Y	123.2	0.09	1.76	14.82	11	105	31	96	0.07	0.1	1.938	0.131	0	0	0	19
PL.54519	PL.54266	C	#4 ACSR	7.39Y	123.2	0.03	1.79	14.82	11	105	30	96	0.02	0.0	1.996	0.059	49	14	7	19
PL.54520	PL.54519	C	#1/0 ACSR	7.39Y	123.2	0.01	1.80	7.88	3	56	16	96	0.00	0.0	2.039	0.042	18	5	2	12
PL.54521	PL.54520	C	#1/0 ACSR	7.39Y	123.2	0.00	1.80	5.37	2	38	11	96	0.00	0.0	2.084	0.045	38	11	10	10
PL.54265	PL.63245	C	6 A (CWC)	7.40Y	123.4	0.06	1.64	24.88	18	177	51	96	0.08	0.0	1.732	0.052	0	0	0	17
PL.54229	PL.54265	C	6 A (CWC)	7.40Y	123.3	0.02	1.66	22.00	16	156	45	96	0.03	0.0	1.757	0.025	22	7	3	15
PL.54230	PL.54229	C	6 A (CWC)	7.40Y	123.3	0.04	1.70	18.84	13	134	39	96	0.03	0.0	1.804	0.047	35	10	3	12
PL.54528	PL.54230	C	6 A (CWC)	7.40Y	123.3	0.02	1.71	13.88	10	99	29	96	0.01	0.0	1.840	0.035	61	18	6	9
PL.54527	PL.54528	C	#2 ACSR	7.40Y	123.3	0.00	1.72	2.39	1	17	5	96	0.00	0.0	1.879	0.040	17	5	1	1
PL.54529	PL.54528	C	6 A (CWC)	7.40Y	123.3	0.00	1.72	1.98	1	14	4	96	0.00	0.0	1.868	0.028	0	0	0	1
PL.54184	PL.54529	C	#1/0 ACSR	7.40Y	123.3	0.00	1.72	1.98	1	14	4	96	0.00	0.0	1.877	0.009	14	4	1	1
PL.54183	PL.54529	C	6 A (CWC)	7.40Y	123.3	0.00	1.72	0.00	0	0	0	100	0.00	0.0	1.892	0.024	0	0	0	0
PL.54530	PL.54528	C	#2 ACSR	7.40Y	123.3	0.00	1.71	0.93	1	7	2	96	0.00	0.0	1.883	0.044	7	2	1	1
PL.63517	PL.54265	C	6 A (CWC)	7.40Y	123.4	0.00	1.64	2.87	2	20	6	96	0.00	0.0	1.735	0.003	0	0	0	2
PD.9478	PL.63517	C	20T	7.40Y	123.4	0.00	1.64	2.87	0	20	6	96	0.00	0.0	1.735	0.003	0	0	0	2
PL.63518	PD.9478	C	6 A (CWC)	7.40Y	123.4	0.01	1.64	2.87	2	20	6	96	0.00	0.0	1.777	0.042	0	0	0	2
PL.54228	PL.63518	C	6 A (CWC)	7.40Y	123.4	0.00	1.65	2.87	2	20	6	96	0.00	0.0	1.798	0.021	20	6	2	2
PL.41710	PL.54234	ABC	6 A (CWC)	7.41Y	123.6	0.01	1.43	2.66	2	53	26	90	0.00	0.0	1.670	0.064	0	0	0	2

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PL.57248	PL.41710	ABC	1/0 AL URD	7.41Y	123.6	0.00	1.44	2.66	2	53	26	90	0.00	0.0	1.752	0.082	18	9	1	2
PL.57249	PL.57248	ABC	1/0 AL URD	7.41Y	123.6	0.00	1.44	1.77	1	36	17	90	0.00	0.0	1.760	0.008	36	17	1	1
PL.41662	PL.41661	C	#2 ACSR	7.43Y	123.8	0.00	1.17	1.51	1	11	3	96	0.00	0.0	1.339	0.006	0	0	0	1
PD.6679	PL.41662	C	10QA	7.43Y	123.8	0.00	1.17	1.51	0	11	3	96	0.00	0.0	1.339	0.006	0	0	0	1
PL.57975	PD.6679	C	#2 ACSR	7.43Y	123.8	0.01	1.17	1.51	1	11	3	96	0.00	0.0	1.457	0.119	0	0	0	1
PL.57976	PL.57975	C	#2 ACSR	7.43Y	123.8	0.00	1.17	1.51	1	11	3	96	0.00	0.0	1.506	0.049	11	3	1	1
PL.54608	PL.54605	ABC	#2 ACSR	7.42Y	123.7	0.25	1.32	119.26	68	2550	757	96	4.88	0.2	1.321	0.084	17	5	2	303
PL.54469	PL.54608	ABC	#2 ACSR	7.40Y	123.4	0.32	1.64	118.48	68	2529	749	96	6.10	0.2	1.427	0.107	21	6	2	301
PL.63753	PL.54469	A	#4 ACSR	7.40Y	123.4	0.00	1.64	1.59	1	11	3	96	0.00	0.0	1.427	0.000	0	0	0	2
PL.63754	PL.63753	A	#4 ACSR	7.40Y	123.4	0.00	1.65	1.59	1	11	3	96	0.00	0.0	1.433	0.006	0	0	0	2
PD.6680	PL.63754	A	65T	7.40Y	123.4	0.00	1.65	1.59	0	11	3	96	0.00	0.0	1.433	0.006	0	0	0	2
PL.42798	PD.6680	A	#4 ACSR	7.40Y	123.4	0.00	1.65	1.59	1	11	3	96	0.00	0.0	1.477	0.044	0	0	0	2
PL.42799	PL.42798	A	#4 ACSR	7.40Y	123.3	0.00	1.65	1.59	1	11	3	96	0.00	0.0	1.534	0.057	11	3	2	2
PL.60938	PL.54469	ABC	#2 ACSR	7.39Y	123.2	0.18	1.83	116.96	67	2490	737	96	3.47	0.1	1.490	0.062	13	4	1	297
PL.60942	PL.60938	ABC	#2 ACSR	7.39Y	123.1	0.03	1.86	116.35	66	2474	731	96	0.55	0.0	1.500	0.010	0	0	0	296
PL.60944	PL.60942	ABC	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.17	0	4	1	97	0.00	0.0	1.502	0.002	0	0	0	1
PL.60949	PL.60944	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.545	0.043	0	0	0	0
PL.60950	PL.60949	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.560	0.015	0	0	0	0
PL.60952	PL.60950	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.628	0.068	0	0	0	0
PL.60954	PL.60952	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.684	0.056	0	0	0	0
PL.60956	PL.60954	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.718	0.034	0	0	0	0
PL.60957	PL.60956	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.751	0.033	0	0	0	0
PL.60955	PL.60957	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.797	0.046	0	0	0	0
PL.60953	PL.60955	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.830	0.033	0	0	0	0
PL.60960	PL.60953	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.895	0.066	0	0	0	0
PL.60961	PL.60960	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.933	0.037	0	0	0	0
PL.60967	PL.60961	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.000	0.068	0	0	0	0
PL.60969	PL.60967	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.042	0.042	0	0	0	0
PL.60971	PL.60969	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.085	0.042	0	0	0	0
PL.60972	PL.60971	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.128	0.043	0	0	0	0
PL.60970	PL.60972	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.170	0.042	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.60968	PL.60970	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.213	0.043	0	0	0	0
PL.60966	PL.60968	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.275	0.062	0	0	0	0
PL.60965	PL.60966	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	2.300	0.025	0	0	0	0
PL.60945	PL.60944	ABC	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.749	0.247	0	0	0	0
PL.60946	PL.60945	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.752	0.003	0	0	0	0
PL.60947	PL.60945	C	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.751	0.002	0	0	0	0
PL.60948	PL.60944	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.51	0	4	1	97	0.00	0.0	1.527	0.025	0	0	0	1
PL.60951	PL.60948	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.51	0	4	1	97	0.00	0.0	1.584	0.057	0	0	0	1
PL.60958	PL.60951	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.51	0	4	1	97	0.00	0.0	1.622	0.038	0	0	0	1
PL.72562	PL.60958	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.51	0	4	1	97	0.00	0.0	1.655	0.034	0	0	0	1
PL.72563	PL.72562	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.51	0	4	1	97	0.00	0.0	1.659	0.004	4	1	1	1
PL.60962	PL.72563	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.696	0.037	0	0	0	0
PL.60963	PL.60962	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.734	0.037	0	0	0	0
PL.60964	PL.60963	B	1/0 AL URD	7.39Y	123.1	0.00	1.86	0.00	0	0	0	100	0.00	0.0	1.749	0.016	0	0	0	0
PL.60943	PL.60942	ABC	#2 ACSR	7.38Y	123.0	0.10	1.96	116.18	66	2470	730	96	1.82	0.1	1.532	0.033	0	0	0	295
PL.60940	PL.60943	C	#1/0 ACSR	7.38Y	123.0	0.00	1.96	1.63	1	12	3	97	0.00	0.0	1.538	0.006	0	0	0	1
PD.6400	PL.60940	C	65T	7.38Y	123.0	0.00	1.96	1.63	0	12	3	97	0.00	0.0	1.538	0.006	0	0	0	1
PL.42756	PD.6400	C	#1/0 ACSR	7.38Y	123.0	0.00	1.96	1.63	1	12	3	97	0.00	0.0	1.602	0.064	12	3	1	1
PL.60941	PL.60943	A	6 A (CWC)	7.38Y	123.0	0.02	1.98	76.75	55	544	160	96	0.08	0.0	1.538	0.006	0	0	0	55
PD.6401	PL.60941	A	65T	7.38Y	123.0	0.00	1.98	76.75	0	544	160	96	0.00	0.0	1.538	0.006	0	0	0	55
PL.42757	PD.6401	A	6 A (CWC)	7.37Y	122.8	0.22	2.19	76.75	55	544	160	96	0.88	0.2	1.600	0.062	0	0	1	55
PL.42758	PL.42757	A	6 A (CWC)	7.36Y	122.7	0.08	2.27	76.75	55	543	159	96	0.30	0.1	1.622	0.022	16	5	1	54
PL.42759	PL.42758	A	6 A (CWC)	7.36Y	122.7	0.07	2.34	74.45	53	526	154	96	0.29	0.1	1.643	0.022	0	0	0	53
PL.42760	PL.42759	A	6 A (CWC)	7.35Y	122.4	0.22	2.56	74.17	53	524	153	96	0.85	0.2	1.707	0.064	0	0	0	52
PL.42761	PL.42760	A	6 A (CWC)	7.35Y	122.4	0.02	2.58	74.17	53	523	153	96	0.08	0.0	1.713	0.006	0	0	0	52
PD.6789	PL.42761	A	140L	7.35Y	122.4	0.00	2.58	74.17	53	523	153	96	0.00	0.0	1.713	0.006	0	0	0	52
PL.54343	PD.6789	A	6 A (CWC)	7.33Y	122.2	0.18	2.76	74.17	53	523	153	96	0.70	0.1	1.766	0.053	8	2	1	52
PL.54344	PL.54343	A	6 A (CWC)	7.33Y	122.1	0.09	2.85	73.01	52	514	150	96	0.36	0.1	1.794	0.029	14	4	1	51
PL.54340	PL.54344	A	6 A (CWC)	7.32Y	122.0	0.16	3.01	71.08	51	500	146	96	0.60	0.1	1.844	0.050	8	2	1	50
PL.54341	PL.54340	A	6 A (CWC)	7.31Y	121.9	0.11	3.13	67.79	48	476	139	96	0.40	0.1	1.882	0.038	27	8	3	47
PL.57754	PL.54341	A	6 A (CWC)	7.31Y	121.8	0.10	3.23	63.89	46	449	131	96	0.34	0.1	1.917	0.035	10	3	1	44

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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.57755	PL.57754	A	6 A (CWC)	7.30Y	121.7	0.12	3.35	62.52	45	439	128	96	0.38	0.1	1.957	0.040	0	0	0	43
PL.59036	PL.57755	A	#4 ACSR	7.30Y	121.7	0.00	3.35	9.27	7	65	19	96	0.00	0.0	1.961	0.004	0	0	0	6
PD.8667	PL.59036	A	25T	7.30Y	121.7	0.00	3.35	9.27	0	65	19	96	0.00	0.0	1.961	0.004	0	0	0	6
PL.59037	PD.8667	A	#4 ACSR	7.30Y	121.6	0.01	3.36	9.27	7	65	19	96	0.01	0.0	1.999	0.039	22	6	3	6
PL.42763	PL.59037	A	#4 ACSR	7.30Y	121.6	0.01	3.37	6.07	5	43	12	96	0.00	0.0	2.074	0.074	25	7	2	3
PL.43027	PL.42763	A	#4 ACSR	7.30Y	121.6	0.01	3.38	2.52	2	18	5	96	0.00	0.0	2.124	0.050	0	0	0	1
PL.43028	PL.43027	A	#4 ACSR	7.30Y	121.6	0.00	3.38	2.52	2	18	5	96	0.00	0.0	2.167	0.043	18	5	1	1
PL.42764	PL.57755	A	6 A (CWC)	7.29Y	121.5	0.19	3.53	53.25	38	373	108	96	0.50	0.1	2.040	0.083	58	17	5	37
PL.42765	PL.42764	A	6 A (CWC)	7.28Y	121.3	0.13	3.66	45.01	32	315	91	96	0.29	0.1	2.107	0.066	46	13	5	32
PL.42766	PL.42765	A	#1/0 ACSR	7.28Y	121.3	0.00	3.66	0.00	0	0	0	100	0.00	0.0	2.148	0.041	0	0	0	1
PL.42767	PL.42766	A	#1/0 ACSR	7.28Y	121.3	0.00	3.66	0.00	0	0	0	100	0.00	0.0	2.193	0.045	0	0	1	1
PL.54118	PL.42765	A	6 A (CWC)	7.28Y	121.3	0.06	3.72	38.47	27	269	78	96	0.12	0.0	2.146	0.039	44	13	4	26
PL.54382	PL.54118	A	6 A (CWC)	7.27Y	121.1	0.13	3.85	32.21	23	225	65	96	0.21	0.1	2.241	0.095	32	9	3	22
PL.54385	PL.54382	A	6 A (CWC)	7.27Y	121.1	0.04	3.89	27.60	20	193	56	96	0.05	0.0	2.271	0.030	11	3	1	19
PL.54386	PL.54385	A	6 A (CWC)	7.26Y	121.1	0.05	3.94	25.96	19	181	52	96	0.07	0.0	2.314	0.043	0	0	0	18
PL.54381	PL.54386	A	#2 ACSR	7.26Y	121.1	0.00	3.94	2.06	1	14	4	96	0.00	0.0	2.361	0.046	14	4	1	1
PL.54384	PL.54386	A	#1/0 ACSR	7.26Y	121.1	0.00	3.94	4.63	2	32	9	96	0.00	0.0	2.319	0.004	0	0	0	2
PD.8132	PL.54384	A	20QA	7.26Y	121.1	0.00	3.94	4.63	23	32	9	96	0.00	0.0	2.319	0.004	0	0	0	2
PL.54366	PD.8132	A	#1/0 ACSR	7.26Y	121.1	0.00	3.95	4.63	2	32	9	96	0.00	0.0	2.339	0.020	19	6	1	2
PL.54367	PL.54366	A	#1/0 ACSR	7.26Y	121.1	0.00	3.95	1.90	1	13	4	96	0.00	0.0	2.401	0.062	13	4	1	1
PL.54383	PL.54386	A	6 A (CWC)	7.26Y	121.0	0.02	3.97	19.27	14	134	39	96	0.02	0.0	2.343	0.028	15	4	1	15
PL.54365	PL.54383	A	#4 ACSR	7.26Y	121.0	0.00	3.97	1.81	1	13	4	96	0.00	0.0	2.380	0.037	13	4	1	1
PL.42768	PL.54383	A	6 A (CWC)	7.26Y	121.0	0.04	4.00	15.30	11	107	31	96	0.03	0.0	2.399	0.056	20	6	1	13
PL.41397	PL.42768	A	#4 ACSR	7.26Y	121.0	0.01	4.01	2.30	2	16	5	95	0.00	0.0	2.617	0.218	15	4	1	2
PL.41490	PL.41397	A	#4 ACSR	7.26Y	121.0	0.00	4.01	0.08	0	1	0	100	0.00	0.0	2.813	0.196	1	0	1	1
PL.54076	PL.42768	A	6 A (CWC)	7.26Y	121.0	0.01	4.02	10.19	7	71	21	96	0.01	0.0	2.441	0.042	36	10	4	10
PL.54077	PL.54076	A	6 A (CWC)	7.26Y	121.0	0.01	4.03	5.06	4	35	10	96	0.00	0.0	2.495	0.054	21	6	2	6
PL.63521	PL.54077	A	6 A (CWC)	7.26Y	121.0	0.00	4.03	1.32	1	9	3	95	0.00	0.0	2.498	0.004	0	0	0	3
PL.63527	PL.63521	A	6 A (CWC)	7.26Y	121.0	0.00	4.03	1.32	1	9	3	95	0.00	0.0	2.519	0.020	0	0	0	3
PL.63526	PL.63527	A	#1/0 ACSR	7.26Y	121.0	0.00	4.03	1.32	1	9	3	95	0.00	0.0	2.555	0.036	9	3	3	3
PL.63528	PL.63527	A	6 A (CWC)	7.26Y	121.0	0.00	4.03	0.00	0	0	0	100	0.00	0.0	2.613	0.094	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.63522	PL.54077	A	#1/0 ACSR	7.26Y	121.0	0.00	4.03	0.73	0	5	1	98	0.00	0.0	2.589	0.094	5	1	1	1
PL.54380	PL.54382	A	#2 ACSR	7.27Y	121.1	0.00	3.85	0.00	0	0	0	100	0.00	0.0	2.271	0.030	0	0	0	0
PL.54117	PL.54118	A	#2 ACSR	7.28Y	121.3	0.00	3.72	0.00	0	0	0	100	0.00	0.0	2.182	0.036	0	0	0	0
PL.54342	PL.54340	A	6 A (CWC)	7.32Y	122.0	0.01	3.02	2.13	2	15	4	97	0.00	0.0	1.946	0.102	9	3	1	2
PL.42762	PL.54342	A	6 A (CWC)	7.32Y	122.0	0.00	3.02	0.78	1	5	2	93	0.00	0.0	2.027	0.081	5	2	1	1
PL.41818	PL.42759	A	6 A (CWC)	7.36Y	122.7	0.00	2.34	0.28	0	2	1	89	0.00	0.0	1.691	0.048	2	1	1	1
PL.60939	PL.60943	ABC	#2 ACSR	7.37Y	122.9	0.19	2.15	90.05	51	1913	566	96	2.78	0.1	1.616	0.084	0	0	0	239
PL.41359	PL.60939	C	#2 ACSR	7.37Y	122.9	0.00	2.15	1.92	1	14	4	96	0.00	0.0	1.622	0.006	0	0	0	2
PD.6569	PL.41359	C	65T	7.37Y	122.9	0.00	2.15	1.92	0	14	4	96	0.00	0.0	1.622	0.006	0	0	0	2
PL.60851	PD.6569	C	#2 ACSR	7.37Y	122.9	0.00	2.15	1.92	1	14	4	96	0.00	0.0	1.661	0.039	3	1	1	2
PL.60852	PL.60851	C	#1/0 ACSR	7.37Y	122.9	0.00	2.15	1.47	1	10	3	96	0.00	0.0	1.703	0.043	10	3	1	1
PL.41306	PL.60939	ABC	#2 ACSR	7.36Y	122.6	0.25	2.40	88.05	50	1867	552	96	3.55	0.2	1.728	0.112	0	0	0	234
PL.43002	PL.41306	ABC	#1/0 ACSR	7.35Y	122.5	0.06	2.45	85.44	37	1808	534	96	0.73	0.0	1.765	0.038	0	0	0	227
PL.43003	PL.43002	A	#4 ACSR	7.35Y	122.5	0.00	2.45	2.47	2	17	5	96	0.00	0.0	1.771	0.006	0	0	0	1
PD.6403	PL.43003	A	65T	7.35Y	122.5	0.00	2.45	2.47	0	17	5	96	0.00	0.0	1.771	0.006	0	0	0	1
PL.43004	PD.6403	A	#4 ACSR	7.35Y	122.5	0.00	2.46	2.47	2	17	5	96	0.00	0.0	1.810	0.039	17	5	1	1
PL.43005	PL.43002	ABC	#1/0 ACSR	7.34Y	122.4	0.15	2.60	84.62	37	1790	528	96	1.80	0.1	1.860	0.095	15	4	1	226
PL.43006	PL.43005	A	6 A (CWC)	7.34Y	122.4	0.00	2.60	2.07	1	15	4	97	0.00	0.0	1.866	0.006	0	0	0	1
PD.6404	PL.43006	A	65QA	7.34Y	122.4	0.00	2.60	2.07	0	15	4	97	0.00	0.0	1.866	0.006	0	0	0	1
PL.43007	PD.6404	A	6 A (CWC)	7.34Y	122.4	0.00	2.60	2.07	1	15	4	97	0.00	0.0	1.904	0.038	15	4	1	1
PL.43008	PL.43005	ABC	#1/0 ACSR	7.34Y	122.3	0.07	2.67	83.20	36	1758	518	96	0.80	0.0	1.904	0.043	15	4	1	224
PL.42495	PL.43008	ABC	#1/0 ACSR	7.34Y	122.3	0.08	2.74	82.48	36	1742	512	96	0.96	0.1	1.957	0.053	0	0	0	223
PL.42496	PL.42495	C	#4 ACSR	7.34Y	122.3	0.00	2.75	1.15	1	8	2	97	0.00	0.0	1.963	0.006	0	0	0	1
PD.6681	PL.42496	C	65T	7.34Y	122.3	0.00	2.75	1.15	0	8	2	97	0.00	0.0	1.963	0.006	0	0	0	1
PL.55695	PD.6681	C	#4 ACSR	7.34Y	122.3	0.00	2.75	1.15	1	8	2	97	0.00	0.0	2.011	0.048	8	2	1	1
PL.54085	PL.42495	A	#4 ACSR	7.33Y	122.2	0.02	2.76	8.14	6	57	17	96	0.01	0.0	2.026	0.069	43	13	4	7
PL.54086	PL.54085	A	#4 ACSR	7.33Y	122.2	0.01	2.77	1.99	2	14	4	96	0.00	0.0	2.143	0.117	0	0	0	3
PL.60901	PL.54086	A	#1/0 ACSR	7.33Y	122.2	0.00	2.78	1.95	1	14	4	96	0.00	0.0	2.243	0.100	0	0	0	2
PL.60902	PL.60901	A	#1/0 ACSR	7.33Y	122.2	0.00	2.78	1.95	1	14	4	96	0.00	0.0	2.310	0.066	14	4	2	2
PL.42497	PL.54086	A	#4 ACSR	7.33Y	122.2	0.00	2.77	0.04	0	0	0	100	0.00	0.0	2.217	0.073	0	0	1	1
PL.55693	PL.42495	ABC	#2 ACSR	7.32Y	122.1	0.19	2.94	79.38	45	1676	493	96	2.47	0.1	2.053	0.096	18	5	3	215

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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.55694	PL.55693	ABC	#2 ACSR	7.31Y	121.8	0.21	3.15	78.02	45	1645	483	96	2.69	0.2	2.161	0.108	0	0	0	210
PL.41416	PL.55694	A	6 A (CWC)	7.31Y	121.8	0.00	3.15	1.92	1	13	4	96	0.00	0.0	2.180	0.019	13	4	1	1
PL.43098	PL.55694	C	6 A (CWC)	7.31Y	121.8	0.00	3.15	5.07	4	36	10	96	0.00	0.0	2.167	0.006	0	0	0	5
PD.6402	PL.43098	C	50QA	7.31Y	121.8	0.00	3.15	5.07	10	36	10	96	0.00	0.0	2.167	0.006	0	0	0	5
PL.43099	PD.6402	C	6 A (CWC)	7.31Y	121.8	0.01	3.16	5.07	4	36	10	96	0.00	0.0	2.219	0.052	23	7	3	5
PL.43100	PL.43099	C	6 A (CWC)	7.31Y	121.8	0.00	3.16	1.78	1	12	4	95	0.00	0.0	2.246	0.027	9	3	1	2
PL.43101	PL.43100	C	6 A (CWC)	7.31Y	121.8	0.00	3.16	0.53	0	4	1	97	0.00	0.0	2.263	0.017	4	1	1	1
PL.43097	PL.55694	ABC	#2 ACSR	7.30Y	121.6	0.21	3.36	75.69	43	1593	467	96	2.59	0.2	2.271	0.110	0	0	0	204
PL.43102	PL.43097	B	6 A (CWC)	7.30Y	121.6	0.01	3.38	48.20	34	338	98	96	0.03	0.0	2.277	0.006	0	0	0	36
PD.6405	PL.43102	B	25T	7.30Y	121.6	0.00	3.38	48.20	0	338	98	96	0.00	0.0	2.277	0.006	0	0	0	36
PL.43103	PD.6405	B	6 A (CWC)	7.29Y	121.5	0.11	3.49	48.20	34	338	98	96	0.29	0.1	2.328	0.051	0	0	0	36
PL.55947	PL.43103	B	6 A (CWC)	7.28Y	121.3	0.26	3.74	43.85	31	307	89	96	0.57	0.2	2.462	0.134	32	9	3	34
PL.55948	PL.55947	B	6 A (CWC)	7.27Y	121.1	0.14	3.88	39.29	28	275	80	96	0.28	0.1	2.542	0.081	24	7	4	31
PL.55949	PL.55948	B	6 A (CWC)	7.27Y	121.1	0.01	3.89	4.43	3	31	9	96	0.00	0.0	2.596	0.054	12	4	1	4
PL.55950	PL.55949	B	6 A (CWC)	7.27Y	121.1	0.01	3.90	2.65	2	18	5	96	0.00	0.0	2.673	0.076	0	0	1	3
PL.43108	PL.55950	B	6 A (CWC)	7.27Y	121.1	0.00	3.90	2.62	2	18	5	96	0.00	0.0	2.730	0.057	18	5	2	2
PL.55946	PL.55948	B	6 A (CWC)	7.27Y	121.1	0.01	3.89	4.00	3	28	8	96	0.00	0.0	2.583	0.040	0	0	0	3
PL.43106	PL.55946	B	6 A (CWC)	7.27Y	121.1	0.00	3.89	4.00	3	28	8	96	0.00	0.0	2.610	0.028	14	4	2	3
PL.43107	PL.43106	B	6 A (CWC)	7.27Y	121.1	0.00	3.90	2.06	1	14	4	96	0.00	0.0	2.695	0.084	14	4	1	1
PL.56039	PL.55948	B	6 A (CWC)	7.26Y	121.0	0.10	3.98	27.49	20	192	56	96	0.14	0.1	2.622	0.080	16	5	1	20
PL.56038	PL.56039	B	#2 ACSR	7.26Y	121.0	0.00	3.98	2.78	2	19	6	95	0.00	0.0	2.716	0.094	19	6	1	1
PL.56040	PL.56039	B	6 A (CWC)	7.26Y	121.0	0.07	4.05	22.39	16	156	45	96	0.08	0.1	2.691	0.069	12	4	1	18
PL.55856	PL.56040	B	6 A (CWC)	7.26Y	120.9	0.01	4.05	3.02	2	21	6	96	0.00	0.0	2.771	0.080	21	6	1	2
PL.56037	PL.55856	B	6 A (CWC)	7.26Y	120.9	0.00	4.05	0.00	0	0	0	100	0.00	0.0	2.800	0.030	0	0	1	1
PL.55858	PL.56040	B	#2 ACSR	7.26Y	120.9	0.00	4.05	1.91	1	13	4	96	0.00	0.0	2.774	0.082	0	0	0	1
PL.42111	PL.55858	B	#2 ACSR	7.26Y	120.9	0.00	4.06	1.91	1	13	4	96	0.00	0.0	2.878	0.105	13	4	1	1
PL.55857	PL.56040	B	6 A (CWC)	7.26Y	120.9	0.03	4.08	15.66	11	109	32	96	0.02	0.0	2.731	0.040	0	0	0	14
PL.55855	PL.55857	B	6 A (CWC)	7.25Y	120.9	0.02	4.09	15.66	11	109	32	96	0.01	0.0	2.754	0.023	9	3	2	14
PL.55854	PL.55855	B	6 A (CWC)	7.25Y	120.9	0.03	4.12	14.37	10	100	29	96	0.02	0.0	2.815	0.061	40	11	5	12
PL.55853	PL.55854	B	#2 ACSR	7.25Y	120.9	0.00	4.13	3.22	2	22	7	95	0.00	0.0	2.865	0.050	14	4	1	3
PL.63524	PL.55853	B	#1/0 ACSR	7.25Y	120.9	0.00	4.13	1.22	1	9	2	98	0.00	0.0	2.951	0.086	9	2	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.56029	PL.55854	B	6 A (CWC)	7.25Y	120.9	0.01	4.13	5.46	4	38	11	96	0.00	0.0	2.873	0.058	20	6	1	4
PL.56030	PL.56029	B	6 A (CWC)	7.25Y	120.9	0.00	4.14	2.61	2	18	5	96	0.00	0.0	2.905	0.032	0	0	0	3
PL.55851	PL.56030	B	6 A (CWC)	7.25Y	120.9	0.00	4.14	1.33	1	9	3	95	0.00	0.0	2.953	0.048	9	3	1	2
PL.55850	PL.55851	B	6 A (CWC)	7.25Y	120.9	0.00	4.14	0.02	0	0	0	100	0.00	0.0	3.163	0.211	0	0	1	1
PL.55852	PL.56030	B	#1/0 ACSR	7.25Y	120.9	0.00	4.14	1.29	1	9	3	95	0.00	0.0	2.980	0.075	9	3	1	1
PL.43104	PL.43103	B	#2 ACSR	7.29Y	121.5	0.01	3.50	4.35	2	30	9	96	0.00	0.0	2.391	0.063	5	2	1	2
PL.43105	PL.43104	B	#2 ACSR	7.29Y	121.5	0.00	3.50	3.61	2	25	7	96	0.00	0.0	2.453	0.062	25	7	1	1
PL.55430	PL.43097	ABC	#2 ACSR	7.29Y	121.5	0.11	3.47	59.62	34	1253	368	96	1.05	0.1	2.345	0.073	27	8	1	168
PL.55431	PL.55430	ABC	#2 ACSR	7.29Y	121.5	0.05	3.52	58.35	33	1225	359	96	0.43	0.0	2.376	0.031	20	6	2	167
PL.55428	PL.55431	A	#4 ACSR	7.29Y	121.5	0.00	3.52	2.21	2	15	4	97	0.00	0.0	2.382	0.006	0	0	0	1
PD.6525	PL.55428	A	50QA	7.29Y	121.5	0.00	3.52	2.21	4	15	4	97	0.00	0.0	2.382	0.006	0	0	0	1
PL.55427	PD.6525	A	#4 ACSR	7.29Y	121.5	0.00	3.52	2.21	2	15	4	97	0.00	0.0	2.439	0.056	15	4	1	1
PL.55429	PL.55431	ABC	#2 ACSR	7.28Y	121.4	0.10	3.62	56.68	32	1189	349	96	0.91	0.1	2.447	0.071	34	10	4	164
PL.55687	PL.55429	ABC	#2 ACSR	7.27Y	121.2	0.18	3.80	55.08	31	1155	339	96	1.60	0.1	2.576	0.129	6	2	2	160
PL.55686	PL.55687	ABC	#2 ACSR	7.27Y	121.1	0.11	3.91	41.68	24	872	256	96	0.76	0.1	2.685	0.109	13	4	1	123
PL.43117	PL.55686	ABC	#2 ACSR	7.26Y	121.0	0.09	4.00	37.82	22	791	232	96	0.52	0.1	2.774	0.090	16	5	1	117
PL.43118	PL.43117	ABC	#2 ACSR	7.25Y	120.9	0.11	4.11	37.04	21	774	227	96	0.66	0.1	2.891	0.117	0	0	0	116
PL.43119	PL.43118	ABC	#2 ACSR	7.25Y	120.8	0.09	4.20	36.81	21	769	226	96	0.52	0.1	2.986	0.094	0	0	0	114
PL.43120	PL.43119	B	6 A (CWC)	7.25Y	120.8	0.00	4.20	7.76	6	54	16	96	0.00	0.0	2.991	0.006	0	0	0	6
PD.6529	PL.43120	B	60QA	7.25Y	120.8	0.00	4.20	7.76	13	54	16	96	0.00	0.0	2.991	0.006	0	0	0	6
PL.55767	PD.6529	B	6 A (CWC)	7.25Y	120.8	0.01	4.21	7.76	6	54	16	96	0.01	0.0	3.035	0.044	15	4	1	6
PL.55768	PL.55767	B	6 A (CWC)	7.25Y	120.8	0.03	4.24	5.65	4	39	11	96	0.01	0.0	3.158	0.123	0	0	0	5
PL.55939	PL.55768	B	6 A (CWC)	7.24Y	120.7	0.02	4.26	5.65	4	39	11	96	0.00	0.0	3.263	0.105	28	8	3	5
PL.55940	PL.55939	B	6 A (CWC)	7.24Y	120.7	0.01	4.27	1.65	1	11	3	96	0.00	0.0	3.415	0.152	11	3	2	2
PL.43121	PL.43119	ABC	#2 ACSR	7.24Y	120.7	0.09	4.29	34.22	20	714	210	96	0.50	0.1	3.090	0.104	0	0	0	108
PL.60889	PL.43121	A	6 A (CWC)	7.24Y	120.7	0.00	4.29	0.00	0	0	0	100	0.00	0.0	3.125	0.035	0	0	0	0
PL.60890	PL.60889	A	6 A (CWC)	7.24Y	120.7	0.00	4.29	0.00	0	0	0	100	0.00	0.0	3.164	0.039	0	0	0	0
PL.43122	PL.43121	ABC	#2 ACSR	7.24Y	120.7	0.06	4.35	34.22	20	714	209	96	0.33	0.0	3.160	0.070	0	0	0	108
PL.55774	PL.43122	ABC	#2 ACSR	7.24Y	120.7	0.00	4.35	0.46	0	10	3	96	0.00	0.0	3.233	0.073	0	0	0	1
PL.55776	PL.55774	C	6 A (CWC)	7.24Y	120.7	0.00	4.35	1.38	1	10	3	96	0.00	0.0	3.237	0.005	0	0	0	1
PD.8225	PL.55776	C	10QA	7.24Y	120.7	0.00	4.35	1.38	0	10	3	96	0.00	0.0	3.237	0.005	0	0	0	1

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.55777	PD.8225	C	6 A (CWC)	7.24Y	120.6	0.00	4.35	1.38	1	10	3	96	0.00	0.0	3.325	0.087	10	3	1	1
PL.55775	PL.55774	ABC	#2 ACSR	7.24Y	120.7	0.00	4.35	0.00	0	0	0	100	0.00	0.0	3.292	0.059	0	0	0	0
PD.6816-B	PL.55775	ABC	Open	7.24Y	120.7	0.00	4.35	0.00	0	0	0	100	0.00	0.0	3.292	0.059	0	0	0	0
PL.41587	PL.43122	ABC	336 MCM AC	7.24Y	120.6	0.01	4.36	33.76	7	704	206	96	0.04	0.0	3.206	0.047	0	0	0	107
PL.59676	PL.41587	ABC	336 MCM AC	7.24Y	120.6	0.00	4.36	33.76	7	704	206	96	0.00	0.0	3.209	0.003	0	0	0	107
PD.8826	PL.59676	ABC	70L	7.24Y	120.6	0.00	4.36	33.76	48	704	206	96	0.00	0.0	3.209	0.003	0	0	0	107
PL.59677	PD.8826	ABC	336 MCM AC	7.24Y	120.6	0.01	4.37	33.76	7	704	206	96	0.03	0.0	3.237	0.028	0	0	0	107
PL.59672	PL.59677	ABC	336 MCM AC	7.24Y	120.6	0.03	4.40	33.76	7	704	206	96	0.12	0.0	3.360	0.123	0	0	0	107
PL.59673	PL.59672	ABC	336 MCM AC	7.24Y	120.6	0.00	4.40	2.34	0	49	14	96	0.00	0.0	3.515	0.155	0	0	0	8
PL.56584	PL.59673	C	6 A (CWC)	7.24Y	120.6	0.00	4.40	7.02	5	49	14	96	0.00	0.0	3.515	0.000	0	0	0	8
PD.8241	PL.56584	C	20QA	7.24Y	120.6	0.00	4.40	7.02	35	49	14	96	0.00	0.0	3.515	0.000	0	0	0	8
PL.56587	PD.8241	C	6 A (CWC)	7.24Y	120.6	0.00	4.40	7.02	5	49	14	96	0.00	0.0	3.515	0.000	2	1	1	8
PL.56588	PL.56587	C	6 A (CWC)	7.23Y	120.6	0.02	4.42	6.71	5	47	14	96	0.01	0.0	3.586	0.070	0	0	0	7
PL.56586	PL.56588	C	6 A (CWC)	7.23Y	120.6	0.00	4.43	4.26	3	30	9	96	0.00	0.0	3.614	0.029	10	3	1	4
PL.55778	PL.56586	C	6 A (CWC)	7.23Y	120.6	0.01	4.44	2.79	2	19	6	95	0.00	0.0	3.679	0.065	0	0	0	3
PL.55779	PL.55778	C	6 A (CWC)	7.23Y	120.6	0.01	4.44	2.79	2	19	6	95	0.00	0.0	3.753	0.073	0	0	0	3
PL.55780	PL.55779	C	6 A (CWC)	7.23Y	120.5	0.01	4.45	2.79	2	19	6	95	0.00	0.0	3.857	0.105	19	6	3	3
PL.55781	PL.55780	C	6 A (CWC)	7.23Y	120.5	0.00	4.45	0.00	0	0	0	100	0.00	0.0	3.951	0.093	0	0	0	0
PL.56585	PL.56588	C	6 A (CWC)	7.23Y	120.6	0.00	4.42	2.45	2	17	5	96	0.00	0.0	3.623	0.037	13	4	2	3
PL.55802	PL.56585	C	6 A (CWC)	7.23Y	120.6	0.00	4.43	0.52	0	4	1	97	0.00	0.0	3.671	0.048	4	1	1	1
PL.59675	PL.59672	ABC	336 MCM AC	7.23Y	120.6	0.03	4.42	31.09	6	648	190	96	0.09	0.0	3.474	0.114	0	0	0	98
PL.43146	PL.59675	ABC	336 MCM AC	7.23Y	120.6	0.01	4.44	30.70	6	639	187	96	0.04	0.0	3.526	0.053	0	0	0	97
PL.62993	PL.43146	ABC	336 MCM AC	7.23Y	120.5	0.03	4.47	29.99	6	624	183	96	0.10	0.0	3.658	0.131	0	0	0	95
PL.62994	PL.62993	ABC	336 MCM AC	7.23Y	120.5	0.04	4.50	29.51	6	614	180	96	0.12	0.0	3.822	0.164	13	4	3	94
PL.55740	PL.62994	ABC	336 MCM AC	7.23Y	120.5	0.03	4.53	28.90	6	602	176	96	0.09	0.0	3.951	0.130	0	0	0	91
PL.55742	PL.55740	C	#1/0 ACSR	7.23Y	120.5	0.00	4.53	1.50	1	10	3	96	0.00	0.0	3.955	0.004	0	0	0	1
PD.8223	PL.55742	C	10QA	7.23Y	120.5	0.00	4.53	1.50	0	10	3	96	0.00	0.0	3.955	0.004	0	0	0	1
PL.55743	PD.8223	C	#1/0 ACSR	7.23Y	120.5	0.00	4.53	1.50	1	10	3	96	0.00	0.0	3.967	0.012	0	0	0	1
PL.55744	PL.55743	C	1/0 AL URD	7.23Y	120.5	0.00	4.53	1.50	1	10	3	96	0.00	0.0	4.027	0.060	10	3	1	1
PL.55741	PL.55740	ABC	336 MCM AC	7.22Y	120.4	0.06	4.59	28.40	5	591	173	96	0.18	0.0	4.218	0.267	2	0	1	90
PL.55739	PL.55741	ABC	336 MCM AC	7.22Y	120.4	0.03	4.62	27.32	5	569	166	96	0.08	0.0	4.354	0.137	9	3	1	86

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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.43152	PL.55739	B	#2 ACSR	7.22Y	120.4	0.00	4.62	0.00	0	0	0	100	0.00	0.0	4.360	0.006	0	0	0	0
PD.6773	PL.43152	B	40T	7.22Y	120.4	0.00	4.62	0.00	0	0	0	100	0.00	0.0	4.360	0.006	0	0	0	0
PL.43153	PD.6773	B	#2 ACSR	7.22Y	120.4	0.00	4.62	0.00	0	0	0	100	0.00	0.0	4.377	0.017	0	0	0	0
PL.43151	PL.55739	ABC	336 MCM AC	7.22Y	120.4	0.01	4.63	26.89	5	559	163	96	0.04	0.0	4.422	0.068	0	0	0	85
PL.43154	PL.43151	ABC	336 MCM AC	7.22Y	120.4	0.01	4.64	26.89	5	559	163	96	0.03	0.0	4.465	0.043	0	0	0	85
PL.43155	PL.43154	ABC	336 MCM AC	7.22Y	120.3	0.03	4.67	26.48	5	551	160	96	0.10	0.0	4.635	0.171	0	0	0	84
PL.43158	PL.43155	C	6 A (CWC)	7.22Y	120.3	0.01	4.68	35.83	26	248	72	96	0.02	0.0	4.641	0.006	0	0	0	39
PD.6774	PL.43158	C	50QA	7.22Y	120.3	0.00	4.68	35.83	72	248	72	96	0.00	0.0	4.641	0.006	0	0	0	39
PL.55782	PD.6774	C	6 A (CWC)	7.22Y	120.3	0.06	4.75	35.83	26	248	72	96	0.12	0.0	4.681	0.040	15	4	1	39
PL.55783	PL.55782	C	6 A (CWC)	7.22Y	120.3	0.00	4.75	0.39	0	3	1	95	0.00	0.0	4.707	0.026	0	0	0	3
PL.55785	PL.55783	C	6 A (CWC)	7.22Y	120.3	0.00	4.75	0.39	0	3	1	95	0.00	0.0	4.736	0.029	3	1	3	3
PL.55784	PL.55782	C	6 A (CWC)	7.22Y	120.3	0.00	4.75	0.00	0	0	0	100	0.00	0.0	4.732	0.051	0	0	0	0
PL.57728	PL.55782	C	6 A (CWC)	7.21Y	120.2	0.10	4.85	33.26	24	230	67	96	0.18	0.1	4.749	0.068	4	1	1	35
REG75	PL.57728	C	76.2 KVA	7.54Y	125.6	-5.50	-0.65	32.68	33	226	66	96	percent Boost= 0.00		Tap= 0.0					34
PL.57729	REG75	C	6 A (CWC)	7.53Y	125.6	0.08	-0.56	31.25	22	226	66	96	0.14	0.1	4.811	0.061	18	5	1	34
PL.55399	PL.57729	C	6 A (CWC)	7.53Y	125.5	0.05	-0.51	27.18	19	197	57	96	0.07	0.0	4.851	0.040	6	2	1	29
PL.60903	PL.55399	C	6 A (CWC)	7.53Y	125.5	0.03	-0.49	23.20	17	168	49	96	0.03	0.0	4.877	0.026	0	0	0	26
PL.60904	PL.60903	C	6 A (CWC)	7.53Y	125.5	0.01	-0.47	8.66	6	63	18	96	0.01	0.0	4.929	0.052	39	11	10	14
PL.55788	PL.60904	C	6 A (CWC)	7.53Y	125.5	0.00	-0.47	3.32	2	24	7	96	0.00	0.0	4.963	0.035	21	6	3	4
PL.55787	PL.55788	C	6 A (CWC)	7.53Y	125.5	0.00	-0.47	0.35	0	3	1	95	0.00	0.0	5.038	0.074	3	1	1	1
PL.64375	PL.60903	C	6 A (CWC)	7.53Y	125.5	0.03	-0.45	14.54	10	105	30	96	0.03	0.0	4.928	0.051	0	0	0	12
PL.64376	PL.64375	C	6 A (CWC)	7.53Y	125.5	0.00	-0.45	14.54	10	105	30	96	0.00	0.0	4.928	0.000	13	4	1	12
PL.60907	PL.64376	C	6 A (CWC)	7.52Y	125.4	0.04	-0.42	12.78	9	92	27	96	0.02	0.0	5.000	0.072	25	7	2	11
PL.63247	PL.60907	C	6 A (CWC)	7.52Y	125.4	0.01	-0.41	3.39	2	24	7	96	0.00	0.0	5.072	0.072	15	4	2	4
PL.63248	PL.63247	C	6 A (CWC)	7.52Y	125.4	0.00	-0.41	1.34	1	10	3	96	0.00	0.0	5.117	0.045	0	0	1	2
PL.55400	PL.63248	C	#4 ACSR	7.52Y	125.4	0.00	-0.40	1.34	1	10	3	96	0.00	0.0	5.170	0.052	0	0	0	1
PL.64830	PL.55400	C	#1/0 ACSR	7.52Y	125.4	0.00	-0.40	1.34	1	10	3	96	0.00	0.0	5.189	0.020	10	3	1	1
PL.60905	PL.60907	C	6 A (CWC)	7.52Y	125.4	0.00	-0.41	3.82	3	28	8	96	0.00	0.0	5.037	0.037	15	4	2	4
PL.53038	PL.60905	C	6 A (CWC)	7.52Y	125.4	0.00	-0.41	1.71	1	12	4	95	0.00	0.0	5.059	0.022	12	4	1	2
PL.60973	PL.53038	C	#1/0 ACSR	7.52Y	125.4	0.00	-0.41	0.00	0	0	0	100	0.00	0.0	5.073	0.014	0	0	1	1
PL.60906	PL.60907	C	6 A (CWC)	7.52Y	125.4	0.00	-0.41	2.06	1	15	4	97	0.00	0.0	5.056	0.056	15	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.55789	PL.55399	C	#2 ACSR	7.53Y	125.5	0.01	-0.51	3.17	2	23	7	96	0.00	0.0	4.941	0.090	9	3	1	2
PL.55906	PL.55789	C	#1/0 ACSR	7.53Y	125.5	0.00	-0.51	1.93	1	14	4	96	0.00	0.0	5.015	0.074	14	4	1	1
PL.55786	PL.57729	C	#4 ACSR	7.53Y	125.6	0.00	-0.56	1.57	1	11	3	96	0.00	0.0	4.879	0.068	0	0	0	4
PL.52890	PL.55786	C	#4 ACSR	7.53Y	125.6	0.00	-0.56	0.64	0	5	1	98	0.00	0.0	4.905	0.026	5	1	3	3
PL.52889	PL.55786	C	#1/0 ACSR	7.53Y	125.6	0.00	-0.56	0.92	0	7	2	96	0.00	0.0	4.939	0.060	7	2	1	1
PL.42863	PL.43155	ABC	336 MCM AC	7.22Y	120.3	0.01	4.68	14.29	3	297	86	96	0.02	0.0	4.726	0.090	0	0	0	44
PL.41590	PL.42863	B	#2 ACSR	7.22Y	120.3	0.00	4.68	1.52	1	11	3	96	0.00	0.0	4.762	0.036	11	3	2	2
PL.42864	PL.42863	ABC	336 MCM AC	7.22Y	120.3	0.01	4.69	13.78	3	287	83	96	0.01	0.0	4.819	0.094	0	0	0	42
PL.42742	PL.42864	ABC	336 MCM AC	7.22Y	120.3	0.01	4.70	11.31	2	235	68	96	0.01	0.0	4.912	0.093	0	0	0	36
PL.42743	PL.42742	ABC	336 MCM AC	7.22Y	120.3	0.01	4.71	11.31	2	235	68	96	0.01	0.0	5.024	0.112	0	0	0	36
PL.55808	PL.42743	C	1/0 AL URD	7.22Y	120.3	0.00	4.71	2.59	2	18	5	96	0.00	0.0	5.052	0.028	18	5	2	2
PL.59679	PL.42743	ABC	336 MCM AC	7.22Y	120.3	0.01	4.72	10.44	2	217	63	96	0.01	0.0	5.103	0.079	0	0	0	34
PL.59678	PL.59679	ABC	336 MCM AC	7.22Y	120.3	0.01	4.73	10.44	2	217	63	96	0.01	0.0	5.232	0.129	27	8	5	34
PL.59681	PL.59678	A	6 A (CWC)	7.22Y	120.3	0.00	4.73	0.00	0	0	0	100	0.00	0.0	5.234	0.002	0	0	0	0
PL.55928	PL.59678	A	6 A (CWC)	7.22Y	120.3	0.00	4.73	27.50	20	191	55	96	0.01	0.0	5.235	0.003	0	0	0	29
PD.8226	PL.55928	A	50L	7.22Y	120.3	0.00	4.73	27.50	55	191	55	96	0.00	0.0	5.235	0.003	0	0	0	29
PL.55929	PD.8226	A	6 A (CWC)	7.21Y	120.2	0.03	4.76	27.50	20	191	55	96	0.04	0.0	5.257	0.022	0	0	0	29
PL.62975	PL.55929	A	6 A (CWC)	7.21Y	120.1	0.13	4.89	27.50	20	191	55	96	0.19	0.1	5.368	0.111	17	5	2	29
REG74	PL.62975	A	76.2 KVA	7.54Y	125.6	-5.50	-0.60	25.08	25	174	50	96	percent Boost= 4.38		Tap= 7.0					27
PL.63240	REG74	A	#2 ACSR	7.54Y	125.6	0.00	-0.60	0.00	0	0	0	100	0.00	0.0	5.452	0.083	0	0	0	0
PL.63243	REG74	A	6 A (CWC)	7.53Y	125.5	0.12	-0.48	23.98	17	174	50	96	0.16	0.1	5.481	0.112	0	0	0	27
PL.51845	PL.63243	A	6 A (CWC)	7.52Y	125.3	0.21	-0.27	22.75	16	165	48	96	0.25	0.2	5.690	0.209	8	2	1	25
PL.63242	PL.51845	A	6 A (CWC)	7.51Y	125.2	0.04	-0.23	18.22	13	132	38	96	0.04	0.0	5.734	0.044	0	0	1	21
PL.63239	PL.63242	A	#2 ACSR	7.51Y	125.2	0.00	-0.23	1.60	1	12	3	97	0.00	0.0	5.815	0.081	12	3	1	1
PL.63241	PL.63242	A	6 A (CWC)	7.51Y	125.2	0.05	-0.18	16.63	12	120	35	96	0.04	0.0	5.797	0.064	0	0	0	19
PL.56087	PL.63241	A	#4 ACSR	7.51Y	125.2	0.00	-0.18	1.94	1	14	4	96	0.00	0.0	5.840	0.043	14	4	1	1
PL.56088	PL.63241	A	6 A (CWC)	7.51Y	125.2	0.02	-0.16	7.19	5	52	15	96	0.01	0.0	5.862	0.064	0	0	0	11
PL.56172	PL.56088	A	6 A (CWC)	7.51Y	125.1	0.03	-0.13	7.19	5	52	15	96	0.01	0.0	5.953	0.092	10	3	2	11
PL.56174	PL.56172	A	6 A (CWC)	7.51Y	125.1	0.00	-0.13	0.91	1	7	2	96	0.00	0.0	6.036	0.083	3	1	1	3
PL.56175	PL.56174	A	6 A (CWC)	7.51Y	125.1	0.00	-0.13	0.47	0	3	1	95	0.00	0.0	6.072	0.036	3	1	2	2
PL.56086	PL.56172	A	#2 ACSR	7.51Y	125.1	0.00	-0.13	2.65	2	19	6	95	0.00	0.0	5.978	0.025	9	3	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.56089	PL.56086	A	#2 ACSR	7.51Y	125.1	0.00	-0.13	1.37	1	10	3	96	0.00	0.0	6.091	0.113	10	3	1	1
PL.56173	PL.56172	A	6 A (CWC)	7.51Y	125.1	0.01	-0.13	2.26	2	16	5	95	0.00	0.0	6.023	0.070	0	0	1	3
PL.56171	PL.56173	A	6 A (CWC)	7.51Y	125.1	0.00	-0.12	2.26	2	16	5	95	0.00	0.0	6.063	0.040	16	5	2	2
PL.56170	PL.63241	A	6 A (CWC)	7.51Y	125.1	0.08	-0.10	7.50	5	54	16	96	0.03	0.1	6.050	0.253	9	3	1	7
PL.56169	PL.56170	A	6 A (CWC)	7.51Y	125.1	0.01	-0.10	6.26	4	45	13	96	0.00	0.0	6.072	0.022	0	0	0	6
PL.41363	PL.56169	A	#2 ACSR	7.51Y	125.1	0.00	-0.09	1.63	1	12	3	97	0.00	0.0	6.133	0.061	12	3	1	1
PL.55838	PL.56169	A	#2 ACSR	7.51Y	125.1	0.00	-0.09	1.33	1	10	3	96	0.00	0.0	6.163	0.091	10	3	1	1
PL.59391	PL.56169	A	6 A (CWC)	7.50Y	125.1	0.02	-0.08	3.30	2	24	7	96	0.00	0.0	6.189	0.117	0	0	1	4
PL.59390	PL.59391	A	#2 ACSR	7.50Y	125.1	0.00	-0.07	1.73	1	12	4	95	0.00	0.0	6.313	0.125	12	4	1	1
PL.41549	PL.59390	A	#2 ACSR	7.50Y	125.1	0.00	-0.07	0.00	0	0	0	100	0.00	0.0	6.367	0.053	0	0	0	0
PL.59389	PL.59391	A	6 A (CWC)	7.50Y	125.1	0.01	-0.07	1.53	1	11	3	96	0.00	0.0	6.334	0.145	0	0	0	2
PL.55756	PL.59389	A	#4 ACSR	7.50Y	125.1	0.01	-0.06	1.53	1	11	3	96	0.00	0.0	6.432	0.098	0	0	0	2
PL.55758	PL.55756	A	#4 ACSR	7.50Y	125.1	0.00	-0.06	1.53	1	11	3	96	0.00	0.0	6.566	0.134	11	3	1	2
PL.55759	PL.55758	A	#4 ACSR	7.50Y	125.1	0.00	-0.06	0.01	0	0	0	100	0.00	0.0	6.601	0.035	0	0	1	1
PL.55757	PL.55759	A	#4 ACSR	7.50Y	125.1	0.00	-0.06	0.00	0	0	0	100	0.00	0.0	6.650	0.048	0	0	0	0
PL.42891	PL.51845	A	#2 ACSR	7.52Y	125.3	0.00	-0.26	3.48	2	25	7	96	0.00	0.0	5.717	0.027	11	3	2	3
PL.42892	PL.42891	A	#2 ACSR	7.52Y	125.3	0.00	-0.26	1.95	1	14	4	96	0.00	0.0	5.798	0.082	14	4	1	1
PL.55710	PL.63243	A	#2 ACSR	7.53Y	125.5	0.00	-0.48	1.23	1	9	3	95	0.00	0.0	5.578	0.097	9	3	2	2
PL.55711	PL.42864	B	#2 ACSR	7.22Y	120.3	0.02	4.71	7.21	4	50	14	96	0.01	0.0	4.909	0.090	1	0	1	5
PL.55712	PL.55711	B	#2 ACSR	7.22Y	120.3	0.03	4.74	7.00	4	48	14	96	0.01	0.0	5.029	0.120	0	0	0	4
PL.41863	PL.55712	B	#2 ACSR	7.22Y	120.3	0.00	4.74	3.02	2	21	6	96	0.00	0.0	5.059	0.030	21	6	1	1
PL.42740	PL.55712	B	#2 ACSR	7.22Y	120.3	0.00	4.74	3.98	2	28	8	96	0.00	0.0	5.071	0.041	20	6	2	3
PL.42741	PL.42740	B	#2 ACSR	7.22Y	120.3	0.00	4.74	1.13	1	8	2	97	0.00	0.0	5.118	0.048	0	0	0	1
PL.55709	PL.42741	B	#1/0 ACSR	7.22Y	120.3	0.00	4.74	1.13	0	8	2	97	0.00	0.0	5.136	0.017	8	2	1	1
PL.42865	PL.42864	B	6 A (CWC)	7.22Y	120.3	0.00	4.69	0.23	0	2	0	100	0.00	0.0	4.864	0.045	0	0	0	1
PL.42866	PL.42865	B	6 A (CWC)	7.22Y	120.3	0.00	4.69	0.23	0	2	0	100	0.00	0.0	4.916	0.052	2	0	1	1
PL.41814	PL.43155	B	#2 ACSR	7.22Y	120.3	0.00	4.67	0.74	0	5	1	98	0.00	0.0	4.680	0.044	0	0	0	1
PL.63523	PL.41814	B	#1/0 ACSR	7.22Y	120.3	0.00	4.67	0.74	0	5	1	98	0.00	0.0	4.717	0.037	5	1	1	1
PL.43156	PL.43154	B	#2 ACSR	7.22Y	120.4	0.00	4.64	1.21	1	8	2	97	0.00	0.0	4.471	0.006	0	0	0	1
PD.6600	PL.43156	B	40QA	7.22Y	120.4	0.00	4.64	1.21	3	8	2	97	0.00	0.0	4.471	0.006	0	0	0	1
PL.43157	PD.6600	B	#2 ACSR	7.22Y	120.4	0.00	4.64	1.21	1	8	2	97	0.00	0.0	4.501	0.031	8	2	1	1

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.55738	PL.55741	B	#2 ACSR	7.22Y	120.4	0.00	4.59	1.17	1	8	2	97	0.00	0.0	4.224	0.006	0	0	0	1
PD.6647	PL.55738	B	60QA	7.22Y	120.4	0.00	4.59	1.17	2	8	2	97	0.00	0.0	4.224	0.006	0	0	0	1
PL.43150	PD.6647	B	#2 ACSR	7.22Y	120.4	0.00	4.59	1.17	1	8	2	97	0.00	0.0	4.373	0.150	8	2	1	1
PL.55736	PL.55741	B	#2 ACSR	7.22Y	120.4	0.00	4.59	0.86	0	6	2	95	0.00	0.0	4.260	0.042	6	2	1	1
PL.55737	PL.55741	C	#2 ACSR	7.22Y	120.4	0.00	4.59	0.94	1	7	2	96	0.00	0.0	4.224	0.006	0	0	0	1
PD.6772	PL.55737	C	40QA	7.22Y	120.4	0.00	4.59	0.94	2	7	2	96	0.00	0.0	4.224	0.006	0	0	0	1
PL.43149	PD.6772	C	#2 ACSR	7.22Y	120.4	0.00	4.59	0.94	1	7	2	96	0.00	0.0	4.307	0.083	7	2	1	1
PL.62995	PL.62993	B	1/0 AL URD	7.23Y	120.5	0.00	4.47	1.43	1	10	3	96	0.00	0.0	3.697	0.040	10	3	1	1
PL.43147	PL.43146	A	6 A (CWC)	7.23Y	120.6	0.00	4.44	2.15	2	15	4	97	0.00	0.0	3.532	0.006	0	0	0	2
PD.6684	PL.43147	A	40QA	7.23Y	120.6	0.00	4.44	2.15	5	15	4	97	0.00	0.0	3.532	0.006	0	0	0	2
PL.43148	PD.6684	A	6 A (CWC)	7.23Y	120.6	0.01	4.44	2.15	2	15	4	97	0.00	0.0	3.599	0.067	6	2	1	2
PL.55908	PL.43148	A	6 A (CWC)	7.23Y	120.6	0.00	4.44	1.31	1	9	3	95	0.00	0.0	3.642	0.043	9	3	1	1
PL.43144	PL.59675	B	#2 ACSR	7.23Y	120.6	0.00	4.42	1.15	1	8	2	97	0.00	0.0	3.479	0.006	0	0	0	1
PD.6646	PL.43144	B	40QA	7.23Y	120.6	0.00	4.42	1.15	3	8	2	97	0.00	0.0	3.479	0.006	0	0	0	1
PL.43145	PD.6646	B	#2 ACSR	7.23Y	120.6	0.00	4.43	1.15	1	8	2	97	0.00	0.0	3.509	0.030	8	2	1	1
PL.59674	PL.59672	C	#4 ACSR	7.24Y	120.6	0.00	4.40	1.01	1	7	2	96	0.00	0.0	3.366	0.006	0	0	0	1
PD.6530	PL.59674	C	40QA	7.24Y	120.6	0.00	4.40	1.01	3	7	2	96	0.00	0.0	3.366	0.006	0	0	0	1
PL.55909	PD.6530	C	#4 ACSR	7.24Y	120.6	0.00	4.40	1.01	1	7	2	96	0.00	0.0	3.442	0.076	7	2	1	1
PL.55910	PL.55909	C	1/0 AL URD	7.24Y	120.6	0.00	4.40	0.00	0	0	0	100	0.00	0.0	3.542	0.101	0	0	0	0
PL.43116	PL.43118	C	#4 ACSR	7.25Y	120.9	0.00	4.11	0.70	1	5	1	98	0.00	0.0	2.897	0.006	0	0	0	2
PD.6528	PL.43116	C	60QA	7.25Y	120.9	0.00	4.11	0.70	1	5	1	98	0.00	0.0	2.897	0.006	0	0	0	2
PL.55769	PD.6528	C	#4 ACSR	7.25Y	120.9	0.00	4.11	0.70	1	5	1	98	0.00	0.0	2.957	0.060	3	1	1	2
PL.55770	PL.55769	C	#4 ACSR	7.25Y	120.9	0.00	4.11	0.29	0	2	1	89	0.00	0.0	3.008	0.052	2	1	1	1
PL.43112	PL.55686	A	6 A (CWC)	7.27Y	121.1	0.00	3.92	9.66	7	67	20	96	0.00	0.0	2.690	0.006	0	0	0	5
PD.6409	PL.43112	A	50QA	7.27Y	121.1	0.00	3.92	9.66	19	67	20	96	0.00	0.0	2.690	0.006	0	0	0	5
PL.55702	PD.6409	A	6 A (CWC)	7.26Y	121.1	0.01	3.93	9.66	7	67	20	96	0.01	0.0	2.722	0.032	4	1	1	5
PL.55703	PL.55702	A	6 A (CWC)	7.26Y	121.0	0.06	3.99	7.42	5	52	15	96	0.02	0.0	2.898	0.176	0	0	0	3
PL.43113	PL.55703	A	6 A (CWC)	7.26Y	121.0	0.01	4.00	7.42	5	52	15	96	0.01	0.0	2.940	0.042	1	0	1	3
PL.41687	PL.43113	A	#4 ACSR	7.26Y	121.0	0.02	4.03	6.68	5	47	13	96	0.01	0.0	3.015	0.075	0	0	0	1
PL.43114	PL.41687	A	1/0 AL URD	7.26Y	121.0	0.00	4.03	6.68	4	47	13	96	0.00	0.0	3.021	0.006	0	0	0	1
PD.6527	PL.43114	A	10QA	7.26Y	121.0	0.00	4.03	6.68	0	47	13	96	0.00	0.0	3.021	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.43115	PD.6527	A	1/0 AL URD	7.26Y	121.0	0.00	4.03	6.68	4	47	13	96	0.00	0.0	3.039	0.018	47	13	1	1
PL.59989	PL.43113	A	6 A (CWC)	7.26Y	121.0	0.00	4.01	0.65	0	5	1	98	0.00	0.0	3.073	0.133	0	0	0	1
PL.60887	PL.59989	A	6 A (CWC)	7.26Y	121.0	0.00	4.01	0.00	0	0	0	100	0.00	0.0	3.140	0.067	0	0	0	0
PL.60888	PL.59989	A	1/0 AL URD	7.26Y	121.0	0.00	4.01	0.65	0	5	1	98	0.00	0.0	3.116	0.043	5	1	1	1
PL.55701	PL.55702	A	#1/0 ACSR	7.26Y	121.1	0.00	3.93	1.65	1	12	3	97	0.00	0.0	2.807	0.085	12	3	1	1
PL.55685	PL.55687	A	6 A (CWC)	7.27Y	121.2	0.00	3.80	6.51	5	45	13	96	0.00	0.0	2.582	0.006	0	0	0	3
PD.6526	PL.55685	A	50QA	7.27Y	121.2	0.00	3.80	6.51	13	45	13	96	0.00	0.0	2.582	0.006	0	0	0	3
PL.55690	PD.6526	A	6 A (CWC)	7.27Y	121.2	0.01	3.81	6.51	5	45	13	96	0.00	0.0	2.636	0.054	36	10	2	3
PL.55691	PL.55690	A	6 A (CWC)	7.27Y	121.2	0.00	3.81	1.39	1	10	3	96	0.00	0.0	2.682	0.046	10	3	1	1
PL.55684	PL.55687	C	6 A (CWC)	7.27Y	121.2	0.01	3.81	32.83	23	229	67	96	0.01	0.0	2.582	0.006	0	0	0	32
PD.6658	PL.55684	C	50QA	7.27Y	121.2	0.00	3.81	32.83	66	229	67	96	0.00	0.0	2.582	0.006	0	0	0	32
PL.55688	PD.6658	C	6 A (CWC)	7.26Y	121.1	0.12	3.93	32.83	23	229	67	96	0.21	0.1	2.669	0.087	24	7	4	32
PL.55689	PL.55688	C	6 A (CWC)	7.26Y	120.9	0.12	4.06	29.32	21	205	59	96	0.19	0.1	2.765	0.095	16	4	1	28
PL.55941	PL.55689	C	#4 ACSR	7.26Y	120.9	0.00	4.06	3.70	3	26	7	97	0.00	0.0	2.791	0.027	26	7	3	3
PL.42535	PL.55689	C	6 A (CWC)	7.25Y	120.9	0.09	4.14	23.40	17	163	47	96	0.11	0.1	2.844	0.080	0	0	0	24
PL.55942	PL.42535	C	6 A (CWC)	7.25Y	120.8	0.09	4.23	22.50	16	157	45	96	0.11	0.1	2.933	0.088	0	0	0	23
PL.55944	PL.55942	C	#4 ACSR	7.25Y	120.8	0.01	4.24	3.22	2	22	6	96	0.00	0.0	2.983	0.050	12	3	2	3
PL.55945	PL.55944	C	#4 ACSR	7.25Y	120.8	0.00	4.24	1.53	1	11	3	96	0.00	0.0	3.017	0.035	11	3	1	1
PL.55943	PL.55942	C	6 A (CWC)	7.24Y	120.7	0.03	4.26	19.28	14	134	39	96	0.03	0.0	2.968	0.035	21	6	3	20
PL.55632	PL.55943	C	6 A (CWC)	7.24Y	120.7	0.02	4.29	16.22	12	113	33	96	0.02	0.0	3.000	0.033	0	0	1	17
PL.55634	PL.55632	C	6 A (CWC)	7.23Y	120.6	0.15	4.44	14.11	10	98	28	96	0.12	0.1	3.239	0.239	0	0	0	15
PL.41302	PL.55634	C	#4 ACSR	7.23Y	120.6	0.00	4.44	1.00	1	7	2	96	0.00	0.0	3.311	0.072	7	2	1	1
PL.43110	PL.55634	C	6 A (CWC)	7.23Y	120.5	0.02	4.46	3.38	2	23	7	96	0.00	0.0	3.341	0.102	0	0	0	3
PL.43111	PL.43110	C	6 A (CWC)	7.23Y	120.5	0.00	4.46	0.65	0	5	1	98	0.00	0.0	3.402	0.060	5	1	1	1
PL.42537	PL.43110	C	#1/0 ACSR	7.23Y	120.5	0.00	4.46	2.73	1	19	5	97	0.00	0.0	3.387	0.046	12	3	1	2
PL.43109	PL.42537	C	#1/0 ACSR	7.23Y	120.5	0.00	4.46	1.07	0	7	2	96	0.00	0.0	3.437	0.049	7	2	1	1
PL.42536	PL.55634	C	#4 ACSR	7.23Y	120.5	0.03	4.47	9.73	7	68	20	96	0.02	0.0	3.331	0.092	23	7	2	11
PL.63767	PL.42536	C	#1/0 ACSR	7.23Y	120.5	0.02	4.50	6.38	3	44	13	96	0.01	0.0	3.497	0.166	7	2	4	9
PL.72565	PL.63767	C	#1/0 ACSR	7.23Y	120.5	0.01	4.50	5.41	2	38	11	96	0.00	0.0	3.567	0.070	10	3	1	5
PL.72566	PL.72565	C	#1/0 ACSR	7.23Y	120.5	0.00	4.50	3.91	2	27	8	96	0.00	0.0	3.567	0.000	14	4	3	4
PL.62982	PL.72566	C	1/0 AL URD	7.23Y	120.5	0.00	4.51	1.87	1	13	4	96	0.00	0.0	3.627	0.060	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
-----																				
PL.55633	PL.55632	C	#4 ACSR	7.24Y	120.7	0.01	4.29	2.05	2	14	4	96	0.00	0.0	3.151	0.150	14	4	1	1
PL.41445	PL.42535	C	#2 ACSR	7.25Y	120.9	0.00	4.14	0.90	1	6	2	95	0.00	0.0	2.882	0.038	6	2	1	1
PL.64744	PL.55693	B	#2 ACSR	7.32Y	122.1	0.00	2.94	1.50	1	11	3	96	0.00	0.0	2.056	0.003	0	0	0	2
PD.9555	PL.64744	B	65T	7.32Y	122.1	0.00	2.94	1.50	0	11	3	96	0.00	0.0	2.056	0.003	0	0	0	2
PL.64745	PD.9555	B	#2 ACSR	7.32Y	122.1	0.00	2.94	1.50	1	11	3	96	0.00	0.0	2.085	0.029	0	0	0	2
PL.63717	PL.64745	B	#2 ACSR	7.32Y	122.1	0.00	2.94	1.50	1	11	3	96	0.00	0.0	2.085	0.000	11	3	2	2
PL.41360	PL.41306	B	6 A (CWC)	7.36Y	122.6	0.00	2.40	7.84	6	55	16	96	0.00	0.0	1.734	0.006	0	0	0	7
PD.6603	PL.41360	B	50QA	7.36Y	122.6	0.00	2.40	7.84	16	55	16	96	0.00	0.0	1.734	0.006	0	0	0	7
PL.41847	PD.6603	B	6 A (CWC)	7.36Y	122.6	0.02	2.42	7.84	6	55	16	96	0.01	0.0	1.790	0.057	9	2	1	7
PL.41848	PL.41847	B	6 A (CWC)	7.35Y	122.6	0.02	2.44	6.63	5	47	14	96	0.01	0.0	1.864	0.074	13	4	2	6
PL.41749	PL.41848	B	6 A (CWC)	7.35Y	122.6	0.01	2.44	4.83	3	34	10	96	0.00	0.0	1.912	0.049	12	4	1	4
PL.41750	PL.41749	B	6 A (CWC)	7.35Y	122.5	0.01	2.45	2.83	2	20	6	96	0.00	0.0	1.967	0.055	6	2	1	2
PL.62981	PL.41750	B	#2 ACSR	7.35Y	122.5	0.01	2.46	2.02	1	14	4	96	0.00	0.0	2.105	0.138	0	0	0	1
PL.63530	PL.62981	B	#2 ACSR	7.35Y	122.5	0.00	2.46	2.02	1	14	4	96	0.00	0.0	2.171	0.066	0	0	0	1
PL.63531	PL.63530	B	#2 ACSR	7.35Y	122.5	0.00	2.47	2.02	1	14	4	96	0.00	0.0	2.238	0.066	14	4	1	1
PL.41294	PL.41750	B	6 A (CWC)	7.35Y	122.5	0.00	2.45	0.00	0	0	0	100	0.00	0.0	1.981	0.014	0	0	0	0
PL.41813	PL.41749	B	6 A (CWC)	7.35Y	122.6	0.00	2.44	0.24	0	2	0	100	0.00	0.0	1.959	0.046	2	0	1	1
PL.41012	PL.60939	A	#4 ACSR	7.37Y	122.9	0.00	2.15	4.06	3	29	8	96	0.00	0.0	1.622	0.006	0	0	0	3
PD.6568	PL.41012	A	65T	7.37Y	122.9	0.00	2.15	4.06	0	29	8	96	0.00	0.0	1.622	0.006	0	0	0	3
PL.41013	PD.6568	A	#4 ACSR	7.37Y	122.8	0.01	2.15	4.06	3	29	8	96	0.00	0.0	1.684	0.063	29	8	3	3
PL.54609	PL.54605	A	#1/0 ACSR	7.44Y	123.9	0.00	1.07	1.09	0	8	2	97	0.00	0.0	1.240	0.003	0	0	0	1
PD.8137	PL.54609	A	65T	7.44Y	123.9	0.00	1.07	1.09	0	8	2	97	0.00	0.0	1.240	0.003	0	0	0	1
PL.54470	PD.8137	A	#1/0 ACSR	7.44Y	123.9	0.00	1.07	1.09	0	8	2	97	0.00	0.0	1.305	0.065	8	2	1	1
PL.56621	PL.54605	C	#4 ACSR	7.44Y	123.9	0.00	1.07	3.64	3	26	8	96	0.00	0.0	1.243	0.007	0	0	0	4
PD.8316	PL.56621	C	65T	7.44Y	123.9	0.00	1.07	3.64	0	26	8	96	0.00	0.0	1.243	0.007	0	0	0	4
PL.56622	PD.8316	C	#4 ACSR	7.44Y	123.9	0.01	1.08	3.64	3	26	8	96	0.00	0.0	1.314	0.071	7	2	2	4
PL.53981	PL.56622	C	#4 ACSR	7.43Y	123.9	0.00	1.09	2.70	2	19	6	95	0.00	0.0	1.367	0.053	19	6	2	2
PL.43001	PL.43000	C	6 A (CWC)	7.46Y	124.3	0.00	0.75	5.55	4	40	12	96	0.00	0.0	0.954	0.006	0	0	0	4
PD.6150	PL.43001	C	65T	7.46Y	124.3	0.00	0.75	5.55	0	40	12	96	0.00	0.0	0.954	0.006	0	0	0	4
PL.54293	PD.6150	C	6 A (CWC)	7.45Y	124.2	0.00	0.75	5.55	4	40	12	96	0.00	0.0	0.969	0.015	40	12	4	4
PL.53677	PL.53676	A	#2 ACSR	7.46Y	124.4	0.00	0.64	2.41	1	17	5	96	0.00	0.0	0.864	0.006	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.6149	PL.53677	A	65T	7.46Y	124.4	0.00	0.64	2.41	0	17	5	96	0.00	0.0	0.864	0.006	0	0	0	2
PL.53679	PD.6149	A	#2 ACSR	7.46Y	124.4	0.00	0.64	2.41	1	17	5	96	0.00	0.0	0.896	0.032	17	5	2	2
PL.42998	PL.42997	C	#2 ACSR	7.47Y	124.4	0.00	0.56	1.67	1	12	3	97	0.00	0.0	0.795	0.006	0	0	0	2
PD.6148	PL.42998	C	65T	7.47Y	124.4	0.00	0.56	1.67	0	12	3	97	0.00	0.0	0.795	0.006	0	0	0	2
PL.42999	PD.6148	C	#2 ACSR	7.47Y	124.4	0.00	0.57	1.67	1	12	3	97	0.00	0.0	0.859	0.064	5	1	1	2
PL.54291	PL.42999	C	#2 ACSR	7.47Y	124.4	0.00	0.57	1.01	1	7	2	96	0.00	0.0	0.909	0.050	7	2	1	1
PL.54292	PL.54291	C	#1/0 ACSR	7.47Y	124.4	0.00	0.57	0.00	0	0	0	100	0.00	0.0	0.946	0.037	0	0	0	0
PL.42738	PL.58929	A	#4 ACSR	7.48Y	124.6	0.00	0.38	1.40	1	10	3	96	0.00	0.0	0.638	0.006	0	0	0	1
PD.6678	PL.42738	A	65T	7.48Y	124.6	0.00	0.38	1.40	0	10	3	96	0.00	0.0	0.638	0.006	0	0	0	1
PL.42995	PD.6678	A	#4 ACSR	7.48Y	124.6	0.00	0.38	1.40	1	10	3	96	0.00	0.0	0.738	0.100	10	3	1	1
PL.41921	PL.41914	A	#4 ACSR	7.48Y	124.7	0.00	0.26	13.35	10	96	28	96	0.00	0.0	0.498	0.006	0	0	0	9
PD.6715	PL.41921	A	65T	7.48Y	124.7	0.00	0.26	13.35	0	96	28	96	0.00	0.0	0.498	0.006	0	0	0	9
PL.41922	PD.6715	A	#4 ACSR	7.48Y	124.6	0.09	0.36	13.35	10	96	28	96	0.07	0.1	0.666	0.168	11	3	1	9
PL.54734	PL.41922	A	#4 ACSR	7.48Y	124.6	0.04	0.40	11.83	9	85	25	96	0.03	0.0	0.748	0.082	0	0	0	8
PL.54736	PL.54734	A	#1/0 ACSR	7.48Y	124.6	0.00	0.40	9.35	4	67	19	96	0.00	0.0	0.751	0.003	0	0	0	6
PD.8150	PL.54736	A	60QA	7.48Y	124.6	0.00	0.40	9.35	16	67	19	96	0.00	0.0	0.751	0.003	0	0	0	6
PL.54739	PD.8150	A	#1/0 ACSR	7.48Y	124.6	0.02	0.42	9.35	4	67	19	96	0.01	0.0	0.839	0.087	20	6	1	6
PL.54740	PL.54739	A	#1/0 ACSR	7.47Y	124.5	0.04	0.46	6.53	3	47	14	96	0.01	0.0	1.122	0.284	0	0	0	5
PL.61676	PL.54740	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.144	0.022	0	0	0	0
PL.61677	PL.61676	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.192	0.047	0	0	0	0
PL.61675	PL.61677	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.239	0.047	0	0	0	0
PL.61674	PL.61675	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.285	0.046	0	0	0	0
PL.61673	PL.61674	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.310	0.024	0	0	0	0
PL.61672	PL.61673	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.364	0.054	0	0	0	0
PL.61671	PL.61672	A	1/0 AL URD	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.370	0.006	0	0	0	0
PL.54741	PL.54740	A	6 A (CWC)	7.47Y	124.5	0.01	0.47	6.53	5	47	14	96	0.00	0.0	1.165	0.042	19	5	3	5
PL.54743	PL.54741	A	6 A (CWC)	7.47Y	124.5	0.00	0.47	3.91	3	28	8	96	0.00	0.0	1.199	0.034	19	6	1	2
PL.54744	PL.54743	A	6 A (CWC)	7.47Y	124.5	0.00	0.47	1.25	1	9	3	95	0.00	0.0	1.228	0.029	9	3	1	1
PL.54742	PL.54740	A	6 A (CWC)	7.47Y	124.5	0.00	0.46	0.00	0	0	0	100	0.00	0.0	1.197	0.075	0	0	0	0
PL.54735	PL.54734	A	#4 ACSR	7.48Y	124.6	0.00	0.40	2.47	2	18	5	96	0.00	0.0	0.763	0.014	18	5	2	2
PL.63761	Pine Grove 2	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	298.95	57	6355	2204	94	0.03	0.0	0.002	0.002	0	0	0	591

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 2

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

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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	Length (mi)	-----Element-----		Cons On	Cons Thru
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PL.63762	PL.63761	ABC	397 SPACER	7.50Y	125.0	0.00	0.00	298.95	57	6355	2204	94	0.02	0.0	0.004	0.002	0	0	0	591
----- Feeder No. 2 (River Bend F2) Beginning with Device PD.9482 -----																				
PD.9482	PL.63762	ABC	400VWE	7.50Y	125.0	0.00	0.00	298.95	0	6355	2204	94	0.00	0.0	0.004	0.002	0	0	0	591
PL.63766	PD.9482	ABC	397 SPACER	7.50Y	124.9	0.06	0.06	298.95	57	6355	2204	94	0.65	0.0	0.059	0.055	0	0	0	591
PL.63763	PL.63766	A	#2 ACSR	7.50Y	124.9	0.00	0.06	2.31	1	17	5	96	0.00	0.0	0.065	0.006	0	0	0	2
PD.9480	PL.63763	A	75QA	7.50Y	124.9	0.00	0.06	2.31	3	17	5	96	0.00	0.0	0.065	0.006	0	0	0	2
PL.63758	PD.9480	A	#2 ACSR	7.50Y	124.9	0.00	0.06	2.31	1	17	5	96	0.00	0.0	0.078	0.013	17	5	1	2
PL.42732	PL.63758	A	#2 ACSR	7.50Y	124.9	0.00	0.06	0.00	0	0	0	100	0.00	0.0	0.090	0.012	0	0	1	1
PL.63765	PL.63766	ABC	397 SPACER	7.49Y	124.9	0.06	0.12	297.52	57	6323	2187	95	0.64	0.0	0.114	0.055	0	0	0	587
PL.63760	PL.63765	ABC	397 SPACER	7.49Y	124.9	0.01	0.13	297.52	57	6323	2180	95	0.10	0.0	0.122	0.008	0	0	0	587
PL.42733	PL.63760	A	#2 ACSR	7.49Y	124.9	0.00	0.13	2.25	1	16	5	95	0.00	0.0	0.128	0.006	0	0	0	3
PD.6408	PL.42733	A	75QA	7.49Y	124.9	0.00	0.13	2.25	3	16	5	95	0.00	0.0	0.128	0.006	0	0	0	3
PL.42734	PD.6408	A	#2 ACSR	7.49Y	124.9	0.00	0.13	2.25	1	16	5	95	0.00	0.0	0.163	0.036	16	5	3	3
PL.42744	PL.63760	ABC	397 SPACER	7.48Y	124.7	0.12	0.25	296.77	57	6306	2174	95	1.38	0.0	0.240	0.118	0	0	0	584
PL.42745	PL.42744	ABC	397 SPACER	7.48Y	124.7	0.04	0.29	294.27	57	6251	2142	95	0.47	0.0	0.282	0.041	8	2	2	580
PL.41299	PL.42745	ABC	397 SPACER	7.48Y	124.7	0.04	0.34	293.90	57	6243	2134	95	0.49	0.0	0.325	0.043	0	0	0	578
PL.41915	PL.41299	ABC	397 SPACER	7.48Y	124.6	0.05	0.39	293.16	56	6226	2124	95	0.59	0.0	0.377	0.052	0	0	0	576
PL.41916	PL.41915	A	#2 ACSR	7.48Y	124.6	0.00	0.39	1.41	1	10	3	96	0.00	0.0	0.383	0.006	0	0	0	2
PD.6140	PL.41916	A	75QA	7.48Y	124.6	0.00	0.39	1.41	2	10	3	96	0.00	0.0	0.383	0.006	0	0	0	2
PL.41917	PD.6140	A	#2 ACSR	7.48Y	124.6	0.00	0.39	1.41	1	10	3	96	0.00	0.0	0.397	0.014	10	3	2	2
PL.41920	PL.41915	ABC	397 SPACER	7.47Y	124.6	0.03	0.42	292.69	56	6215	2114	95	0.35	0.0	0.408	0.031	3	1	1	574
PL.41923	PL.41920	ABC	397 SPACER	7.46Y	124.4	0.16	0.58	292.54	56	6212	2108	95	1.77	0.0	0.565	0.157	0	0	0	573
PL.43038	PL.41923	ABC	336 MCM AC	7.43Y	123.8	0.60	1.18	291.90	56	6196	2083	95	18.57	0.3	0.824	0.259	14	4	2	570
PL.54235	PL.43038	ABC	336 MCM AC	7.42Y	123.7	0.16	1.34	291.23	56	6163	2036	95	5.08	0.1	0.895	0.071	8	2	1	568
PL.54237	PL.54235	ABC	336 MCM AC	7.41Y	123.5	0.18	1.52	290.87	56	6150	2022	95	5.59	0.1	0.974	0.078	2	1	1	567
PL.54236	PL.54237	B	6 A (CWC)	7.41Y	123.5	0.01	1.54	55.30	40	393	115	96	0.04	0.0	0.979	0.006	0	0	0	36
PD.6141	PL.54236	B	40T	7.41Y	123.5	0.00	1.54	55.30	0	393	115	96	0.00	0.0	0.979	0.006	0	0	0	36
PL.43039	PD.6141	B	6 A (CWC)	7.40Y	123.4	0.09	1.63	55.30	40	393	115	96	0.26	0.1	1.016	0.036	16	5	4	36
PL.54240	PL.43039	B	#4 ACSR	7.40Y	123.4	0.00	1.63	4.53	3	32	9	96	0.00	0.0	1.054	0.038	32	9	3	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.43040	PL.43039	B	6 A (CWC)	7.39Y	123.2	0.16	1.79	39.81	28	283	83	96	0.34	0.1	1.105	0.089	0	0	0	26
PL.43041	PL.43040	B	6 A (CWC)	7.39Y	123.2	0.04	1.83	39.81	28	283	82	96	0.08	0.0	1.126	0.021	9	3	1	26
PL.43042	PL.43041	B	6 A (CWC)	7.39Y	123.1	0.08	1.90	38.55	28	274	80	96	0.16	0.1	1.169	0.043	0	0	0	25
PL.42091	PL.43042	B	6 A (CWC)	7.37Y	122.9	0.20	2.10	38.55	28	273	80	96	0.40	0.1	1.283	0.114	14	4	2	25
PL.42092	PL.42091	B	6 A (CWC)	7.37Y	122.8	0.13	2.23	36.54	26	259	75	96	0.25	0.1	1.360	0.076	0	0	0	23
PL.41698	PL.42092	B	6 A (CWC)	7.37Y	122.8	0.00	2.23	1.65	1	12	3	97	0.00	0.0	1.383	0.024	12	3	1	1
PL.42093	PL.42092	B	6 A (CWC)	7.36Y	122.6	0.18	2.41	34.88	25	247	72	96	0.33	0.1	1.477	0.117	19	5	1	22
PL.42094	PL.42093	B	6 A (CWC)	7.35Y	122.5	0.05	2.46	32.21	23	228	66	96	0.08	0.0	1.510	0.033	0	0	0	21
PL.54560	PL.42094	B	6 A (CWC)	7.35Y	122.5	0.05	2.51	32.21	23	227	66	96	0.09	0.0	1.550	0.040	35	10	3	21
PL.54561	PL.54560	B	6 A (CWC)	7.35Y	122.4	0.06	2.57	27.28	19	193	56	96	0.08	0.0	1.595	0.045	0	0	0	18
PL.41461	PL.54561	B	#2 ACSR	7.35Y	122.4	0.00	2.57	1.46	1	10	3	96	0.00	0.0	1.667	0.072	10	3	1	1
PL.42095	PL.54561	B	6 A (CWC)	7.34Y	122.4	0.06	2.63	25.82	18	182	53	96	0.09	0.0	1.649	0.054	0	0	0	17
PL.54231	PL.42095	B	6 A (CWC)	7.34Y	122.4	0.00	2.64	1.59	1	11	3	96	0.00	0.0	1.693	0.045	11	3	2	2
PL.54232	PL.42095	B	6 A (CWC)	7.34Y	122.3	0.03	2.66	24.23	17	171	49	96	0.03	0.0	1.673	0.025	24	7	2	15
PL.63249	PL.54232	B	6 A (CWC)	7.34Y	122.3	0.03	2.69	20.80	15	147	42	96	0.03	0.0	1.717	0.043	55	16	6	13
PL.63250	PL.63249	B	6 A (CWC)	7.34Y	122.3	0.01	2.70	13.06	9	92	27	96	0.01	0.0	1.755	0.038	92	27	7	7
PL.54238	PL.43039	B	#4 ACSR	7.40Y	123.4	0.02	1.65	8.70	7	62	18	96	0.01	0.0	1.078	0.062	19	5	2	3
PL.54239	PL.54238	B	#4 ACSR	7.40Y	123.3	0.00	1.65	6.08	5	43	13	96	0.00	0.0	1.093	0.015	43	13	1	1
PL.54263	PL.54237	ABC	336 MCM AC	7.39Y	123.1	0.37	1.89	272.34	52	5749	1894	95	10.69	0.2	1.146	0.172	36	11	3	530
PL.54264	PL.54263	ABC	336 MCM AC	7.37Y	122.9	0.20	2.09	270.63	52	5702	1858	95	5.81	0.1	1.240	0.094	14	4	1	527
PL.42796	PL.54264	A	6 A (CWC)	7.37Y	122.9	0.00	2.09	2.00	1	14	4	96	0.00	0.0	1.246	0.006	0	0	0	2
PD.6142	PL.42796	A	75QA	7.37Y	122.9	0.00	2.09	2.00	3	14	4	96	0.00	0.0	1.246	0.006	0	0	0	2
PL.42839	PD.6142	A	6 A (CWC)	7.37Y	122.9	0.00	2.09	2.00	1	14	4	96	0.00	0.0	1.295	0.050	0	0	0	2
PL.54262	PL.42839	A	8 A (CWC)	7.37Y	122.9	0.00	2.10	2.00	2	14	4	96	0.00	0.0	1.335	0.039	14	4	2	2
PL.42797	PL.54264	C	#2 ACSR	7.37Y	122.9	0.00	2.09	2.54	1	18	5	96	0.00	0.0	1.246	0.006	0	0	0	2
PD.6143	PL.42797	C	75QA	7.37Y	122.9	0.00	2.09	2.54	3	18	5	96	0.00	0.0	1.246	0.006	0	0	0	2
PL.54260	PD.6143	C	#2 ACSR	7.37Y	122.9	0.00	2.09	2.54	1	18	5	96	0.00	0.0	1.297	0.051	4	1	1	2
PL.54261	PL.54260	C	#2 ACSR	7.37Y	122.9	0.00	2.09	1.96	1	14	4	96	0.00	0.0	1.373	0.076	14	4	1	1
PL.54253	PL.54264	ABC	336 MCM AC	7.36Y	122.7	0.20	2.29	268.45	52	5650	1831	95	5.71	0.1	1.334	0.094	15	4	2	522
PL.54254	PL.54253	ABC	336 MCM AC	7.36Y	122.6	0.08	2.36	267.76	52	5630	1814	95	2.22	0.0	1.371	0.037	19	6	1	520
PL.54256	PL.54254	ABC	336 MCM AC	7.35Y	122.6	0.08	2.44	266.86	51	5608	1803	95	2.32	0.0	1.410	0.039	0	0	0	519

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.54255	PL.54256	A	6 A (CWC)	7.35Y	122.6	0.00	2.44	0.00	0	0	0	100	0.00	0.0	1.459	0.049	0	0	0	0
PL.54259	PL.54256	ABC	336 MCM AC	7.35Y	122.4	0.13	2.57	259.63	50	5453	1753	95	3.57	0.1	1.473	0.063	21	6	1	501
PL.54250	PL.54259	ABC	336 MCM AC	7.34Y	122.3	0.10	2.67	258.64	50	5428	1739	95	2.75	0.1	1.522	0.049	10	3	1	500
PL.53683	PL.54250	B	6 A (CWC)	7.34Y	122.3	0.05	2.72	57.66	41	406	118	96	0.14	0.0	1.539	0.018	0	0	0	38
PL.53684	PL.53683	B	6 A (CWC)	7.34Y	122.3	0.02	2.73	57.66	41	406	118	96	0.05	0.0	1.545	0.006	0	0	0	38
PD.6717	PL.53684	B	100QA	7.34Y	122.3	0.00	2.73	57.66	58	406	118	96	0.00	0.0	1.545	0.006	0	0	0	38
PL.54483	PD.6717	B	6 A (CWC)	7.33Y	122.2	0.05	2.78	57.66	41	406	118	96	0.16	0.0	1.566	0.021	17	5	2	38
PL.54484	PL.54483	B	#4 ACSR	7.33Y	122.2	0.01	2.79	8.90	7	63	18	96	0.01	0.0	1.592	0.026	0	0	0	5
PL.54178	PL.54484	B	#2 ACSR	7.33Y	122.2	0.00	2.80	1.73	1	12	4	95	0.00	0.0	1.622	0.030	12	4	1	1
PL.54179	PL.54484	B	#4 ACSR	7.33Y	122.2	0.01	2.80	7.17	6	50	15	96	0.00	0.0	1.616	0.024	20	6	2	4
PL.54180	PL.54179	B	#4 ACSR	7.33Y	122.2	0.00	2.80	4.38	3	31	9	96	0.00	0.0	1.646	0.029	31	9	2	2
PL.54482	PL.54483	B	6 A (CWC)	7.32Y	122.1	0.16	2.95	46.38	33	327	95	96	0.40	0.1	1.642	0.076	0	0	0	31
PL.42869	PL.54482	B	6 A (CWC)	7.32Y	121.9	0.11	3.06	39.94	29	281	82	96	0.23	0.1	1.702	0.060	0	0	0	27
PL.54517	PL.42869	B	#2 ACSR	7.32Y	121.9	0.00	3.06	1.67	1	12	3	97	0.00	0.0	1.729	0.027	12	3	1	1
PL.61634	PL.42869	B	#2 ACSR	7.31Y	121.9	0.05	3.10	38.27	22	269	78	96	0.09	0.0	1.744	0.042	31	9	2	26
PL.61635	PL.61634	B	#2 ACSR	7.31Y	121.9	0.04	3.14	33.91	19	238	69	96	0.06	0.0	1.780	0.037	29	8	2	24
PL.61630	PL.61635	B	#2 ACSR	7.31Y	121.8	0.04	3.18	28.69	16	202	58	96	0.05	0.0	1.824	0.043	13	4	1	21
PL.61636	PL.61630	B	#2 ACSR	7.31Y	121.8	0.02	3.20	24.07	14	169	49	96	0.02	0.0	1.851	0.027	11	3	3	18
PL.61637	PL.61636	B	#2 ACSR	7.31Y	121.8	0.03	3.22	22.54	13	158	46	96	0.03	0.0	1.892	0.041	44	13	4	15
PL.61638	PL.61637	B	#2 ACSR	7.31Y	121.8	0.02	3.24	16.34	9	115	33	96	0.01	0.0	1.929	0.037	22	6	1	11
PL.61639	PL.61638	B	#2 ACSR	7.30Y	121.7	0.02	3.26	13.24	8	93	27	96	0.01	0.0	1.975	0.046	27	8	4	10
PL.61633	PL.61639	B	#2 ACSR	7.30Y	121.7	0.00	3.26	1.21	1	8	2	97	0.00	0.0	1.991	0.016	8	2	2	2
PL.61640	PL.61639	B	#2 ACSR	7.30Y	121.7	0.01	3.26	8.16	5	57	17	96	0.00	0.0	2.010	0.035	30	9	2	4
PL.61641	PL.61640	B	#2 ACSR	7.30Y	121.7	0.00	3.27	3.88	2	27	8	96	0.00	0.0	2.032	0.022	27	8	2	2
PL.61632	PL.61630	B	#2 ACSR	7.31Y	121.8	0.00	3.18	2.16	1	15	4	97	0.00	0.0	1.839	0.015	15	4	1	1
PL.61631	PL.61630	B	#2 ACSR	7.31Y	121.8	0.00	3.18	0.63	0	4	1	97	0.00	0.0	1.857	0.033	4	1	1	1
PL.61629	PL.61635	B	#2 ACSR	7.31Y	121.9	0.00	3.14	1.09	1	8	2	97	0.00	0.0	1.816	0.035	8	2	1	1
PL.42870	PL.54482	B	6 A (CWC)	7.32Y	122.0	0.01	2.95	6.44	5	45	13	96	0.00	0.0	1.679	0.037	22	6	2	4
PL.42871	PL.42870	B	6 A (CWC)	7.32Y	122.0	0.02	2.97	3.35	2	24	7	96	0.00	0.0	1.788	0.108	0	0	0	2
PL.54518	PL.42871	B	6 A (CWC)	7.32Y	122.0	0.00	2.97	0.00	0	0	0	100	0.00	0.0	1.859	0.071	0	0	0	0
PL.42872	PL.42871	B	6 A (CWC)	7.32Y	122.0	0.01	2.98	3.35	2	24	7	96	0.00	0.0	1.867	0.079	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 2

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

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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	Length (mi)	-----Element-----		Cons On	Cons Thru
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PL.42873	PL.42872	B	2 AL URD	7.32Y	122.0	0.00	2.98	3.35	2	24	7	96	0.00	0.0	1.872	0.006	0	0	0	2
PD.6146	PL.42873	B	50QA	7.32Y	122.0	0.00	2.98	3.35	7	24	7	96	0.00	0.0	1.872	0.006	0	0	0	2
PL.42874	PD.6146	B	2 AL URD	7.32Y	122.0	0.00	2.98	3.35	2	24	7	96	0.00	0.0	1.879	0.006	24	7	2	2
PL.54205	PL.54250	ABC	336 MCM AC	7.33Y	122.2	0.09	2.76	238.94	46	5009	1611	95	2.27	0.0	1.569	0.047	0	0	0	461
PL.54206	PL.54205	ABC	336 MCM AC	7.33Y	122.1	0.11	2.87	237.67	46	4979	1598	95	2.84	0.1	1.629	0.060	0	0	0	454
PL.42461	PL.54206	C	6 A (CWC)	7.33Y	122.1	0.00	2.87	13.10	9	92	27	96	0.00	0.0	1.635	0.006	0	0	0	6
PD.6661	PL.42461	C	75QA	7.33Y	122.1	0.00	2.87	13.10	17	92	27	96	0.00	0.0	1.635	0.006	0	0	0	6
PL.54492	PD.6661	C	6 A (CWC)	7.33Y	122.1	0.01	2.88	13.10	9	92	27	96	0.00	0.0	1.647	0.012	24	7	1	6
PL.54493	PL.54492	C	6 A (CWC)	7.33Y	122.1	0.01	2.89	9.65	7	68	20	96	0.01	0.0	1.675	0.028	18	5	1	5
PL.54491	PL.54493	C	6 A (CWC)	7.33Y	122.1	0.01	2.90	5.49	4	39	11	96	0.00	0.0	1.728	0.053	39	11	3	3
PL.54494	PL.54493	C	#1/0 ACSR	7.33Y	122.1	0.00	2.89	1.55	1	11	3	96	0.00	0.0	1.689	0.014	11	3	1	1
PL.42462	PL.54206	A	6 A (CWC)	7.33Y	122.1	0.00	2.87	1.94	1	14	4	96	0.00	0.0	1.635	0.006	0	0	0	2
PD.6427	PL.42462	A	75QA	7.33Y	122.1	0.00	2.87	1.94	3	14	4	96	0.00	0.0	1.635	0.006	0	0	0	2
PL.54249	PD.6427	A	6 A (CWC)	7.33Y	122.1	0.00	2.87	1.94	1	14	4	96	0.00	0.0	1.673	0.039	14	4	2	2
PL.42463	PL.54206	ABC	336 MCM AC	7.32Y	122.0	0.14	3.01	232.65	45	4871	1561	95	3.46	0.1	1.705	0.076	26	7	2	446
PL.42464	PL.42463	A	#4 ACSR	7.32Y	122.0	0.00	3.01	6.86	5	48	14	96	0.00	0.0	1.711	0.006	0	0	0	4
PD.6428	PL.42464	A	75QA	7.32Y	122.0	0.00	3.01	6.86	9	48	14	96	0.00	0.0	1.711	0.006	0	0	0	4
PL.42465	PD.6428	A	#4 ACSR	7.32Y	122.0	0.01	3.02	6.86	5	48	14	96	0.00	0.0	1.759	0.048	30	9	2	4
PL.54247	PL.42465	A	#4 ACSR	7.32Y	122.0	0.00	3.02	2.62	2	18	5	96	0.00	0.0	1.807	0.048	12	4	1	2
PL.54248	PL.54247	A	#4 ACSR	7.32Y	122.0	0.00	3.02	0.85	1	6	2	95	0.00	0.0	1.852	0.045	6	2	1	1
PL.54241	PL.42463	ABC	336 MCM AC	7.31Y	121.9	0.13	3.14	229.15	44	4793	1531	95	3.23	0.1	1.778	0.073	24	7	2	440
PL.54242	PL.54241	ABC	336 MCM AC	7.31Y	121.8	0.11	3.25	228.02	44	4766	1517	95	2.76	0.1	1.842	0.063	26	7	4	438
PL.54243	PL.54242	ABC	336 MCM AC	7.30Y	121.6	0.11	3.36	226.80	44	4738	1503	95	2.64	0.1	1.903	0.061	22	6	2	434
PL.54245	PL.54243	ABC	336 MCM AC	7.29Y	121.5	0.15	3.50	225.76	43	4713	1490	95	3.61	0.1	1.987	0.084	17	5	2	432
PL.54246	PL.54245	B	#2 ACSR	7.29Y	121.5	0.00	3.50	3.55	2	25	7	96	0.00	0.0	1.993	0.006	0	0	0	1
PD.6511	PL.54246	B	20QA	7.29Y	121.5	0.00	3.50	3.55	18	25	7	96	0.00	0.0	1.993	0.006	0	0	0	1
PL.42708	PD.6511	B	#2 ACSR	7.29Y	121.5	0.00	3.51	3.55	2	25	7	96	0.00	0.0	2.024	0.031	0	0	0	1
PL.42709	PL.42708	B	#2 ACSR	7.29Y	121.5	0.00	3.51	3.55	2	25	7	96	0.00	0.0	2.041	0.017	25	7	1	1
PL.54244	PL.54245	ABC	336 MCM AC	7.28Y	121.4	0.14	3.64	223.74	43	4667	1470	95	3.29	0.1	2.066	0.078	0	0	0	429
PL.54475	PL.54244	ABC	336 MCM AC	7.27Y	121.2	0.16	3.80	222.32	43	4634	1453	95	3.88	0.1	2.159	0.094	44	13	4	423
PL.54476	PL.54475	ABC	336 MCM AC	7.27Y	121.2	0.05	3.85	220.22	42	4586	1431	95	1.23	0.0	2.189	0.030	11	3	1	419

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.54477	PL.54476	ABC	336 MCM AC	7.27Y	121.1	0.03	3.88	219.72	42	4574	1426	95	0.71	0.0	2.207	0.018	0	0	0	418
PL.43043	PL.54477	ABC	336 MCM AC	7.27Y	121.1	0.01	3.89	219.72	42	4574	1424	95	0.23	0.0	2.213	0.006	0	0	0	418
RG.44	PL.43043	ABC	250kva	7.45Y	124.2	-3.11	0.78	219.72	67	4573	1423	95	percent Boost= 2.50 Tap= 4.0							418
PL.54473	RG.44	ABC	336 MCM AC	7.45Y	124.2	0.04	0.83	214.22	41	4573	1423	95	0.98	0.0	2.238	0.026	26	7	2	418
PL.54512	PL.54473	ABC	336 MCM AC	7.44Y	124.0	0.13	0.96	212.23	41	4530	1409	95	3.06	0.1	2.319	0.081	3	1	2	415
PL.54513	PL.54512	ABC	336 MCM AC	7.44Y	124.0	0.00	0.96	0.43	0	9	3	95	0.00	0.0	2.384	0.065	0	0	0	1
PL.54514	PL.54513	ABC	336 MCM AC	7.44Y	124.0	0.00	0.96	0.00	0	0	0	100	0.00	0.0	2.385	0.001	0	0	0	0
PD.8140-A	PL.54514	ABC	Open	7.44Y	124.0	0.00	0.96	0.00	0	0	0	100	0.00	0.0	2.385	0.001	0	0	0	0
PL.54515	PL.54513	A	#1/0 ACSR	7.44Y	124.0	0.00	0.96	1.28	1	9	3	95	0.00	0.0	2.388	0.004	0	0	0	1
PD.8141	PL.54515	A	10QA	7.44Y	124.0	0.00	0.96	1.28	0	9	3	95	0.00	0.0	2.388	0.004	0	0	0	1
PL.54516	PD.8141	A	#1/0 ACSR	7.44Y	124.0	0.00	0.96	1.28	1	9	3	95	0.00	0.0	2.409	0.021	9	3	1	1
PL.54727	PL.54512	ABC	#3/0 ACSR	7.44Y	124.0	0.06	1.02	154.68	52	3300	1020	96	1.24	0.0	2.350	0.031	12	4	1	300
PL.54729	PL.54727	C	#1/0 ACSR	7.44Y	124.0	0.00	1.02	4.31	2	31	9	96	0.00	0.0	2.352	0.002	0	0	0	3
PD.8149	PL.54729	C	20QA	7.44Y	124.0	0.00	1.02	4.31	22	31	9	96	0.00	0.0	2.352	0.002	0	0	0	3
PL.54730	PD.8149	C	#1/0 ACSR	7.44Y	124.0	0.00	1.02	4.31	2	31	9	96	0.00	0.0	2.386	0.033	13	4	2	3
PL.54728	PL.54730	C	#1/0 ACSR	7.44Y	124.0	0.00	1.02	2.50	1	18	5	96	0.00	0.0	2.400	0.014	18	5	1	1
PL.60914	PL.54727	ABC	#1/0 ACSR	7.43Y	123.8	0.14	1.16	152.67	66	3255	1006	96	3.15	0.1	2.401	0.051	7	2	1	296
PL.60919	PL.60914	ABC	#1/0 ACSR	7.43Y	123.8	0.07	1.23	148.47	65	3162	977	96	1.45	0.0	2.426	0.025	23	7	1	284
PL.60920	PL.60919	ABC	#1/0 ACSR	7.42Y	123.6	0.14	1.37	147.38	64	3137	968	96	2.97	0.1	2.477	0.051	0	0	0	283
PL.60917	PL.60920	A	#4 ACSR	7.42Y	123.6	0.00	1.37	1.56	1	11	3	96	0.00	0.0	2.483	0.006	0	0	0	1
PD.6412	PL.60917	A	50QA	7.42Y	123.6	0.00	1.37	1.56	3	11	3	96	0.00	0.0	2.483	0.006	0	0	0	1
PL.41834	PD.6412	A	#4 ACSR	7.42Y	123.6	0.00	1.37	1.56	1	11	3	96	0.00	0.0	2.530	0.047	11	3	1	1
PL.60918	PL.60920	ABC	#1/0 ACSR	7.41Y	123.5	0.18	1.54	146.85	64	3123	962	96	3.74	0.1	2.542	0.065	12	4	1	282
PL.41868	PL.60918	ABC	#1/0 ACSR	7.38Y	122.9	0.54	2.08	146.27	64	3107	955	96	11.49	0.4	2.744	0.202	0	0	0	281
PL.42845	PL.41868	ABC	#3/0 ACSR	7.37Y	122.8	0.15	2.23	143.15	48	3029	925	96	2.75	0.1	2.824	0.080	10	3	2	274
PL.42846	PL.42845	ABC	#3/0 ACSR	7.35Y	122.6	0.19	2.42	142.66	48	3016	918	96	3.61	0.1	2.930	0.106	0	0	0	272
PL.42847	PL.42846	ABC	#3/0 ACSR	7.34Y	122.4	0.16	2.59	142.66	48	3012	913	96	3.05	0.1	3.019	0.089	0	0	0	272
PL.42840	PL.42847	ABC	#1/0 ACSR	7.34Y	122.4	0.00	2.59	34.76	15	736	213	96	0.02	0.0	3.025	0.006	0	0	0	45
PD.6416	PL.42840	ABC	50QA	7.34Y	122.4	0.00	2.59	34.76	70	736	213	96	0.00	0.0	3.025	0.006	0	0	0	45
PL.54597	PD.6416	ABC	#1/0 ACSR	7.34Y	122.4	0.02	2.61	34.76	15	736	213	96	0.09	0.0	3.053	0.029	33	9	2	45
PL.54598	PL.54597	ABC	#1/0 ACSR	7.34Y	122.4	0.02	2.63	33.21	14	703	204	96	0.11	0.0	3.092	0.039	0	0	0	43

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.42459	PL.54598	ABC	#4 ACSR	7.34Y	122.4	0.01	2.64	33.21	26	703	204	96	0.04	0.0	3.098	0.006	0	0	0	43
PL.42460	PL.42459	ABC	#4 ACSR	7.34Y	122.3	0.02	2.66	33.21	26	703	204	96	0.11	0.0	3.113	0.015	0	0	0	43
PD.6677	PL.42460	ABC	50QA	7.34Y	122.3	0.00	2.66	33.21	66	702	203	96	0.00	0.0	3.113	0.015	0	0	0	43
PL.42458	PD.6677	ABC	#4 ACSR	7.34Y	122.3	0.01	2.66	33.21	26	702	203	96	0.04	0.0	3.119	0.006	0	0	0	43
PL.42240	PL.42458	ABC	1/0 AL URD	7.34Y	122.3	0.04	2.71	33.21	20	702	203	96	0.24	0.0	3.183	0.064	0	0	0	43
PL.42239	PL.42240	B	1/0 AL URD	7.33Y	122.2	0.09	2.80	33.42	20	236	68	96	0.17	0.1	3.271	0.088	0	0	0	14
PL.42877	PL.42239	B	1/0 AL URD	7.33Y	122.2	0.02	2.82	33.42	20	235	68	96	0.03	0.0	3.287	0.017	7	2	1	14
PL.42878	PL.42877	B	1/0 AL URD	7.33Y	122.2	0.02	2.84	32.36	19	228	66	96	0.04	0.0	3.311	0.024	15	4	1	13
PL.42879	PL.42878	B	1/0 AL URD	7.33Y	122.1	0.04	2.88	30.22	18	213	62	96	0.06	0.0	3.355	0.044	25	7	2	12
PL.42880	PL.42879	B	1/0 AL URD	7.32Y	122.1	0.04	2.92	26.62	16	187	54	96	0.06	0.0	3.408	0.053	16	5	1	10
PL.42881	PL.42880	B	1/0 AL URD	7.32Y	122.0	0.09	3.01	24.28	14	171	49	96	0.11	0.1	3.534	0.126	37	11	3	9
PL.43161	PL.42881	B	1/0 AL URD	7.32Y	121.9	0.06	3.07	18.95	11	133	39	96	0.05	0.0	3.653	0.118	48	14	2	6
PL.42168	PL.43161	B	1/0 AL URD	7.31Y	121.9	0.03	3.09	12.10	7	85	25	96	0.02	0.0	3.739	0.086	33	10	2	4
PL.42169	PL.42168	B	1/0 AL URD	7.31Y	121.9	0.00	3.09	3.29	2	23	7	96	0.00	0.0	3.762	0.023	0	0	0	1
PL.42170	PL.42169	B	1/0 AL URD	7.31Y	121.9	0.00	3.10	3.29	2	23	7	96	0.00	0.0	3.792	0.030	23	7	1	1
PL.42171	PL.42170	B	1/0 AL URD	7.31Y	121.9	0.00	3.10	0.00	0	0	0	100	0.00	0.0	3.840	0.048	0	0	0	0
PL.42237	PL.42168	B	2 AL URD	7.31Y	121.9	0.00	3.09	4.04	2	28	8	96	0.00	0.0	3.764	0.025	28	8	1	1
PL.43160	PL.42881	B	2 AL URD	7.32Y	122.0	0.00	3.01	0.00	0	0	0	100	0.00	0.0	3.540	0.006	0	0	0	0
PL.42876	PL.42239	B	2 AL URD	7.33Y	122.2	0.00	2.80	0.00	0	0	0	100	0.00	0.0	3.281	0.011	0	0	0	0
PD.6145	PL.42876	B	50QA	7.33Y	122.2	0.00	2.80	0.00	0	0	0	100	0.00	0.0	3.281	0.011	0	0	0	0
PL.42875	PD.6145	B	2 AL URD	7.33Y	122.2	0.00	2.80	0.00	0	0	0	100	0.00	0.0	3.287	0.006	0	0	0	0
PL.42885	PL.42240	ABC	1/0 AL URD	7.34Y	122.3	0.03	2.73	20.12	12	425	123	96	0.09	0.0	3.250	0.067	0	0	0	26
PL.42884	PL.42885	ABC	1/0 AL URD	7.34Y	122.3	0.01	2.75	17.66	10	373	108	96	0.04	0.0	3.293	0.043	33	10	2	23
PL.42887	PL.42884	ABC	1/0 AL URD	7.33Y	122.2	0.01	2.76	12.11	7	256	74	96	0.02	0.0	3.332	0.038	0	0	0	16
PL.42886	PL.42887	ABC	1/0 AL URD	7.33Y	122.2	0.01	2.77	12.11	7	256	74	96	0.02	0.0	3.377	0.046	19	5	2	16
PL.42172	PL.42886	B	2 AL URD	7.33Y	122.2	0.00	2.77	0.00	0	0	0	100	0.00	0.0	3.383	0.006	0	0	0	0
PL.42457	PL.42886	B	1/0 AL URD	7.33Y	122.1	0.09	2.86	33.69	20	237	69	96	0.18	0.1	3.467	0.090	0	0	0	14
PL.42456	PL.42457	B	1/0 AL URD	7.32Y	122.0	0.09	2.95	33.69	20	237	69	96	0.16	0.1	3.555	0.088	30	9	2	14
PL.42455	PL.42456	B	1/0 AL URD	7.32Y	122.0	0.06	3.01	29.38	17	207	60	96	0.09	0.0	3.623	0.067	43	13	2	12
PL.42454	PL.42455	B	1/0 AL URD	7.32Y	122.0	0.03	3.04	23.23	14	163	47	96	0.04	0.0	3.672	0.050	26	7	2	10
PL.42453	PL.42454	B	1/0 AL URD	7.32Y	121.9	0.02	3.06	19.58	12	138	40	96	0.03	0.0	3.714	0.041	15	4	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.42707	PL.42453	B	1/0 AL URD	7.31Y	121.9	0.03	3.09	17.39	10	122	35	96	0.03	0.0	3.762	0.048	0	0	0	7
PL.54595	PL.42707	B	1/0 AL URD	7.31Y	121.9	0.02	3.11	17.39	10	122	35	96	0.01	0.0	3.793	0.031	21	6	1	7
PL.54594	PL.54595	B	1/0 AL URD	7.31Y	121.9	0.01	3.12	14.47	9	102	29	96	0.01	0.0	3.822	0.029	0	0	0	6
PL.42452	PL.54594	B	1/0 AL URD	7.31Y	121.9	0.01	3.13	14.47	9	102	29	96	0.01	0.0	3.849	0.027	14	4	1	6
PL.42175	PL.42452	B	1/0 AL URD	7.31Y	121.8	0.03	3.16	12.51	7	88	25	96	0.02	0.0	3.920	0.071	17	5	1	5
PL.42174	PL.42175	B	1/0 AL URD	7.31Y	121.8	0.01	3.17	10.07	6	71	20	96	0.00	0.0	3.958	0.038	25	7	2	4
PL.42173	PL.42174	B	1/0 AL URD	7.31Y	121.8	0.01	3.17	6.50	4	46	13	96	0.00	0.0	4.011	0.054	46	13	2	2
PL.42238	PL.54594	B	2 AL URD	7.31Y	121.9	0.00	3.12	0.00	0	0	0	100	0.00	0.0	3.867	0.045	0	0	0	0
PL.42882	PL.42884	B	1/0 AL URD	7.33Y	122.2	0.03	2.78	11.91	7	84	24	96	0.02	0.0	3.386	0.093	31	9	2	5
PL.42883	PL.42882	B	1/0 AL URD	7.33Y	122.2	0.01	2.79	7.46	4	53	15	96	0.00	0.0	3.451	0.065	53	15	3	3
PL.43159	PL.42883	B	1/0 AL URD	7.33Y	122.2	0.00	2.79	0.00	0	0	0	100	0.00	0.0	3.517	0.066	0	0	0	0
PL.63771	PL.42885	B	1/0 AL URD	7.34Y	122.3	0.00	2.74	7.39	4	52	15	96	0.00	0.0	3.288	0.038	52	15	3	3
PL.41584	PL.42240	B	2 AL URD	7.34Y	122.3	0.00	2.71	5.84	3	41	12	96	0.00	0.0	3.216	0.033	41	12	3	3
PL.60858	PL.42847	B	#2 ACSR 6/	7.34Y	122.4	0.00	2.59	0.79	0	6	2	95	0.00	0.0	3.060	0.041	0	0	0	1
PL.60309	PL.60858	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.79	0	6	2	95	0.00	0.0	3.103	0.043	0	0	0	1
PL.60310	PL.60309	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.79	0	6	2	95	0.00	0.0	3.142	0.039	0	0	0	1
PL.60799	PL.60310	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.79	0	6	2	95	0.00	0.0	3.182	0.040	0	0	0	1
PL.60800	PL.60799	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.79	0	6	2	95	0.00	0.0	3.221	0.039	6	2	1	1
PL.60801	PL.60800	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.00	0	0	0	100	0.00	0.0	3.253	0.032	0	0	0	0
PL.60802	PL.60801	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.00	0	0	0	100	0.00	0.0	3.302	0.049	0	0	0	0
PL.60803	PL.60802	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.00	0	0	0	100	0.00	0.0	3.366	0.064	0	0	0	0
PL.60804	PL.60803	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.00	0	0	0	100	0.00	0.0	3.404	0.038	0	0	0	0
PL.60805	PL.60804	B	1/0 AL URD	7.34Y	122.4	0.00	2.59	0.00	0	0	0	100	0.00	0.0	3.423	0.019	0	0	0	0
PL.54596	PL.42847	ABC	#3/0 ACSR	7.34Y	122.4	0.03	2.62	107.65	36	2268	693	96	0.46	0.0	3.043	0.024	19	6	4	226
PL.54748	PL.54596	ABC	#3/0 ACSR	7.34Y	122.3	0.11	2.73	106.74	36	2249	687	96	1.58	0.1	3.126	0.084	32	9	4	222
PL.54747	PL.54748	ABC	#3/0 ACSR	7.33Y	122.2	0.07	2.81	99.48	33	2094	640	96	0.94	0.0	3.183	0.056	0	0	0	206
PL.41316	PL.54747	C	#2 ACSR	7.33Y	122.2	0.00	2.81	3.68	2	26	7	97	0.00	0.0	3.188	0.006	0	0	0	2
PD.6664	PL.41316	C	60QA	7.33Y	122.2	0.00	2.81	3.68	6	26	7	97	0.00	0.0	3.188	0.006	0	0	0	2
PL.54722	PD.6664	C	#2 ACSR	7.33Y	122.2	0.00	2.81	3.68	2	26	7	97	0.00	0.0	3.212	0.024	26	7	2	2
PL.41392	PL.54747	ABC	#3/0 ACSR	7.33Y	122.1	0.06	2.87	98.25	33	2067	632	96	0.82	0.0	3.233	0.050	0	0	0	204
PL.41317	PL.41392	B	#2 ACSR	7.33Y	122.1	0.00	2.87	3.45	2	24	7	96	0.00	0.0	3.239	0.006	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.6665	PL.41317	B	40QA	7.33Y	122.1	0.00	2.87	3.45	9	24	7	96	0.00	0.0	3.239	0.006	0	0	0	2
PL.41324	PD.6665	B	#2 ACSR	7.33Y	122.1	0.00	2.87	3.45	2	24	7	96	0.00	0.0	3.261	0.022	8	2	1	2
PL.41325	PL.41324	B	#2 ACSR	7.33Y	122.1	0.00	2.88	2.36	1	17	5	96	0.00	0.0	3.326	0.066	17	5	1	1
PL.41326	PL.41325	B	#2 ACSR	7.33Y	122.1	0.00	2.88	0.00	0	0	0	100	0.00	0.0	3.379	0.053	0	0	0	0
PL.41327	PL.41392	ABC	#3/0 ACSR	7.32Y	122.0	0.11	2.98	97.10	32	2042	623	96	1.36	0.1	3.319	0.086	0	0	0	202
PL.41597	PL.41327	ABC	#3/0 ACSR	7.31Y	121.8	0.23	3.20	96.69	32	2032	619	96	2.86	0.1	3.501	0.182	0	0	0	200
PL.41600	PL.41597	ABC	#1/0 ACSR	7.31Y	121.8	0.05	3.25	32.33	14	674	218	95	0.21	0.0	3.577	0.076	12	3	1	61
PL.41332	PL.41600	A	6 A (CWC)	7.31Y	121.8	0.00	3.25	2.12	2	15	4	97	0.00	0.0	3.582	0.006	0	0	0	3
PD.6443	PL.41332	A	20T	7.31Y	121.8	0.00	3.25	2.12	0	15	4	97	0.00	0.0	3.582	0.006	0	0	0	3
PL.42227	PD.6443	A	6 A (CWC)	7.30Y	121.7	0.00	3.25	2.12	2	15	4	97	0.00	0.0	3.671	0.089	15	4	1	3
PL.60900	PL.42227	A	6 A (CWC)	7.30Y	121.7	0.00	3.25	0.02	0	0	0	100	0.00	0.0	3.755	0.084	0	0	2	2
PL.42550	PL.41600	ABC	#1/0 ACSR	7.30Y	121.7	0.02	3.27	31.07	14	648	210	95	0.11	0.0	3.620	0.044	0	0	0	57
PL.54479	PL.42550	A	#2 ACSR	7.30Y	121.7	0.00	3.27	1.08	1	8	2	97	0.00	0.0	3.644	0.023	8	2	2	2
PL.57240	PL.42550	ABC	#1/0 ACSR	7.30Y	121.7	0.04	3.31	30.71	13	640	208	95	0.18	0.0	3.691	0.071	0	0	0	55
PL.57241	PL.57240	ABC	#1/0 ACSR	7.30Y	121.7	0.00	3.32	6.27	3	125	57	91	0.00	0.0	3.722	0.031	0	0	0	2
PL.57247	PL.57241	ABC	1/0 AL URD	7.30Y	121.7	0.00	3.32	5.50	3	108	52	90	0.00	0.0	3.761	0.038	108	53	1	1
PL.57242	PL.57241	A	#1/0 ACSR	7.30Y	121.7	0.00	3.32	2.35	1	16	5	95	0.00	0.0	3.758	0.035	0	0	0	1
PL.41009	PL.57242	A	#4 ACSR	7.30Y	121.7	0.00	3.32	2.35	2	16	5	95	0.00	0.0	3.822	0.065	16	5	1	1
PL.42739	PL.57242	A	6 A (CWC)	7.30Y	121.7	0.00	3.32	0.00	0	0	0	100	0.00	0.0	3.781	0.023	0	0	0	0
PL.58558	PL.57240	A	#4 ACSR	7.30Y	121.7	0.01	3.32	73.46	57	515	151	96	0.03	0.0	3.694	0.003	0	0	0	53
PD.8620	PL.58558	A	40T	7.30Y	121.7	0.00	3.32	73.46	0	515	151	96	0.00	0.0	3.694	0.003	0	0	0	53
PL.58559	PD.8620	A	#4 ACSR	7.30Y	121.6	0.09	3.41	73.46	57	515	151	96	0.35	0.1	3.721	0.027	0	0	0	53
PL.54480	PL.58559	A	#4 ACSR	7.30Y	121.6	0.01	3.42	3.33	3	23	7	96	0.00	0.0	3.794	0.073	23	7	2	3
PL.54481	PL.54480	A	#4 ACSR	7.30Y	121.6	0.00	3.42	0.00	0	0	0	100	0.00	0.0	3.822	0.028	0	0	1	1
PL.57246	PL.58559	A	#1/0 ACSR	7.29Y	121.5	0.06	3.47	70.13	30	491	144	96	0.18	0.0	3.755	0.034	13	4	1	50
PL.57245	PL.57246	A	6 A (CWC)	7.27Y	121.2	0.30	3.76	68.22	49	478	139	96	1.07	0.2	3.850	0.095	1	0	1	49
PL.57243	PL.57245	A	6 A (CWC)	7.27Y	121.2	0.01	3.77	5.30	4	37	11	96	0.00	0.0	3.903	0.053	24	7	2	4
PL.53979	PL.57243	A	6 A (CWC)	7.27Y	121.2	0.00	3.77	1.85	1	13	4	96	0.00	0.0	3.960	0.057	13	4	2	2
PL.57244	PL.57245	A	6 A (CWC)	7.27Y	121.1	0.13	3.90	62.81	45	439	128	96	0.44	0.1	3.896	0.046	0	0	0	44
PL.54487	PL.57244	A	#1/0 ACSR	7.26Y	121.0	0.09	3.98	62.81	27	438	128	96	0.25	0.1	3.956	0.060	9	3	1	44
PL.54604	PL.54487	A	6 A (CWC)	7.26Y	121.0	0.00	3.98	0.00	0	0	0	100	0.00	0.0	3.993	0.038	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.54488	PL.54487	A	6 A (CWC)	7.26Y	121.0	0.07	4.05	61.48	44	429	125	96	0.21	0.1	3.979	0.023	0	0	0	43
PL.54489	PL.54488	A	6 A (CWC)	7.26Y	120.9	0.03	4.07	19.74	14	138	40	96	0.03	0.0	4.008	0.029	6	2	1	11
PL.63750	PL.54489	A	#4 ACSR	7.25Y	120.9	0.07	4.15	18.86	15	131	38	96	0.07	0.1	4.103	0.095	28	8	2	10
PL.63751	PL.63750	A	#4 ACSR	7.25Y	120.8	0.02	4.17	13.22	10	92	27	96	0.01	0.0	4.157	0.054	42	12	3	7
PL.54525	PL.63751	A	#4 ACSR	7.25Y	120.8	0.01	4.18	7.19	6	50	14	96	0.00	0.0	4.187	0.030	0	0	0	4
PL.57723	PL.54525	A	#1/0 ACSR	7.25Y	120.8	0.00	4.19	5.88	3	41	12	96	0.00	0.0	4.248	0.060	32	9	1	3
PL.57724	PL.57723	A	#1/0 ACSR	7.25Y	120.8	0.00	4.19	1.21	1	8	2	97	0.00	0.0	4.300	0.053	8	2	2	2
PL.54526	PL.54525	A	#4 ACSR	7.25Y	120.8	0.00	4.18	1.31	1	9	3	95	0.00	0.0	4.280	0.092	9	3	1	1
PL.63752	PL.63750	A	#1/0 ACSR	7.25Y	120.9	0.00	4.15	1.57	1	11	3	96	0.00	0.0	4.119	0.016	11	3	1	1
PL.54485	PL.54488	A	6 A (CWC)	7.25Y	120.8	0.19	4.24	39.20	28	273	79	96	0.39	0.1	4.083	0.104	1	0	1	28
PL.53977	PL.54485	A	6 A (CWC)	7.24Y	120.6	0.15	4.38	39.05	28	272	79	96	0.30	0.1	4.166	0.083	9	3	1	27
PL.54523	PL.53977	A	#4 ACSR	7.24Y	120.6	0.01	4.39	3.18	2	22	6	96	0.00	0.0	4.254	0.088	9	3	1	2
PL.54524	PL.54523	A	#4 ACSR	7.24Y	120.6	0.00	4.40	1.89	1	13	4	96	0.00	0.0	4.332	0.078	13	4	1	1
PL.53978	PL.53977	A	#4 ACSR	7.23Y	120.5	0.11	4.49	34.53	27	240	70	96	0.20	0.1	4.239	0.073	14	4	1	24
PL.54289	PL.53978	A	#4 ACSR	7.23Y	120.4	0.08	4.57	32.51	25	226	65	96	0.13	0.1	4.296	0.057	22	6	3	23
PL.54288	PL.54289	A	#2 ACSR	7.23Y	120.4	0.00	4.57	0.00	0	0	0	100	0.00	0.0	4.329	0.032	0	0	0	0
PL.54290	PL.54289	A	#4 ACSR	7.22Y	120.4	0.05	4.62	29.29	23	203	59	96	0.08	0.0	4.338	0.042	17	5	2	20
PL.63756	PL.54290	A	#4 ACSR	7.22Y	120.4	0.02	4.65	26.78	21	186	54	96	0.03	0.0	4.360	0.022	40	11	3	18
PL.63755	PL.63756	A	#4 ACSR	7.22Y	120.3	0.01	4.65	4.78	4	33	10	96	0.00	0.0	4.411	0.051	33	10	2	2
PL.63757	PL.63756	A	#4 ACSR	7.22Y	120.3	0.03	4.68	16.29	13	113	33	96	0.03	0.0	4.403	0.043	3	1	1	13
PL.53673	PL.63757	A	#4 ACSR	7.22Y	120.3	0.04	4.72	15.79	12	110	32	96	0.03	0.0	4.466	0.063	11	3	1	12
PL.53674	PL.53673	A	#4 ACSR	7.21Y	120.2	0.06	4.78	14.24	11	99	29	96	0.04	0.0	4.574	0.108	23	7	4	11
PL.42983	PL.53674	A	#4 ACSR	7.21Y	120.2	0.03	4.81	10.96	8	76	22	96	0.02	0.0	4.653	0.079	25	7	4	7
PL.42984	PL.42983	A	#4 ACSR	7.21Y	120.2	0.01	4.82	4.89	4	34	10	96	0.00	0.0	4.697	0.044	0	0	0	2
PL.42985	PL.42984	A	#4 ACSR	7.21Y	120.2	0.00	4.83	4.89	4	34	10	96	0.00	0.0	4.723	0.026	14	4	1	2
PL.42986	PL.42985	A	#4 ACSR	7.21Y	120.2	0.00	4.83	2.87	2	20	6	96	0.00	0.0	4.749	0.026	20	6	1	1
PL.41380	PL.42983	A	#2 ACSR	7.21Y	120.2	0.00	4.81	2.39	1	17	5	96	0.00	0.0	4.680	0.027	17	5	1	1
PL.54486	PL.54488	A	#2 ACSR	7.26Y	120.9	0.02	4.06	2.55	1	18	5	96	0.00	0.0	4.236	0.257	10	3	2	4
PL.42699	PL.54486	A	#2 ACSR	7.26Y	120.9	0.00	4.07	1.16	1	8	2	97	0.00	0.0	4.332	0.096	0	0	1	2
PL.42700	PL.42699	A	#2 ACSR	7.26Y	120.9	0.00	4.07	1.16	1	8	2	97	0.00	0.0	4.386	0.054	8	2	1	1
PL.42981	PL.42700	A	#2 ACSR	7.26Y	120.9	0.00	4.07	0.00	0	0	0	100	0.00	0.0	4.418	0.032	0	0	0	0

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.42982	PL.42981	A	#2 ACSR	7.26Y	120.9	0.00	4.07	0.00	0	0	0	100	0.00	0.0	4.463	0.045	0	0	0	0
PL.54185	PL.41597	ABC	#3/0 ACSR	7.30Y	121.7	0.07	3.27	64.37	21	1354	397	96	0.59	0.0	3.586	0.085	12	4	2	139
PL.54186	PL.54185	ABC	#3/0 ACSR	7.30Y	121.7	0.02	3.30	63.78	21	1341	392	96	0.20	0.0	3.615	0.029	0	0	0	137
PL.42484	PL.54186	A	#2 ACSR	7.30Y	121.7	0.00	3.30	1.13	1	8	2	97	0.00	0.0	3.621	0.006	0	0	0	4
PD.6417	PL.42484	A	25QA	7.30Y	121.7	0.00	3.30	1.13	5	8	2	97	0.00	0.0	3.621	0.006	0	0	0	4
PL.54187	PD.6417	A	#2 ACSR	7.30Y	121.7	0.00	3.30	1.13	1	8	2	97	0.00	0.0	3.627	0.006	8	2	4	4
PL.42481	PL.54186	ABC	#3/0 ACSR	7.30Y	121.6	0.07	3.37	63.41	21	1333	390	96	0.58	0.0	3.700	0.085	0	0	0	133
PL.42485	PL.42481	ABC	#3/0 ACSR	7.30Y	121.6	0.00	3.37	63.41	21	1333	389	96	0.04	0.0	3.706	0.006	0	0	0	133
PL.42486	PL.42485	ABC	#3/0 ACSR	7.29Y	121.6	0.05	3.42	63.41	21	1333	389	96	0.45	0.0	3.772	0.066	0	0	0	133
PL.59290	PL.42486	ABC	#3/0 ACSR	7.29Y	121.6	0.00	3.42	0.89	0	19	5	97	0.00	0.0	3.833	0.061	0	0	0	3
PL.59291	PL.59290	ABC	#4/0 ACSR	7.29Y	121.6	0.00	3.42	0.89	0	19	5	97	0.00	0.0	3.838	0.006	0	0	0	3
PD.6706	PL.59291	ABC	65QA	7.29Y	121.6	0.00	3.42	0.89	0	19	5	97	0.00	0.0	3.838	0.006	0	0	0	3
PL.43371	PD.6706	ABC	#4/0 ACSR	7.29Y	121.6	0.00	3.42	0.89	0	19	5	97	0.00	0.0	3.907	0.069	19	5	3	3
PL.59292	PL.59290	ABC	#3/0 ACSR	7.29Y	121.6	0.00	3.42	0.00	0	0	0	100	0.00	0.0	3.898	0.065	0	0	0	0
PD.8678-B	PL.59292	ABC	Open	7.29Y	121.6	0.00	3.42	0.00	0	0	0	100	0.00	0.0	3.898	0.065	0	0	0	0
PL.63662	PL.42486	ABC	#1/0 ACSR	7.29Y	121.4	0.15	3.58	62.51	27	1313	383	96	1.39	0.1	3.905	0.133	0	0	0	130
PL.63663	PL.63662	ABC	#1/0 ACSR	7.29Y	121.4	0.00	3.58	62.51	27	1312	381	96	0.00	0.0	3.905	0.000	26	7	2	130
PL.42487	PL.63663	ABC	#1/0 ACSR	7.28Y	121.4	0.05	3.63	61.29	27	1286	374	96	0.45	0.0	3.950	0.045	10	3	1	128
PL.54176	PL.42487	ABC	#1/0 ACSR	7.28Y	121.3	0.06	3.68	60.81	26	1276	370	96	0.52	0.0	4.003	0.053	23	7	3	127
PL.54174	PL.54176	ABC	#1/0 ACSR	7.28Y	121.3	0.05	3.73	52.47	23	1100	319	96	0.39	0.0	4.058	0.055	29	9	4	112
PL.42493	PL.54174	C	#4 ACSR	7.28Y	121.3	0.01	3.74	51.05	39	357	103	96	0.03	0.0	4.063	0.004	0	0	0	35
PL.42494	PL.42493	C	#4 ACSR	7.27Y	121.2	0.01	3.76	51.05	39	357	103	96	0.04	0.0	4.068	0.006	0	0	0	35
PD.6413	PL.42494	C	75QA	7.27Y	121.2	0.00	3.76	51.05	68	357	103	96	0.00	0.0	4.068	0.006	0	0	0	35
PL.43326	PD.6413	C	#4 ACSR	7.27Y	121.2	0.08	3.83	51.05	39	357	103	96	0.20	0.1	4.104	0.036	45	13	4	35
PL.41574	PL.43326	C	#4 ACSR	7.27Y	121.1	0.04	3.87	18.24	14	127	37	96	0.03	0.0	4.158	0.054	47	14	3	13
PL.43352	PL.41574	C	#4 ACSR	7.27Y	121.1	0.02	3.89	11.54	9	81	23	96	0.01	0.0	4.195	0.037	22	6	3	10
PL.43353	PL.43352	C	#4 ACSR	7.27Y	121.1	0.01	3.90	8.45	7	59	17	96	0.00	0.0	4.233	0.038	28	8	3	7
PL.43354	PL.43353	C	#4 ACSR	7.27Y	121.1	0.00	3.90	4.42	3	31	9	96	0.00	0.0	4.272	0.039	31	9	4	4
PL.60923	PL.43354	C	#4 ACSR	7.27Y	121.1	0.00	3.90	0.00	0	0	0	100	0.00	0.0	4.305	0.033	0	0	0	0
PL.43357	PL.41574	C	#4 ACSR	7.27Y	121.1	0.00	3.87	0.00	0	0	0	100	0.00	0.0	4.206	0.047	0	0	0	0
PL.54538	PL.43326	C	#4 ACSR	7.27Y	121.1	0.04	3.87	26.40	20	184	53	96	0.05	0.0	4.143	0.039	53	15	4	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.54539	PL.54538	C	#4 ACSR	7.27Y	121.1	0.03	3.90	18.86	15	132	38	96	0.02	0.0	4.180	0.037	34	10	4	14
PL.43350	PL.54539	C	#4 ACSR	7.26Y	121.1	0.02	3.92	14.04	11	98	28	96	0.01	0.0	4.220	0.040	39	11	4	10
PL.43351	PL.43350	C	#4 ACSR	7.26Y	121.1	0.01	3.93	8.43	6	59	17	96	0.00	0.0	4.258	0.038	42	12	4	6
PL.62990	PL.43351	C	#4 ACSR	7.26Y	121.1	0.00	3.93	0.00	0	0	0	100	0.00	0.0	4.260	0.003	0	0	0	0
PL.62991	PL.43351	C	#4 ACSR	7.26Y	121.1	0.00	3.93	2.39	2	17	5	96	0.00	0.0	4.261	0.003	0	0	0	2
PD.9423	PL.62991	C	10T	7.26Y	121.1	0.00	3.93	2.39	0	17	5	96	0.00	0.0	4.261	0.003	0	0	0	2
PL.62992	PD.9423	C	#4 ACSR	7.26Y	121.1	0.00	3.93	2.39	2	17	5	96	0.00	0.0	4.308	0.047	17	5	2	2
PL.43355	PL.54174	ABC	#1/0 ACSR	7.27Y	121.2	0.03	3.77	34.05	15	714	207	96	0.16	0.0	4.110	0.051	10	3	1	73
PL.43356	PL.43355	ABC	#1/0 ACSR	7.27Y	121.2	0.02	3.79	33.58	15	704	204	96	0.11	0.0	4.147	0.038	0	0	0	72
PL.41832	PL.43356	ABC	397 SPACER	7.27Y	121.2	0.00	3.79	32.76	6	687	199	96	0.01	0.0	4.197	0.049	26	7	3	71
PL.64426	PL.41832	ABC	397 SPACER	7.27Y	121.2	0.00	3.80	23.48	5	492	143	96	0.00	0.0	4.250	0.053	0	0	0	51
PL.64427	PL.64426	ABC	397 SPACER	7.27Y	121.2	0.00	3.80	18.06	3	378	110	96	0.00	0.0	4.276	0.026	6	2	1	41
PL.64123	PL.64427	ABC	397 SPACER	7.27Y	121.2	0.00	3.80	17.77	3	372	108	96	0.00	0.0	4.309	0.032	41	12	4	40
PL.64124	PL.64123	A	#4 ACSR	7.27Y	121.2	0.00	3.80	13.41	10	94	27	96	0.00	0.0	4.314	0.006	0	0	0	6
PD.6540	PL.64124	A	50QA	7.27Y	121.2	0.00	3.80	13.41	27	94	27	96	0.00	0.0	4.314	0.006	0	0	0	6
PL.43361	PD.6540	A	#4 ACSR	7.27Y	121.2	0.01	3.82	13.41	10	94	27	96	0.01	0.0	4.349	0.035	59	17	4	6
PL.43362	PL.43361	A	#4 ACSR	7.27Y	121.2	0.01	3.83	4.93	4	34	10	96	0.00	0.0	4.387	0.037	17	5	1	2
PL.43365	PL.43362	A	#4 ACSR	7.27Y	121.2	0.01	3.84	2.46	2	17	5	96	0.00	0.0	4.476	0.089	0	0	0	1
PL.41857	PL.43365	A	#2 ACSR	7.27Y	121.2	0.00	3.84	2.46	1	17	5	96	0.00	0.0	4.522	0.046	17	5	1	1
PL.43366	PL.43365	A	#4 ACSR	7.27Y	121.2	0.00	3.84	0.00	0	0	0	100	0.00	0.0	4.529	0.053	0	0	0	0
PL.64122	PL.64123	ABC	397 SPACER	7.27Y	121.2	0.00	3.80	11.36	2	238	69	96	0.00	0.0	4.365	0.057	12	4	1	30
PL.62513	PL.64122	C	#2 ACSR	7.27Y	121.2	0.00	3.80	26.68	15	186	54	96	0.00	0.0	4.366	0.000	0	0	0	25
PD.9372	PL.62513	C	40T	7.27Y	121.2	0.00	3.80	26.68	0	186	54	96	0.00	0.0	4.366	0.000	0	0	0	25
PL.62514	PD.9372	C	#2 ACSR	7.27Y	121.2	0.00	3.80	26.68	15	186	54	96	0.00	0.0	4.366	0.000	0	0	0	25
PL.62509	PL.62514	C	#2 ACSR	7.27Y	121.2	0.00	3.81	1.46	1	10	3	96	0.00	0.0	4.427	0.061	10	3	1	1
PL.62510	PL.62514	C	#4 ACSR	7.27Y	121.2	0.02	3.82	25.22	19	176	51	96	0.03	0.0	4.383	0.017	2	0	1	24
PL.62512	PL.62510	C	#2 ACSR	7.27Y	121.2	0.01	3.83	24.98	14	174	51	96	0.01	0.0	4.399	0.016	32	9	3	23
PL.41692	PL.62512	C	#2 ACSR	7.27Y	121.2	0.00	3.84	3.01	2	21	6	96	0.00	0.0	4.422	0.023	21	6	2	2
PL.43367	PL.62512	C	#2 ACSR	7.27Y	121.2	0.01	3.84	17.37	10	121	35	96	0.01	0.0	4.414	0.016	23	7	4	18
PL.43368	PL.43367	C	#2 ACSR	7.27Y	121.2	0.01	3.85	11.16	6	78	23	96	0.00	0.0	4.433	0.018	21	6	3	11
PL.43369	PL.43368	C	#2 ACSR	7.27Y	121.1	0.01	3.86	8.18	5	57	17	96	0.00	0.0	4.468	0.035	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.43370	PL.43369	C	#2 ACSR	7.27Y	121.1	0.00	3.86	4.14	2	29	8	96	0.00	0.0	4.508	0.040	29	8	3	3
PL.41443	PL.43369	C	#2 ACSR	7.27Y	121.1	0.00	3.86	4.04	2	28	8	96	0.00	0.0	4.486	0.018	28	8	5	5
PL.41365	PL.43367	C	#2 ACSR	7.27Y	121.2	0.00	3.84	1.51	1	11	3	96	0.00	0.0	4.438	0.023	11	3	2	2
PL.41858	PL.43367	C	#2 ACSR	7.27Y	121.2	0.00	3.84	1.48	1	10	3	96	0.00	0.0	4.432	0.018	10	3	1	1
PL.62511	PL.62510	C	#4 ACSR	7.27Y	121.2	0.00	3.82	0.00	0	0	0	100	0.00	0.0	4.407	0.024	0	0	0	0
PL.62433	PL.64122	A	#4 ACSR	7.27Y	121.2	0.00	3.80	5.65	4	39	11	96	0.00	0.0	4.371	0.006	0	0	0	4
PD.9336	PL.62433	A	40QA	7.27Y	121.2	0.00	3.80	5.65	14	39	11	96	0.00	0.0	4.371	0.006	0	0	0	4
PL.43363	PD.9336	A	#4 ACSR	7.27Y	121.2	0.00	3.81	5.65	4	39	11	96	0.00	0.0	4.385	0.014	8	2	1	4
PL.43364	PL.43363	A	#4 ACSR	7.27Y	121.2	0.00	3.81	4.50	3	31	9	96	0.00	0.0	4.407	0.021	13	4	1	3
PL.43360	PL.43364	A	#4 ACSR	7.27Y	121.2	0.00	3.81	2.70	2	19	5	97	0.00	0.0	4.432	0.025	19	5	2	2
PL.64429	PL.64426	B	#4 ACSR	7.27Y	121.2	0.00	3.80	16.28	13	114	33	96	0.00	0.0	4.254	0.003	0	0	0	10
PD.9540	PL.64429	B	30T	7.27Y	121.2	0.00	3.80	16.28	0	114	33	96	0.00	0.0	4.254	0.003	0	0	0	10
PL.64428	PD.9540	B	#4 ACSR	7.27Y	121.2	0.00	3.80	16.28	13	114	33	96	0.00	0.0	4.254	0.001	11	3	1	10
PL.64121	PL.64428	B	#4 ACSR	7.27Y	121.2	0.02	3.82	14.72	11	103	30	96	0.01	0.0	4.288	0.034	34	10	3	9
PL.42499	PL.64121	B	#4 ACSR	7.27Y	121.2	0.01	3.83	9.79	8	68	20	96	0.01	0.0	4.326	0.038	20	6	2	6
PL.42500	PL.42499	B	#4 ACSR	7.27Y	121.2	0.01	3.84	6.91	5	48	14	96	0.00	0.0	4.363	0.038	9	3	1	4
PL.42501	PL.42500	B	#4 ACSR	7.27Y	121.1	0.01	3.85	5.56	4	39	11	96	0.00	0.0	4.399	0.036	23	7	2	3
PL.42502	PL.42501	B	#4 ACSR	7.27Y	121.1	0.00	3.85	2.23	2	16	4	97	0.00	0.0	4.418	0.019	16	4	1	1
PL.43358	PL.41832	C	#4 ACSR	7.27Y	121.2	0.00	3.79	0.00	0	0	0	100	0.00	0.0	4.202	0.006	0	0	0	0
PL.41361	PL.41832	ABC	397 SPACER	7.27Y	121.2	0.00	3.80	8.05	2	169	49	96	0.00	0.0	4.234	0.037	46	13	6	17
PL.43359	PL.41361	C	#4 ACSR	7.27Y	121.2	0.02	3.82	17.53	13	122	35	96	0.02	0.0	4.268	0.033	55	16	4	11
PL.42498	PL.43359	C	#4 ACSR	7.27Y	121.2	0.01	3.83	9.59	7	67	19	96	0.01	0.0	4.309	0.041	33	9	3	7
PL.60922	PL.42498	C	#4 ACSR	7.27Y	121.2	0.01	3.84	4.89	4	34	10	96	0.00	0.0	4.347	0.039	9	3	1	4
PL.60921	PL.60922	C	#4 ACSR	7.27Y	121.2	0.00	3.84	0.00	0	0	0	100	0.00	0.0	4.385	0.038	0	0	0	0
PL.60925	PL.60922	C	#4 ACSR	7.27Y	121.2	0.00	3.84	3.60	3	25	7	96	0.00	0.0	4.404	0.057	25	7	3	3
PL.60926	PL.60925	C	#4 ACSR	7.27Y	121.2	0.00	3.84	0.00	0	0	0	100	0.00	0.0	4.410	0.006	0	0	0	0
PL.60924	PL.60925	C	#4 ACSR	7.27Y	121.2	0.00	3.84	0.00	0	0	0	100	0.00	0.0	4.453	0.049	0	0	0	0
PL.41323	PL.43356	ABC	#1/0 ACSR	7.27Y	121.2	0.00	3.79	0.82	0	17	5	96	0.00	0.0	4.191	0.044	17	5	1	1
PL.54175	PL.54176	B	#1/0 ACSR	7.28Y	121.3	0.00	3.69	21.71	9	152	44	96	0.00	0.0	4.009	0.006	0	0	0	12
PD.6121	PL.54175	B	40T	7.28Y	121.3	0.00	3.69	21.71	0	152	44	96	0.00	0.0	4.009	0.006	0	0	0	12
PL.42488	PD.6121	B	#1/0 ACSR	7.28Y	121.3	0.01	3.70	21.71	9	152	44	96	0.01	0.0	4.042	0.032	32	9	2	12

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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.54201	PL.42488	B	#1/0 ACSR	7.28Y	121.3	0.02	3.72	17.16	7	120	35	96	0.02	0.0	4.100	0.059	30	9	3	10
PL.54202	PL.54201	B	#1/0 ACSR	7.28Y	121.3	0.02	3.74	12.86	6	90	26	96	0.01	0.0	4.159	0.059	23	7	2	7
PL.42489	PL.54202	B	#1/0 ACSR	7.27Y	121.2	0.03	3.76	9.56	4	67	19	96	0.01	0.0	4.292	0.133	15	4	2	5
PL.42490	PL.42489	B	#1/0 ACSR	7.27Y	121.2	0.00	3.77	7.45	3	52	15	96	0.00	0.0	4.308	0.016	16	5	1	3
PL.42491	PL.42490	B	#1/0 ACSR	7.27Y	121.2	0.00	3.77	5.14	2	36	10	96	0.00	0.0	4.328	0.020	16	5	1	2
PL.42492	PL.42491	B	#1/0 ACSR	7.27Y	121.2	0.00	3.77	2.86	1	20	6	96	0.00	0.0	4.347	0.019	20	6	1	1
CP.63	PL.42485	ABC	Cap (300)	7.30Y	121.6	0.00	3.37	0.00	0	0	0	100	0.00	0.0	3.706	0.019	0	0	0	0
PL.42482	PL.54186	B	#4 ACSR	7.30Y	121.7	0.00	3.30	0.00	0	0	0	100	0.00	0.0	3.621	0.006	0	0	0	0
PD.6444	PL.42482	B	50QA	7.30Y	121.7	0.00	3.30	0.00	0	0	0	100	0.00	0.0	3.621	0.006	0	0	0	0
PL.42483	PD.6444	B	#4 ACSR	7.30Y	121.7	0.00	3.30	0.00	0	0	0	100	0.00	0.0	3.692	0.072	0	0	0	0
PL.41598	PL.41327	B	6 A (CWC)	7.32Y	122.0	0.00	2.98	1.22	1	9	2	98	0.00	0.0	3.324	0.006	0	0	0	2
PD.6666	PL.41598	B	50QA	7.32Y	122.0	0.00	2.98	1.22	2	9	2	98	0.00	0.0	3.324	0.006	0	0	0	2
PL.41599	PD.6666	B	6 A (CWC)	7.32Y	122.0	0.00	2.98	1.22	1	9	2	98	0.00	0.0	3.360	0.036	9	2	2	2
PL.54749	PL.54748	B	#4 ACSR	7.34Y	122.3	0.00	2.74	7.72	6	54	16	96	0.00	0.0	3.132	0.006	0	0	0	5
PD.6120	PL.54749	B	60QA	7.34Y	122.3	0.00	2.74	7.72	13	54	16	96	0.00	0.0	3.132	0.006	0	0	0	5
PL.54285	PD.6120	B	#4 ACSR	7.33Y	122.2	0.02	2.75	7.72	6	54	16	96	0.01	0.0	3.207	0.075	30	9	3	5
PL.54286	PL.54285	B	#4 ACSR	7.33Y	122.2	0.00	2.76	1.53	1	11	3	96	0.00	0.0	3.241	0.034	11	3	1	1
PL.54287	PL.54285	B	#1/0 ACSR	7.33Y	122.2	0.00	2.76	1.86	1	13	4	96	0.00	0.0	3.276	0.069	13	4	1	1
PL.54750	PL.54748	B	6 A (CWC)	7.34Y	122.3	0.00	2.74	9.56	7	67	20	96	0.00	0.0	3.132	0.006	0	0	0	7
PD.6663	PL.54750	B	60QA	7.34Y	122.3	0.00	2.74	9.56	16	67	20	96	0.00	0.0	3.132	0.006	0	0	0	7
PL.57864	PD.6663	B	6 A (CWC)	7.33Y	122.2	0.03	2.76	9.56	7	67	20	96	0.01	0.0	3.205	0.073	25	7	3	7
PL.57866	PL.57864	B	6 A (CWC)	7.33Y	122.2	0.00	2.77	5.97	4	42	12	96	0.00	0.0	3.219	0.014	5	2	1	4
PL.57865	PL.57866	B	#2 ACSR	7.33Y	122.2	0.00	2.77	1.91	1	13	4	96	0.00	0.0	3.255	0.036	13	4	1	1
PL.57867	PL.57866	B	6 A (CWC)	7.33Y	122.2	0.01	2.77	3.29	2	23	7	96	0.00	0.0	3.275	0.055	0	0	0	2
PL.41017	PL.57867	B	#4 ACSR	7.33Y	122.2	0.00	2.78	2.73	2	19	6	95	0.00	0.0	3.320	0.046	19	6	1	1
PL.42548	PL.57867	B	6 A (CWC)	7.33Y	122.2	0.00	2.78	0.56	0	4	1	97	0.00	0.0	3.308	0.033	4	1	1	1
PL.42549	PL.42548	B	6 A (CWC)	7.33Y	122.2	0.00	2.78	0.00	0	0	0	100	0.00	0.0	3.549	0.241	0	0	0	0
PL.60857	PL.42845	B	#2 ACSR	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	2.852	0.028	0	0	0	0
PL.60812	PL.60857	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	2.872	0.020	0	0	0	0
PL.60813	PL.60812	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	2.916	0.043	0	0	0	0
PL.60811	PL.60813	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	2.980	0.064	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.60810	PL.60811	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	3.042	0.062	0	0	0	0
PL.60809	PL.60810	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	3.065	0.023	0	0	0	0
PL.60808	PL.60809	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	3.109	0.044	0	0	0	0
PL.60807	PL.60808	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	3.178	0.069	0	0	0	0
PL.60806	PL.60807	B	1/0 AL URD	7.37Y	122.8	0.00	2.23	0.00	0	0	0	100	0.00	0.0	3.219	0.040	0	0	0	0
PL.41329	PL.41868	C	#4 ACSR	7.38Y	122.9	0.00	2.08	1.99	2	14	4	96	0.00	0.0	2.749	0.006	0	0	0	1
PD.6662	PL.41329	C	60QA	7.38Y	122.9	0.00	2.08	1.99	3	14	4	96	0.00	0.0	2.749	0.006	0	0	0	1
PL.41330	PD.6662	C	#4 ACSR	7.37Y	122.9	0.01	2.09	1.99	2	14	4	96	0.00	0.0	2.873	0.124	14	4	1	1
PL.41869	PL.41868	A	#4 ACSR	7.37Y	122.9	0.00	2.08	7.38	6	52	15	96	0.00	0.0	2.749	0.006	0	0	0	6
PD.6119	PL.41869	A	60QA	7.37Y	122.9	0.00	2.08	7.38	12	52	15	96	0.00	0.0	2.749	0.006	0	0	0	6
PL.41331	PD.6119	A	#4 ACSR	7.37Y	122.9	0.01	2.09	7.38	6	52	15	96	0.00	0.0	2.774	0.024	0	0	0	6
PL.41870	PL.41331	A	#4 ACSR	7.37Y	122.9	0.00	2.10	3.70	3	26	8	96	0.00	0.0	2.829	0.055	26	8	2	2
PL.54181	PL.41331	A	#4 ACSR	7.37Y	122.9	0.00	2.10	3.68	3	26	8	96	0.00	0.0	2.817	0.044	26	8	4	4
PL.60915	PL.60914	C	#4 ACSR	7.43Y	123.8	0.00	1.16	2.88	2	21	6	96	0.00	0.0	2.406	0.006	0	0	0	2
PD.6437	PL.60915	C	50QA	7.43Y	123.8	0.00	1.16	2.88	6	21	6	96	0.00	0.0	2.406	0.006	0	0	0	2
PL.41573	PD.6437	C	#4 ACSR	7.43Y	123.8	0.00	1.17	2.88	2	21	6	96	0.00	0.0	2.461	0.055	14	4	1	2
PL.41572	PL.41573	C	#4 ACSR	7.43Y	123.8	0.00	1.17	0.97	1	7	2	96	0.00	0.0	2.501	0.040	7	2	1	1
PL.60916	PL.60914	B	#4 ACSR	7.43Y	123.8	0.01	1.17	8.81	7	63	18	96	0.00	0.0	2.454	0.053	63	18	9	9
PL.59824	PL.54512	ABC	#3/0 ACSR	7.44Y	124.0	0.03	0.99	56.97	19	1215	378	95	0.22	0.0	2.359	0.040	0	0	0	112
PD.8833-A	PL.59824	ABC	Closed	7.44Y	124.0	0.00	0.99	56.97	0	1214	378	95	0.00	0.0	2.359	0.040	0	0	0	112
PD.8833-B	PD.8833-A	ABC	Closed	7.44Y	124.0	0.00	0.99	56.97	0	1214	378	95	0.00	0.0	2.359	0.040	0	0	0	112
PL.63251	PD.8833-B	ABC	#3/0 ACSR	7.44Y	124.0	0.01	1.00	56.97	19	1214	378	95	0.10	0.0	2.378	0.019	25	7	2	112
PL.62974	PL.63251	ABC	#3/0 ACSR	7.44Y	124.0	0.02	1.02	55.81	19	1189	370	95	0.17	0.0	2.410	0.032	0	0	0	110
PL.43045	PL.62974	ABC	#3/0 ACSR	7.44Y	123.9	0.04	1.07	55.81	19	1189	370	95	0.30	0.0	2.467	0.057	0	0	0	110
PL.43254	PL.43045	ABC	#3/0 ACSR	7.44Y	123.9	0.00	1.07	55.81	19	1189	370	95	0.03	0.0	2.473	0.006	0	0	0	110
PD.6806	PL.43254	ABC	100L	7.44Y	123.9	0.00	1.07	55.81	56	1189	370	95	0.00	0.0	2.473	0.006	0	0	0	110
PL.43255	PD.6806	ABC	#3/0 ACSR	7.44Y	123.9	0.01	1.08	55.81	19	1189	370	95	0.10	0.0	2.491	0.018	6	2	1	110
PL.43256	PL.43255	ABC	#3/0 ACSR	7.43Y	123.9	0.04	1.12	55.53	19	1183	368	95	0.25	0.0	2.540	0.049	4	1	1	109
PL.63744	PL.43256	ABC	#3/0 ACSR	7.43Y	123.8	0.07	1.19	54.27	18	1155	360	95	0.48	0.0	2.638	0.098	13	4	2	107
PL.63746	PL.63744	ABC	#3/0 ACSR	7.43Y	123.8	0.02	1.20	53.65	18	1142	355	95	0.13	0.0	2.665	0.026	0	0	0	105
PL.63748	PL.63746	C	1/0 AL URD	7.43Y	123.8	0.00	1.21	1.34	1	10	3	96	0.00	0.0	2.721	0.056	10	3	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.63747	PL.63746	ABC	#3/0 ACSR	7.42Y	123.6	0.16	1.37	53.20	18	1132	352	95	1.11	0.1	2.913	0.249	89	26	10	104
PL.63745	PL.63747	A	#4 ACSR	7.42Y	123.6	0.00	1.37	13.23	10	94	27	96	0.00	0.0	2.916	0.003	0	0	0	6
PD.8705	PL.63745	A	30T	7.42Y	123.6	0.00	1.37	13.23	0	94	27	96	0.00	0.0	2.916	0.003	0	0	0	6
PL.58521	PD.8705	A	#4 ACSR	7.42Y	123.6	0.01	1.38	13.23	10	94	27	96	0.01	0.0	2.932	0.016	0	0	0	6
PL.58520	PL.58521	A	#4 ACSR	7.42Y	123.6	0.02	1.40	13.23	10	94	27	96	0.01	0.0	2.968	0.037	31	9	1	6
PL.56027	PL.58520	A	#4 ACSR	7.42Y	123.6	0.01	1.40	8.85	7	63	18	96	0.00	0.0	2.986	0.018	32	9	1	5
PL.72560	PL.56027	A	#4 ACSR	7.42Y	123.6	0.00	1.41	4.31	3	31	9	96	0.00	0.0	3.003	0.017	0	0	0	4
PL.72561	PL.72560	A	#4 ACSR	7.42Y	123.6	0.00	1.41	4.31	3	31	9	96	0.00	0.0	3.003	0.000	0	0	0	4
PL.56026	PL.72561	A	#4 ACSR	7.42Y	123.6	0.01	1.41	4.31	3	31	9	96	0.00	0.0	3.044	0.041	0	0	0	4
PL.42888	PL.56026	A	#4 ACSR	7.41Y	123.6	0.01	1.43	2.16	2	15	4	97	0.00	0.0	3.193	0.149	0	0	0	1
PL.63798	PL.42888	A	#1/0 ACSR	7.41Y	123.6	0.00	1.43	2.16	1	15	4	97	0.00	0.0	3.237	0.045	15	4	1	1
PL.56010	PL.56026	A	#4 ACSR	7.42Y	123.6	0.00	1.41	0.01	0	0	0	100	0.00	0.0	3.096	0.052	0	0	0	2
PL.64743	PL.56010	A	#1/0 ACSR	7.42Y	123.6	0.00	1.41	0.01	0	0	0	100	0.00	0.0	3.134	0.038	0	0	2	2
PL.41400	PL.56026	A	#2 ACSR	7.42Y	123.6	0.00	1.42	2.14	1	15	4	97	0.00	0.0	3.074	0.031	15	4	1	1
PL.63743	PL.63747	ABC	#3/0 ACSR	7.41Y	123.6	0.06	1.43	44.63	15	948	297	95	0.36	0.0	3.022	0.108	15	4	1	88
PL.52950	PL.63743	C	6 A (CWC)	7.41Y	123.6	0.00	1.43	1.59	1	11	3	96	0.00	0.0	3.027	0.006	0	0	0	2
PD.6433	PL.52950	C	50QA	7.41Y	123.6	0.00	1.43	1.59	3	11	3	96	0.00	0.0	3.027	0.006	0	0	0	2
PL.57868	PD.6433	C	6 A (CWC)	7.41Y	123.6	0.00	1.43	1.59	1	11	3	96	0.00	0.0	3.096	0.069	11	3	2	2
PL.52983	PL.63743	ABC	#3/0 ACSR	7.41Y	123.6	0.02	1.45	29.87	10	636	192	96	0.06	0.0	3.068	0.046	51	15	5	58
PL.56005	PL.52983	ABC	#3/0 ACSR	7.41Y	123.5	0.02	1.47	27.49	9	585	178	96	0.06	0.0	3.117	0.049	29	8	2	53
PL.56007	PL.56005	ABC	#3/0 ACSR	7.41Y	123.5	0.08	1.55	22.21	7	472	145	96	0.23	0.0	3.412	0.295	22	7	1	45
PL.41823	PL.56007	A	#4 ACSR	7.41Y	123.5	0.00	1.55	2.38	2	17	5	96	0.00	0.0	3.418	0.006	0	0	0	1
PD.6468	PL.41823	A	50QA	7.41Y	123.5	0.00	1.55	2.38	5	17	5	96	0.00	0.0	3.418	0.006	0	0	0	1
PL.41824	PD.6468	A	#4 ACSR	7.41Y	123.4	0.01	1.55	2.38	2	17	5	96	0.00	0.0	3.536	0.119	17	5	1	1
PL.56008	PL.56007	ABC	#3/0 ACSR	7.40Y	123.4	0.09	1.63	20.36	7	432	133	96	0.23	0.1	3.739	0.327	0	0	0	43
PL.56011	PL.56008	ABC	#3/0 ACSR	7.40Y	123.4	0.01	1.65	18.70	6	399	116	96	0.03	0.0	3.795	0.056	0	0	0	42
PL.56012	PL.56011	ABC	#3/0 ACSR	7.40Y	123.3	0.04	1.68	18.70	6	398	116	96	0.09	0.0	3.952	0.157	0	0	0	42
PL.56013	PL.56012	ABC	#3/0 ACSR	7.39Y	123.2	0.07	1.75	18.70	6	398	116	96	0.16	0.0	4.238	0.287	26	7	2	42
PL.56014	PL.56013	A	#2 ACSR	7.39Y	123.2	0.00	1.75	0.00	0	0	0	100	0.00	0.0	4.244	0.006	0	0	0	0
PD.6436	PL.56014	A	50QA	7.39Y	123.2	0.00	1.75	0.00	0	0	0	100	0.00	0.0	4.244	0.006	0	0	0	0
PL.56031	PD.6436	A	#2 ACSR	7.39Y	123.2	0.00	1.75	0.00	0	0	0	100	0.00	0.0	4.296	0.052	0	0	0	0

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.56032	PL.56031	A	#2 ACSR	7.39Y	123.2	0.00	1.75	0.00	0	0	0	100	0.00	0.0	4.333	0.037	0	0	0	0
PL.56016	PL.56013	A	#1/0 ACSR	7.39Y	123.2	0.01	1.76	50.98	22	362	106	96	0.02	0.0	4.245	0.006	0	0	0	39
PD.9338	PL.56016	A	40T	7.39Y	123.2	0.00	1.76	50.98	0	362	106	96	0.00	0.0	4.245	0.006	0	0	0	39
PL.56017	PD.9338	A	#1/0 ACSR	7.39Y	123.1	0.13	1.88	50.98	22	362	106	96	0.29	0.1	4.350	0.106	6	2	1	39
PL.56019	PL.56017	A	#1/0 ACSR	7.38Y	123.0	0.09	1.98	45.11	20	320	93	96	0.20	0.1	4.440	0.090	0	0	0	36
PL.56023	PL.56019	A	#2 ACSR	7.38Y	123.0	0.00	1.98	1.65	1	12	3	97	0.00	0.0	4.482	0.042	12	3	1	1
PL.56020	PL.56019	A	6 A (CWC)	7.37Y	122.9	0.16	2.14	43.47	31	308	89	96	0.36	0.1	4.527	0.086	37	11	4	35
PL.56021	PL.56020	A	#4 ACSR	7.37Y	122.9	0.00	2.14	0.00	0	0	0	100	0.00	0.0	4.588	0.061	0	0	0	0
PL.56022	PL.56020	A	6 A (CWC)	7.36Y	122.7	0.13	2.27	38.20	27	270	78	96	0.25	0.1	4.602	0.075	22	6	2	31
PL.53227	PL.56022	A	6 A (CWC)	7.36Y	122.6	0.09	2.35	35.06	25	248	72	96	0.16	0.1	4.657	0.055	8	2	1	29
PL.53226	PL.53227	A	6 A (CWC)	7.36Y	122.6	0.02	2.37	14.27	10	101	29	96	0.01	0.0	4.691	0.035	38	11	7	14
PL.43251	PL.53226	A	6 A (CWC)	7.36Y	122.6	0.01	2.38	8.89	6	63	18	96	0.00	0.0	4.731	0.039	34	10	4	7
PL.43252	PL.43251	A	6 A (CWC)	7.36Y	122.6	0.01	2.39	4.02	3	28	8	96	0.00	0.0	4.790	0.059	16	5	2	3
PL.43253	PL.43252	A	6 A (CWC)	7.36Y	122.6	0.00	2.39	1.76	1	12	4	95	0.00	0.0	4.814	0.024	12	4	1	1
PL.53228	PL.53227	A	#4 ACSR	7.36Y	122.6	0.04	2.39	19.59	15	138	40	96	0.04	0.0	4.709	0.053	36	10	3	14
PL.53229	PL.53228	A	#4 ACSR	7.35Y	122.6	0.03	2.43	14.48	11	102	30	96	0.02	0.0	4.768	0.059	22	6	2	11
PL.53230	PL.53229	A	#4 ACSR	7.35Y	122.5	0.03	2.45	11.35	9	80	23	96	0.01	0.0	4.821	0.053	11	3	1	9
PL.53231	PL.53230	A	#4 ACSR	7.35Y	122.5	0.01	2.46	9.79	8	69	20	96	0.00	0.0	4.841	0.020	17	5	2	8
PL.55886	PL.53231	A	#4 ACSR	7.35Y	122.5	0.02	2.48	7.32	6	52	15	96	0.01	0.0	4.908	0.067	29	9	4	6
PL.55887	PL.55886	A	#4 ACSR	7.35Y	122.5	0.00	2.48	3.15	2	22	6	96	0.00	0.0	4.952	0.044	12	3	1	2
PL.53232	PL.55887	A	#4 ACSR	7.35Y	122.5	0.00	2.48	1.50	1	11	3	96	0.00	0.0	4.973	0.020	11	3	1	1
PL.56018	PL.56017	A	#2 ACSR	7.39Y	123.1	0.01	1.89	5.06	3	36	10	96	0.00	0.0	4.393	0.043	0	0	0	2
PL.53234	PL.56018	A	6 A (CWC)	7.39Y	123.1	0.01	1.90	5.06	4	36	10	96	0.00	0.0	4.416	0.023	0	0	0	2
PL.53233	PL.53234	A	#2 ACSR	7.39Y	123.1	0.00	1.90	5.06	3	36	10	96	0.00	0.0	4.463	0.047	36	10	2	2
PL.56015	PL.56013	ABC	#3/0 ACSR	7.39Y	123.2	0.00	1.75	0.49	0	11	3	96	0.00	0.0	4.276	0.038	0	0	0	1
PL.53237	PL.56015	ABC	#3/0 ACSR	7.39Y	123.2	0.00	1.75	0.49	0	11	3	96	0.00	0.0	4.324	0.048	11	3	1	1
PL.53236	PL.53237	ABC	#3/0 ACSR	7.39Y	123.2	0.00	1.75	0.00	0	0	0	100	0.00	0.0	4.362	0.037	0	0	0	0
PD.6817-A	PL.53236	ABC	Open	7.39Y	123.2	0.00	1.75	0.00	0	0	0	100	0.00	0.0	4.362	0.037	0	0	0	0
PL.41010	PL.56012	A	6 A (CWC)	7.40Y	123.3	0.00	1.68	0.00	0	0	0	100	0.00	0.0	4.254	0.302	0	0	0	0
PL.56009	PL.56008	ABC	#3/0 ACSR	7.40Y	123.4	0.00	1.63	1.69	1	34	16	90	0.00	0.0	3.773	0.034	34	16	1	1
PL.56006	PL.56005	C	#4 ACSR	7.41Y	123.5	0.00	1.47	11.83	9	84	24	96	0.00	0.0	3.123	0.006	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 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PD.6415	PL.56006	C	50QA	7.41Y	123.5	0.00	1.47	11.83	24	84	24	96	0.00	0.0	3.123	0.006	0	0	0	6
PL.52980	PD.6415	C	#4 ACSR	7.41Y	123.5	0.01	1.48	11.83	9	84	24	96	0.00	0.0	3.143	0.020	28	8	2	6
PL.52981	PL.52980	C	#4 ACSR	7.41Y	123.5	0.01	1.49	5.81	4	41	12	96	0.00	0.0	3.180	0.037	0	0	0	3
PL.56033	PL.52981	C	#2 ACSR	7.41Y	123.5	0.00	1.49	3.61	2	26	7	97	0.00	0.0	3.210	0.030	11	3	1	2
PL.56035	PL.56033	C	#2 ACSR	7.41Y	123.5	0.00	1.49	2.06	1	15	4	97	0.00	0.0	3.236	0.025	15	4	1	1
PL.52982	PL.52981	C	#4 ACSR	7.41Y	123.5	0.00	1.49	2.19	2	16	5	95	0.00	0.0	3.212	0.032	16	5	1	1
PL.56034	PL.52980	C	#4 ACSR	7.41Y	123.5	0.00	1.48	2.03	2	14	4	96	0.00	0.0	3.188	0.046	14	4	1	1
PL.55879	PL.63743	ABC	#1/0 ACSR	7.41Y	123.6	0.01	1.44	13.55	6	285	97	95	0.01	0.0	3.051	0.029	15	4	1	27
PL.55880	PL.55879	ABC	#1/0 ACSR	7.41Y	123.6	0.00	1.44	12.83	6	270	93	95	0.00	0.0	3.057	0.006	0	0	0	26
PD.6807	PL.55880	ABC	50L	7.41Y	123.6	0.00	1.44	12.83	26	270	93	95	0.00	0.0	3.057	0.006	0	0	0	26
PL.52951	PD.6807	ABC	#1/0 ACSR	7.41Y	123.6	0.01	1.45	12.83	6	270	93	95	0.01	0.0	3.089	0.032	18	5	2	26
PL.52952	PL.52951	ABC	#1/0 ACSR	7.41Y	123.5	0.01	1.46	12.00	5	252	87	95	0.01	0.0	3.130	0.042	29	8	3	24
PL.42889	PL.52952	ABC	#1/0 ACSR	7.41Y	123.5	0.01	1.47	10.63	5	223	79	94	0.02	0.0	3.185	0.054	0	0	0	21
PL.42890	PL.42889	B	#2 ACSR	7.41Y	123.5	0.00	1.47	2.66	2	19	5	97	0.00	0.0	3.190	0.006	0	0	0	3
PD.6434	PL.42890	B	40QA	7.41Y	123.5	0.00	1.47	2.66	7	19	5	97	0.00	0.0	3.190	0.006	0	0	0	3
PL.55865	PD.6434	B	#2 ACSR	7.41Y	123.5	0.00	1.47	2.66	2	19	5	97	0.00	0.0	3.210	0.020	19	5	3	3
PL.55866	PL.55865	B	#2 ACSR	7.41Y	123.5	0.00	1.47	0.00	0	0	0	100	0.00	0.0	3.236	0.026	0	0	0	0
PL.55863	PL.42889	ABC	#1/0 ACSR	7.41Y	123.5	0.01	1.47	9.75	4	204	73	94	0.01	0.0	3.228	0.043	16	5	2	18
PL.55864	PL.55863	ABC	#1/0 ACSR	7.41Y	123.5	0.02	1.49	8.98	4	188	69	94	0.02	0.0	3.339	0.111	10	3	1	16
PL.41825	PL.55864	ABC	#1/0 ACSR	7.41Y	123.5	0.02	1.51	8.50	4	177	66	94	0.02	0.0	3.439	0.099	0	0	0	15
PL.42769	PL.41825	B	#2 ACSR	7.41Y	123.5	0.00	1.51	6.30	4	45	13	96	0.00	0.0	3.445	0.006	0	0	0	5
PD.6431	PL.42769	B	40QA	7.41Y	123.5	0.00	1.51	6.30	16	45	13	96	0.00	0.0	3.445	0.006	0	0	0	5
PL.42770	PD.6431	B	#2 ACSR	7.41Y	123.5	0.01	1.52	6.30	4	45	13	96	0.00	0.0	3.496	0.051	34	10	3	5
PL.42771	PL.42770	B	#2 ACSR	7.41Y	123.5	0.00	1.52	1.57	1	11	3	96	0.00	0.0	3.524	0.028	4	1	1	2
PL.42772	PL.42771	B	#2 ACSR	7.41Y	123.5	0.00	1.52	0.94	1	7	2	96	0.00	0.0	3.562	0.038	7	2	1	1
PL.42773	PL.41825	ABC	#1/0 ACSR	7.41Y	123.5	0.01	1.52	6.40	3	132	53	93	0.01	0.0	3.522	0.083	3	1	1	10
PL.42774	PL.42773	B	#2 ACSR	7.41Y	123.5	0.00	1.52	0.49	0	4	1	97	0.00	0.0	3.527	0.006	0	0	0	2
PD.6435	PL.42774	B	40QA	7.41Y	123.5	0.00	1.52	0.49	1	4	1	97	0.00	0.0	3.527	0.006	0	0	0	2
PL.42775	PD.6435	B	#2 ACSR	7.41Y	123.5	0.00	1.52	0.49	0	4	1	97	0.00	0.0	3.723	0.195	4	1	2	2
PL.53243	PL.42773	ABC	#1/0 ACSR	7.41Y	123.5	0.01	1.52	6.09	3	126	51	93	0.00	0.0	3.574	0.053	23	7	3	7
PL.53244	PL.53243	ABC	#1/0 ACSR	7.41Y	123.5	0.01	1.53	5.04	2	103	44	92	0.00	0.0	3.722	0.148	73	35	1	4

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.53241	PL.53244	ABC	#1/0 ACSR	7.41Y	123.5	0.00	1.54	1.39	1	30	9	96	0.00	0.0	3.889	0.167	14	4	1	3
PL.53242	PL.53241	ABC	#1/0 ACSR	7.41Y	123.5	0.00	1.54	0.72	0	15	4	97	0.00	0.0	3.957	0.068	11	3	1	2
PL.53240	PL.53242	ABC	#1/0 ACSR	7.41Y	123.5	0.00	1.54	0.20	0	4	1	97	0.00	0.0	4.010	0.052	4	1	1	1
PL.43257	PL.43256	C	#4 ACSR	7.43Y	123.9	0.00	1.12	3.20	2	23	7	96	0.00	0.0	2.546	0.006	0	0	0	1
PD.6763	PL.43257	C	50QA	7.43Y	123.9	0.00	1.12	3.20	6	23	7	96	0.00	0.0	2.546	0.006	0	0	0	1
PL.43258	PD.6763	C	#4 ACSR	7.43Y	123.9	0.01	1.12	3.20	2	23	7	96	0.00	0.0	2.619	0.073	23	7	1	1
PL.43046	PL.62974	A	#4 ACSR	7.44Y	124.0	0.00	1.02	0.00	0	0	0	100	0.00	0.0	2.416	0.006	0	0	0	0
PD.6432	PL.43046	A	60QA	7.44Y	124.0	0.00	1.02	0.00	0	0	0	100	0.00	0.0	2.416	0.006	0	0	0	0
PL.54160	PD.6432	A	#4 ACSR	7.44Y	124.0	0.00	1.02	0.00	0	0	0	100	0.00	0.0	2.445	0.030	0	0	0	0
PL.54474	PL.54473	B	#2 ACSR	7.45Y	124.2	0.00	0.83	2.38	1	17	5	96	0.00	0.0	2.244	0.006	0	0	0	1
PD.6430	PL.54474	B	60QA	7.45Y	124.2	0.00	0.83	2.38	4	17	5	96	0.00	0.0	2.244	0.006	0	0	0	1
PL.43044	PD.6430	B	#2 ACSR	7.45Y	124.2	0.00	0.83	2.38	1	17	5	96	0.00	0.0	2.279	0.035	17	5	1	1
PL.42710	PL.54244	C	6 A (CWC)	7.28Y	121.4	0.00	3.64	0.00	0	0	0	100	0.00	0.0	2.071	0.006	0	0	0	1
PD.6429	PL.42710	C	50QA	7.28Y	121.4	0.00	3.64	0.00	0	0	0	100	0.00	0.0	2.071	0.006	0	0	0	1
PL.42711	PD.6429	C	6 A (CWC)	7.28Y	121.4	0.00	3.64	0.00	0	0	0	100	0.00	0.0	2.205	0.134	0	0	1	1
PL.42712	PL.54244	B	6 A (CWC)	7.28Y	121.4	0.00	3.64	4.27	3	30	9	96	0.00	0.0	2.071	0.006	0	0	0	5
PD.6660	PL.42712	B	75QA	7.28Y	121.4	0.00	3.64	4.27	6	30	9	96	0.00	0.0	2.071	0.006	0	0	0	5
PL.42713	PD.6660	B	6 A (CWC)	7.28Y	121.3	0.02	3.65	4.27	3	30	9	96	0.00	0.0	2.149	0.078	0	0	0	5
PL.54655	PL.42713	B	6 A (CWC)	7.28Y	121.3	0.00	3.66	2.73	2	19	6	95	0.00	0.0	2.187	0.038	19	6	4	4
PL.42714	PL.42713	B	6 A (CWC)	7.28Y	121.3	0.00	3.66	1.54	1	11	3	96	0.00	0.0	2.230	0.081	11	3	1	1
PL.54207	PL.54205	B	#1/0 ACSR	7.33Y	122.2	0.00	2.76	3.81	2	27	8	96	0.00	0.0	1.592	0.023	27	8	7	7
PL.54208	PL.54207	B	#1/0 ACSR	7.33Y	122.2	0.00	2.76	0.00	0	0	0	100	0.00	0.0	1.633	0.041	0	0	0	0
PL.54258	PL.54256	C	#4 ACSR	7.35Y	122.6	0.00	2.45	18.25	14	129	37	96	0.00	0.0	1.415	0.006	0	0	0	13
PD.6144	PL.54258	C	50T	7.35Y	122.6	0.00	2.45	18.25	0	129	37	96	0.00	0.0	1.415	0.006	0	0	0	13
PL.53711	PD.6144	C	#4 ACSR	7.35Y	122.5	0.10	2.55	18.25	14	129	37	96	0.10	0.1	1.549	0.133	16	5	2	13
PL.53712	PL.53711	C	#4 ACSR	7.35Y	122.4	0.03	2.58	14.98	12	106	31	96	0.02	0.0	1.598	0.049	13	4	1	9
PL.53707	PL.53712	C	#2 ACSR	7.35Y	122.4	0.00	2.58	1.73	1	12	4	95	0.00	0.0	1.611	0.013	12	4	1	1
PL.53708	PL.53712	C	#4 ACSR	7.34Y	122.4	0.02	2.60	11.34	9	80	23	96	0.01	0.0	1.650	0.052	14	4	1	7
PL.53709	PL.53708	C	#2 ACSR	7.34Y	122.4	0.00	2.61	4.76	3	34	10	96	0.00	0.0	1.689	0.039	11	3	1	4
PL.42867	PL.53709	C	#2 ACSR	7.34Y	122.4	0.00	2.61	3.14	2	22	6	96	0.00	0.0	1.708	0.019	12	3	1	3
PL.42868	PL.42867	C	#2 ACSR	7.34Y	122.4	0.00	2.61	1.50	1	11	3	96	0.00	0.0	1.734	0.026	11	3	2	2

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Balanced Voltage Drop Report  
Source: Pine Grove 2

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	Length (mi)	-----Element-----		Cons On	Cons Thru
PL.53710	PL.53708	C	#4 ACSR	7.34Y	122.4	0.01	2.61	4.60	4	32	9	96	0.00	0.0	1.685	0.035	16	5	1	2
PL.54490	PL.53710	C	#4 ACSR	7.34Y	122.4	0.00	2.61	2.31	2	16	5	95	0.00	0.0	1.725	0.040	16	5	1	1
PL.53713	PL.53711	C	#2 ACSR	7.35Y	122.4	0.00	2.55	1.06	1	7	2	96	0.00	0.0	1.579	0.030	7	2	2	2
PL.53714	PL.54256	A	#1/0 ACSR	7.35Y	122.6	0.00	2.44	1.80	1	13	4	96	0.00	0.0	1.439	0.029	13	4	3	3
PL.54257	PL.54256	A	6 A (CWC)	7.35Y	122.6	0.00	2.44	1.63	1	12	3	97	0.00	0.0	1.415	0.006	0	0	0	2
PD.6676	PL.54257	A	75QA	7.35Y	122.6	0.00	2.44	1.63	2	12	3	97	0.00	0.0	1.415	0.006	0	0	0	2
PL.54251	PD.6676	A	6 A (CWC)	7.35Y	122.6	0.00	2.45	1.63	1	12	3	97	0.00	0.0	1.481	0.065	1	0	1	2
PL.54252	PL.54251	A	6 A (CWC)	7.35Y	122.5	0.00	2.45	1.47	1	10	3	96	0.00	0.0	1.549	0.068	10	3	1	1
PL.42735	PL.41923	A	#2 ACSR	7.46Y	124.4	0.00	0.58	1.93	1	14	4	96	0.00	0.0	0.571	0.006	0	0	0	3
PD.6757	PL.42735	A	75QA	7.46Y	124.4	0.00	0.58	1.93	3	14	4	96	0.00	0.0	0.571	0.006	0	0	0	3
PL.42736	PD.6757	A	#2 ACSR	7.46Y	124.4	0.01	0.59	1.93	1	14	4	96	0.00	0.0	0.709	0.139	7	2	1	3
PL.42737	PL.42736	A	#2 ACSR	7.46Y	124.4	0.00	0.59	0.92	1	7	2	96	0.00	0.0	0.777	0.068	7	2	2	2
PL.41766	PL.41299	A	#1/0 ACSR	7.48Y	124.7	0.00	0.34	2.21	1	16	5	95	0.00	0.0	0.331	0.006	0	0	0	2
PD.6716	PL.41766	A	60QA	7.48Y	124.7	0.00	0.34	2.21	4	16	5	95	0.00	0.0	0.331	0.006	0	0	0	2
PL.41767	PD.6716	A	#1/0 ACSR	7.48Y	124.7	0.00	0.34	2.21	1	16	5	95	0.00	0.0	0.341	0.010	16	5	2	2
PL.42746	PL.42744	A	#2 ACSR	7.48Y	124.7	0.00	0.25	7.48	4	54	16	96	0.00	0.0	0.246	0.006	0	0	0	4
PD.6139	PL.42746	A	75QA	7.48Y	124.7	0.00	0.25	7.48	10	54	16	96	0.00	0.0	0.246	0.006	0	0	0	4
PL.53691	PD.6139	A	#2 ACSR	7.48Y	124.7	0.00	0.25	7.48	4	54	16	96	0.00	0.0	0.249	0.003	45	13	3	4
PL.53692	PL.53691	A	#2 ACSR	7.48Y	124.7	0.00	0.26	1.17	1	8	2	97	0.00	0.0	0.281	0.031	0	0	0	1
PL.53690	PL.53692	A	#2 ACSR	7.48Y	124.7	0.00	0.26	1.17	1	8	2	97	0.00	0.0	0.312	0.032	8	2	1	1
PL.63764	PL.63766	C	#2 ACSR	7.50Y	124.9	0.00	0.06	2.01	1	14	4	96	0.00	0.0	0.065	0.006	0	0	0	2
PD.9481	PL.63764	C	75QA	7.50Y	124.9	0.00	0.06	2.01	3	14	4	96	0.00	0.0	0.065	0.006	0	0	0	2
PL.63759	PD.9481	C	#2 ACSR	7.50Y	124.9	0.00	0.06	2.01	1	14	4	96	0.00	0.0	0.078	0.013	14	4	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

	Load	Adjustment	Capacitance	Charging	Gen&Motors	Loops&Metas	Losses	No Load	Losses	Total			
KW	9615	0	0	0	0	0	237		0.00	9852	Lowest Voltage =	120.11	on Element PL.62975
KVAR	2836	0	0	0	0	0	459			3294	Max Accm VoltD =	4.89	on Element PL.62975
											Max Elem VoltD =	0.60	on Element PL.43038

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 2

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

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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	Length (mi)	-----Element-----		Cons On	Cons Thru
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